

**DRAFT
INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION
AVALON K-12 HVAC, ADA, CONTAMINATED SOIL
REMOVAL AND NEW SYNTHETIC TURF FIELD
PROJECT
Avalon, CA
(Los Angeles County)**

Prepared for:

LONG BEACH UNIFIED SCHOOL DISTRICT
Facilities Development and Planning Branch
2425 Webster Avenue
Long Beach, CA 90810



Prepared by:

CHAMBERS GROUP, INC.
5 Hutton Centre Drive, Suite 750
Santa Ana, California 92707
(949) 261-5414

July 2020

TABLE OF CONTENTS

	<u>Page</u>
SECTION 1.0 – PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING	1
1.1 PROJECT PURPOSE.....	1
1.2 PROJECT LOCATION AND SITE CHARACTERISTICS	1
1.2.1 Project Site	1
1.3 PROJECT BACKGROUND.....	1
1.4 PROJECT GOALS AND OBJECTIVES.....	2
1.5 PROJECT DESCRIPTION	3
1.5.1 HVAC, ADA, and New Synthetic Turf Field	3
1.5.2 Building Materials Abatement, Delineated and New Discovered Contaminated Soil Removal	4
1.5.3 Project Schedule	5
1.6 REQUIRED PERMITS AND APPROVALS.....	9
1.6.1 Responsible Agencies.....	9
1.6.2 Reviewing Agencies.....	9
SECTION 2.0 – ENVIRONMENTAL DETERMINATION	10
2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:	10
2.2 DETERMINATION	10
SECTION 3.0 – EVALUATION OF ENVIRONMENTAL IMPACTS.....	11
SECTION 4.0 – CHECKLIST OF ENVIRONMENTAL ISSUES	13
4.1 AESTHETICS.....	13
4.1.1 Environmental Setting	13
4.1.2 Impact Analysis	13
4.2 AGRICULTURE & FORESTRY RESOURCES	15
4.2.1 Environmental Setting	15
4.2.2 Impact Analysis	16
4.3 AIR QUALITY.....	17
4.3.1 Environmental Setting	17
4.3.2 Impact Analysis	20
4.4 BIOLOGICAL RESOURCES	27
4.4.1 Environmental Setting	27
4.4.2 Impact Analysis	27
4.5 CULTURAL RESOURCES	29
4.5.1 Environmental Setting	29
4.6 ENERGY	32
4.7 GEOLOGY AND SOILS	33
4.7.1 Environmental Setting	34

4.7.2	Evaluation	35
4.8	GREENHOUSE GAS EMISSIONS	37
4.8.1	Environmental Setting	37
4.8.2	Impact Analysis	37
4.9	HAZARDS AND HAZARDOUS MATERIALS.....	40
4.9.1	Environmental Setting	41
4.9.2	Impact Analysis	41
4.10	HYDROLOGY AND WATER QUALITY.....	45
4.10.1	Impact Analysis	45
4.11	LAND USE AND PLANNING	48
4.11.1	Impact Analysis	48
4.12	MINERAL RESOURCES	48
4.12.1	Environmental Setting	49
4.12.2	Impact Analysis	49
4.13	NOISE	49
4.13.1	Environmental Setting	50
4.13.2	Impact Analysis	51
4.14	POPULATION AND HOUSING	56
4.14.1	Environmental Setting	56
4.14.2	Impact Analysis	56
4.15	PUBLIC SERVICES.....	57
4.15.1	Environmental Setting	57
4.15.2	Impact Analysis	57
4.16	RECREATION	59
4.16.1	Environmental Setting	59
4.16.2	Impact Analysis	59
4.17	TRANSPORTATION	60
4.17.1	Environmental Setting	60
4.17.2	Impact Analysis	60
4.18	TRIBAL CULTURAL RESOURCES	62
4.18.1	Impact Analysis	62
4.19	UTILITIES AND SERVICE SYSTEMS	66
4.19.1	Environmental Setting	66
4.19.2	Impact Analysis	66
4.20	WILDFIRE.....	68
4.20.1	Impact Analysis	68
4.21	MANDATORY FINDINGS OF SIGNIFICANCE.....	70
4.21.1	Impact Analysis	70
SECTION 5.0 – REFERENCES		73

APPENDIX A – Air Quality & Greenhouse Gas Model Printouts

APPENDIX B – Biological Resources Report

APPENDIX C – Archaeological Literature Review and Records Search

APPENDIX D – Phase II Intensive Historic Assessment Report

**APPENDIX E – Preliminary Geological and Other Hazards Evaluation, Geotechnical Exploration Report,
Limited Geotechnical Evaluation of Soil/Bedrock Conditions, and Geotechnical and
Geological Engineering Investigation Report**

APPENDIX F – Noise Model Printouts

LIST OF TABLES

	<u>Page</u>
Table 1: Site Specific Remedial Goals for Soil	2
Table 2: Designations/Classifications for the Project Area	19
Table 3: Regional Thresholds of Significance	23
Table 4: Local Thresholds of Significance	23
Table 5: Construction-Related Regional Criteria Pollutant Emissions	24
Table 6: Construction-Related Local Criteria Pollutant Emissions	25
Table 7 – Annual Greenhouse Gas Emissions from the Proposed Project	39
Table 8: Existing Noise Level Measurements	50
Table 9: Construction Equipment Emissions and Usage Factors	52
Table 10: Proposed Project Construction Noise Levels at Nearby Homes	52
Table 11 – Operational On-Site Noise Impacts to the Nearest Homes	54
Table 12: Typical Construction Equipment Vibration Emissions	55

LIST OF FIGURES

	<u>Page</u>
Figure 1 - Project Vicinity Map	7
Figure 2 - Project Location Map	8

SECTION 1.0 – PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

1.1 PROJECT PURPOSE

Measure E bonds provide support that focuses on repairs, technology, heating, ventilation and air conditioning (HVAC) and school safety improvements within the Long Beach Unified School District (District). Measure E bonds also provide for Americans with Disabilities Act (“ADA”) and athletic field improvements. The District proposes to continue the bond measure improvements at Avalon’s Kindergarten through 12th grade (“K-12”) School HVAC system, ADA, and athletic field improvements. During the HVAC, ADA and new turf field installation, delineated areas of contaminated soil within the Avalon K-12 school boundary would also be removed and hauled offsite for disposal. The purpose of the Avalon K-12 School HVAC, ADA, Contaminated Soil Removal, and New Synthetic Turf Field projects (“Proposed Project”) is to provide: HVAC to permanent buildings, interior improvements to buildings on the campus, and ADA improvements. Additionally, the Proposed Project will replace the existing natural turf athletic field with a new synthetic turf field; the Proposed Project will also remove delineated contaminated soil and any additional contaminated soil encountered that is located on the campus.

1.2 PROJECT LOCATION AND SITE CHARACTERISTICS

1.2.1 Project Site

The Avalon K-12 campus was originally built in 1924 with the last set of buildings being added in 1998. The school is located at 200 Falls Canyon Road in Avalon, California and is situated against a natural hillside on the south, with residential housing on the north, City warehouses on the west and a golf course on the east. This school accommodates students from Kindergarten to 12th Grade. The site is approximately 11.5 acres in size and encompasses seven permanent buildings, one modular building, and 22 relocatable/portable buildings. The seven permanent buildings are approximately 49,000 square feet in size and encompass two 2-story buildings and five single-story buildings. The modular/relocatable buildings add approximately 23,000 square feet to the site.

1.3 PROJECT BACKGROUND

The Department of Toxic Substances Control (DTSC) issued an Imminent and Substantial Endangerment Determination and Order (“Order”) in 2012 which asked the Santa Catalina Island Company, the City of Avalon, and the District to adequately characterize the impacted areas of the site and conduct appropriate remedial measures. Contaminated soil is “generally found between the surface and 10 feet below ground surface (bgs) and/or greater” on the main school campus. (RAP 2019). “Most of the chemicals of concern are relatively immobile and therefore have not migrated laterally or vertically from where they were deposited” (DTSC 2019). The Proposed Project includes the HVAC installation, ADA improvements and athletic field replacement as well as any other earthwork on site including the addition of an infiltration device at the new athletic field, installation of retaining walls due to expansion of the athletic field, and for path of travel improvements to the athletic field. In addition, Phase II of the RAP work will include soil removal up to 5 feet below ground surface of impacted soil as required by the DTSC. The Proposed Project also includes removal of any other impacted soil encountered both for the field replacement and due to the trenching related to HVAC upgrades.

The District serves over 72,000 students in 85 public schools and is considered the third largest school district in California. On June 2016, Measure E bonds were approved to implement District-wide school upgrade projects over the next 8 to 10 years.

According to the School Bond Projects Timeline (LBUSD 2020), Avalon K-12 school is scheduled to receive the Measure E upgrades in Phase 7 and Phase 8 of scheduled projects, which is expected to occur from 2022 to 2024. Anticipated improvements include HVAC system installation, utility infrastructure, accessibility upgrades, ADA upgrades, technology/AV system, ceiling repairs/replacement, athletic turf field replacement, and installation of interior LED lighting.

1.4 PROJECT GOALS AND OBJECTIVES

The Proposed Project has the following overarching goals:

- Comply with DTSC Order with removal of a portion of the contaminated soils onsite.
- Conduct Measure E Upgrades including HVAC system installation, utility infrastructure, accessibility upgrades, ADA upgrades, technology/AV system, ceiling repairs/replacement, athletic turf field replacement, and installation of interior LED lighting.

During multiple geologic and geotechnical investigations at the Avalon K-12 school site, fill material and debris within the soils was found to include chemicals of concern (COCs) including arsenic, lead, dioxins, and Benzo(a)pyrene equivalents (BaP-eq). The District has developed Remedial Action Objectives (RAOs) and site-specific Remedial Goals (RGs) for the COCs at the Project site. The RAOs identified are to minimize exposure to elevated concentrations of COCs in soil through mitigation of potential on-site exposure to protect students, staff, maintenance workers, and construction workers.

The site specific RGs for soil were developed considering human health exposure pathways and background concentrations, and are presented below in Table 1.

Table 1: Site Specific Remedial Goals for Soil

Chemical	HHRA Screening Levels (Final Soil 95% UCL Target Concentration)	Student Remedial Goal in Soil (mg/kg)	Worker Remedial Goal in Soil (mg/kg)	Basis
School Property				
Arsenic	12	20	20	Approximately 2x DTSC default background screening level
Lead	91 (0 to 2 feet bgs) 320 (>2 to 5 feet bgs)	200	640	Approximately 2x site-specific screening level for students and DTSC default screening level for workers
Dioxin (TCDD-equivalents)	5 x 10 ⁻⁵ (50 ppt) (0 to 2 feet bgs) 2.2 x 10 ⁻⁴ (220 ppt) (>2 to 5 feet bgs)	1 x 10 ⁻⁴ (100 ppt)	4.4 x 10 ⁻⁴ (440 ppt)	2x DTSC screening level
Athletic Field				
Arsenic	12	20	20	Approximately 2x DTSC default background screening level
Benzo(a)pyrene equivalents (BaP-eq)	0.9	2	2	Approximately 2x DTSC default background screening level

*Notes: The Remedial Goals represent the concentrations that individual samples must meet to achieve the 95% Upper Confidence Limit (UCL) equal to or lower than the previously completed Human Health Risk Assessment (HHRA) screening levels.

Goals and objectives under Measure E address four key areas which consists of repairs, technology, air conditioning and safety. The objective of the Proposed Project is for the District to conduct repair, technology, air conditioning and safety upgrades at Avalon K-12 School in order to improve classroom conditions, provide up-to-date equipment for student use, and create a safe educational environment. These improvements include the following more detailed actions:

Repairs

- Due to District campuses being built up to 95 years ago, the outdated buildings require repairs to meet American Disabilities Act (ADA) accessibility requirements; meet fire, life safety standards; and improve on-site building conditions such as leaking roofs, damaged ceilings, restroom replacement, electrical and plumbing upgrades, lighting improvements and security upgrades.

Technology

- Improvements will include audio visual integration upgrades for classrooms, libraries, auditoriums and multi-purpose rooms.

Air Conditioning

- Air conditioning equipment will be upgraded with modern, energy efficient systems to improve classroom conditions and prevent class cancellations due to overheated classrooms.

Safety

- Access to secure recreational areas during after-school programs will be made available to allow students access to safe, supervised activities including mentoring and counseling.
- Fire Alarm systems will be upgraded in order to provide appropriate safety measures at the campus.

1.5 PROJECT DESCRIPTION

The Proposed Project includes multiple components, including campus upgrades and contaminated soil removal, as outlined below.

1.5.1 HVAC, ADA, and New Synthetic Turf Field

Campus Building Upgrades

The Proposed Project will consist of the following upgrades:

- New HVAC systems
- New suspended ceilings
- Installation of new interior LED lighting
- New Audio-visual systems
- Fire Alarm upgrades
- Additional power/data outlets
- Cosmetic upgrades including new paint, flooring, and markerboards/tackboards

- New building and room signage
- New Low-E glazing for windows
- Repurposing the existing shop building to provide functional classrooms
- Renovation and expansion of existing kitchen area to improve food service
- Re-distribution of classrooms and administrative spaces for operational needs
- Replacement of degraded asphalt and concrete
- Underground electrical, low voltage and utility upgrades

The Proposed Project also includes updates to ensure ADA compliance including:

- Installation or reconstruction of ADA compliant ramps and walkways at and around all building entrances throughout the site. This includes both Classrooms buildings, Auditorium, Library, Gymnasium, Locker Room, Shop building and access to the Athletic Field.
- Handicap-accessible parking spaces at the athletic field
- Student and staff restroom upgrades
- Drinking fountain upgrades
- Classroom sink upgrades
- Path-of-travel improvements at various points throughout the campus

The Proposed Project includes upgrades to safety and communication systems including the District's Electronic Visitor Screening System (EVSS).

Athletic Field Replacement

The Proposed Project would also include replacing the existing natural turf athletic field and will include:

- Replacement of existing natural turf field with a new synthetic turf athletic field
- Replacement of existing scoreboard with a new scoreboard
- Providing new bleachers for visitors
- Accessibility upgrades to path of travel, parking, and restrooms as required by current code
- Utility system upgrades (e.g., electrical, stormwater, sewer, etc.) as required to support the new field.
- Expanding the athletic field to provide the maximum space available by developing the sloped soil/bedrock hillside north of the existing field. The soils from this athletic field expansion are anticipated to be used as clean fill on the Project site.
- Creating a natural amphitheater/seating area east of the athletic field for outdoor learning and gathering

1.5.2 Building Materials Abatement, Delineated and New Discovered Contaminated Soil Removal

During the course of the Proposed Project, concrete, asphalt and earth excavation will occur to allow installation of the upgraded HVAC units or subsurface utilities, replace degraded asphalt/concrete or ADA pathways, as well as the excavation for the installation of the new synthetic turf field. The Proposed Project will involve removal/abatement of impacted building materials found within the buildings and/or potentially impacted asphalt as well as removal of up to 5 feet bgs of impacted soil in paved delineated areas, as required by DTSC. The Proposed Project also includes removal of any other

impacted soil encountered both for the field replacement and due to trenching related to HVAC upgrades.

Once the hazardous and non-hazardous soil/building material arrives at the Port of Los Angeles (POLA), non-hazardous soil would be transported to the Simi Valley Landfill which is located at 2801 Madera Road Simi Valley, California, approximately 62 miles from the POLA. Non-Resource Conservation and Recovery Act (RCRA) soils would be transported to Waste management Kettleman Hills located at 5251 Old Skyline Road Kettleman City, California, approximately 200 miles from the POLA or to other qualified licensed waste disposal facilities permitted to accept such waste.

Per the District's Voluntary Cleanup Agreement (DTSC 2007), "If, at any time during construction at the Project Site, a previously unidentified release or threatened release of a hazardous material or the presence of a naturally occurring hazardous material is discovered, the Proponent shall, pursuant to Education Code section 17213.2(e), immediately cease all construction activities at the Site and notify DTSC's Agreement Manager".

1.5.3 Project Schedule

The Proposed Project will occur over a 24-month period, approximately between 2022 and 2024. The school would continue normal operations during construction. Students and staff will be relocated on-site out of permanent spaces during construction when applicable. Construction activities will take place between the hours of 7:00 a.m. to 4:00 p.m. on Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturday, with Saturday work only occurring as necessary to complete the Proposed Project on time. The removal of the delineated "hot spots" is planned to occur during the summer when school is not in session.

Students will remain on site during project construction and students will be shifted to vacant spaces within permanent buildings and/or portables throughout the campus.

Construction Activities

DTSC approved the RAP in 2019 for delineated contaminated soil removal activities (DTSC 2019). Half of delineated contaminated soil removal work discussed in the RAP was performed during the Summer of 2019. The remainder of the removal is planned to initiate during the summer of 2022 when school is not in session. Once the CEQA document is approved by the District's Board of Education, the Proposed Project construction activities could begin in 2022. The construction would begin after the Division of the State Architect (DSA) approval of plans and specifications is obtained. Prior to and during construction activities, any existing asbestos and lead-based paint identified as areas to be touched by the Proposed Project would be abated in accordance with all applicable requirements, including SCAQMD Rule 1403, and disposed of properly (SCAQMD 1994). Uncontaminated materials would be recycled to the extent feasible; and the remaining debris, existing vegetation, and other structures would be removed and disposed of at an appropriate landfill after barging the material off Catalina Island.

Applicable Best Management Practices (BMPs) would be implemented as appropriate, and as discussed further in Section 4.0.

Construction equipment to be used during construction of the Proposed Project upgrades include, but is not limited to, the following items:

- Loaders
- Pick-up trucks
- Backhoes
- Water Truck
- Crane
- Asphalt paver
- Concrete Mixer Truck
- Concrete Pump
- Concrete Saw
- Dozer
- Dump Truck
- Excavator
- Flatbed Truck
- Front End Loader
- Generator
- Gradall
- Mounted Impact Hammer
- Paver
- Roller
- Tractor
- Welder
- Torch

Workers will have the option to take the ferry to and from the island on a daily basis or stay on the island for the duration of their work. The District anticipates that the majority of contractors would take the ferry to and from the site each day (especially during high season), but there may be some that elect to stay on the island until their work is complete. Construction materials and equipment will generally be transported by barge. Larger HVAC equipment that requires roof installation may be transported via helicopter if a crane of adequate size is not available (or cannot be transported to or operated) on the island.

Demolition and Excavation

Proposed demolition work for the Proposed Project will primarily occur within existing buildings and rooftops. This may include walls, ceilings, doors, glazing, casework, and floor/wall finishes. There will be some exterior demolition, including removal of walkways and ramps for ADA compliance. Removal of fire extinguishers, window HVAC units, and other restroom fixtures will be salvaged and delivered to the District for recycling. Proposed excavations will include concrete, asphalt, and earth excavation to allow installation of the upgraded HVAC units or subsurface utilities, replace degraded asphalt/concrete or ADA pathways, as well as the excavation for the installation of the new synthetic turf field and infrastructure. Demolished materials and contaminated soil encountered during the Proposed Project will be removed from Catalina Island via barge and will be transported from the POLA to the appropriate disposal facility.

Staging Areas

Construction trailers and staging areas will be located either within or directly adjacent to the school site. The staging areas would be located on already disturbed land.

Figure 1 - Project Vicinity Map

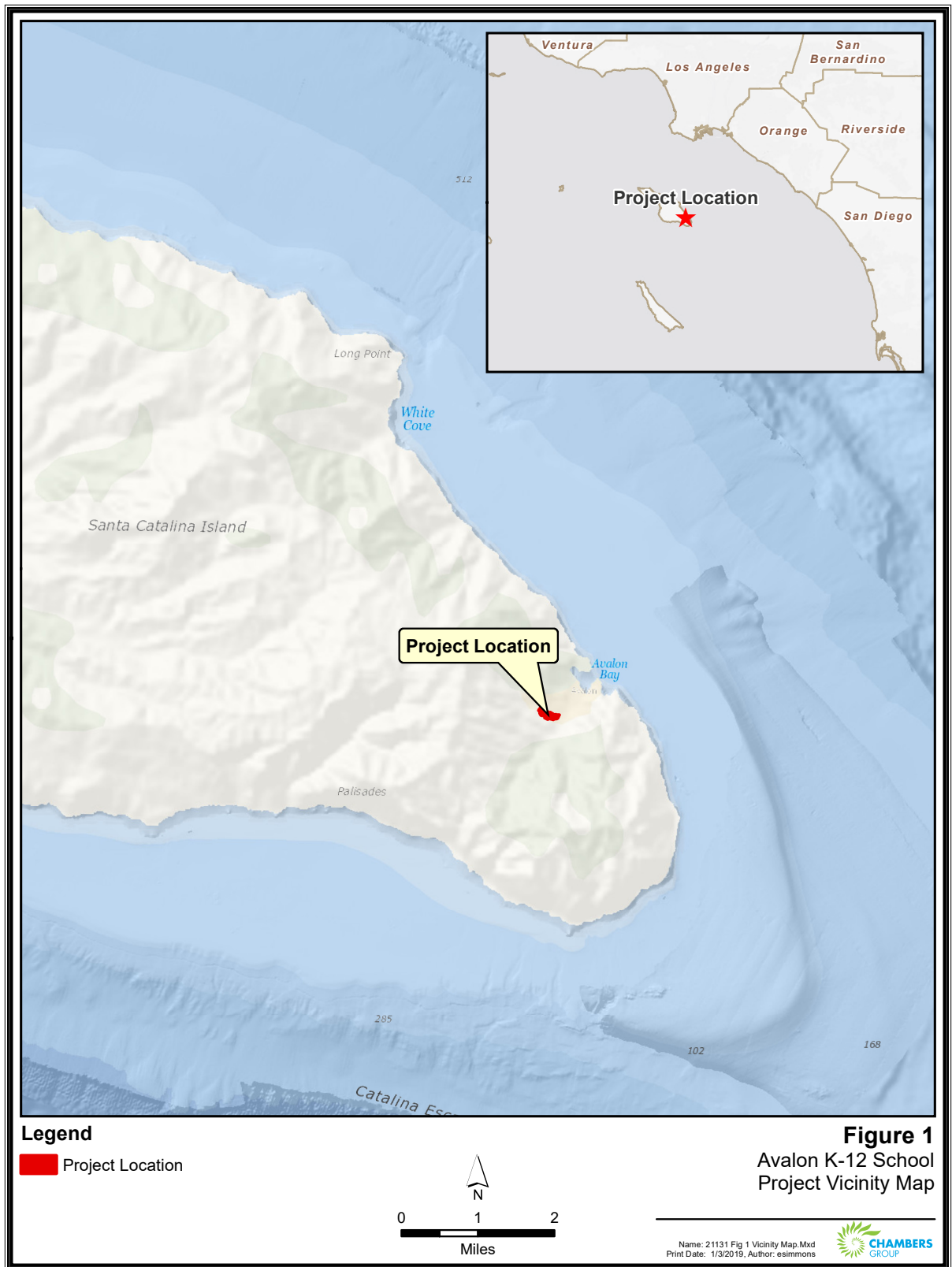


Figure 2 - Project Location Map



1.6 REQUIRED PERMITS AND APPROVALS

Reviewing Agencies include those agencies that do not have discretionary powers but may review the Mitigated Negative Declaration for adequacy and accuracy. Responsible Agencies have discretionary approval authority for a project. Potential Reviewing Agencies and Responsible Agencies include the following:

1.6.1 Responsible Agencies

State of California

- Department of Toxic Substances Control
- Department of Education
 - School Facilities Planning Division
- Department of General Services
 - Office of Public School Construction
 - Division of the State Architect
- Department of Public Health (DPH)
- Division of Occupational Safety and Health (Cal/OSHA)

Regional Agencies

- South Coast Air Quality Management District (SCAQMD)
- Los Angeles Regional Water Quality Control Board (RWQCB)
- Los Angeles County Department of Health

Local Agencies

- City of Avalon Fire Department

1.6.2 Reviewing Agencies

- City of Avalon
- Native American Heritage Commission, and tribes requesting consultation

SECTION 2.0 – ENVIRONMENTAL DETERMINATION

2.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would potentially be affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklists on the following pages. For each of the potentially affected factors, mitigation measures are recommended that would reduce the impacts to less than significant levels.

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy
<input type="checkbox"/> Geology /Soils	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards & Hazardous Materials
<input type="checkbox"/> Hydrology /Water Quality	<input type="checkbox"/> Land Use / Planning	<input type="checkbox"/> Mineral Resources
<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing	<input type="checkbox"/> Public Services
<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation	<input checked="" type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Utilities /Service Systems	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Mandatory Findings of Significance

2.2 DETERMINATION

On the basis of this initial evaluation:

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

Signature

Date

Name

Title

SECTION 3.0 – EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if substantial evidence exists that an effect may be significant. If one or more “Potentially Significant Impact” entries are marked when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significant.

*Note: Instructions may be omitted from final document.

SECTION 4.0 – CHECKLIST OF ENVIRONMENTAL ISSUES

4.1 AESTHETICS

1.	AESTHETICS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c)	Substantially degrade the existing visual character or quality of public views of the site and its surroundings? 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"/>

4.1.1 Environmental Setting

The aesthetic value of an area is a measure of its visual character and quality, combined with the viewer response to the area. Scenic quality can best be described as the overall impression that an individual viewer retains after driving through, walking through, or flying over an area. Aesthetic resources include scenic resources, which include water forms, trees, rock outcroppings, historic buildings, and scenic highways. Impacts to aesthetic resources include obstruction and destruction of views to or from scenic resources and/or the degradation of the visual character of the area.

Existing Visual Character and Visual Resources

The City of Avalon General Plan and Local Coastal Program outline the importance of the open space within the City as a scenic resource. Specific scenic views within the City of Avalon include the hillsides surrounding Lover's Cove including Buena Vista Point, the beach areas, and marine resources such as shorelines and lagoons (City of Avalon 2013).

4.1.2 Impact Analysis

a) *Would the project have a substantial adverse effect on a scenic vista?*

Less than Significant Impact. The Proposed Project site is bounded by residential housing to the north, a warehouse to the west, a golf course to the east, and the natural hillside to the south. Potential scenic vistas in the general vicinity of the Proposed Project site include views of the Pacific Ocean approximately 0.5 miles northeast of the Project site, Catalina Island Golf Course immediately southeast, and views of Mt. Orizaba, approximately 5.5 miles southeast of the Project site. No scenic vistas would be permanently obstructed by the Proposed Project. The Proposed Project elements on the existing campus would not result in increased building height that would permanently obstruct any views. Although the existing natural athletic field will be replaced with a synthetic turf larger in

size, the field will remain at the current site and views will not significantly be changed. In addition, although views of the school will be impacted during soil removal, synthetic turf field replacement, and building upgrades, with the presence of construction equipment and staging areas onsite, this impact will be temporary in nature. Construction activities will cease once the Proposed Project construction is completed and the campus will return to normal operations. Impacts to scenic vistas will be less than significant.

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

No Impact. There are no existing state scenic highways that have been identified or designated on Catalina island. The Proposed Project would, therefore, have no impact on any state scenic highway.

- c) *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less than Significant Impact. The Proposed Project is a phased project that includes contaminated soil removal, athletic field replacement, campus building upgrades including HVAC installation, and updates to endure ADA compliance. The Proposed Project will include ground disturbing activities to remove contaminated soils as well as incorporate these upgrades; and the construction of the Proposed Project includes the presence of construction equipment that will impact the existing visual character of the campus. Once operational, all construction equipment will be removed from the Proposed Project site and the campus will return to normal operating conditions. The Proposed Project would be consistent with the character of the surrounding structures. The campus upgrades would not significantly or permanently degrade the existing visual character or quality of the site or its immediate surroundings. The Proposed Project would also be consistent with zoning regulations. Impacts would be less than significant.

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

Less than Significant Impact. The Proposed Project would not substantially or permanently increase lighting in the surrounding area relative to existing levels. The Proposed Project site is in a small urbanized area surrounded by a residential neighborhood northeast of the Project site and the natural hillside to the south. The Project site has existing light sources for the campus grounds. The Proposed Project will include upgrades to the existing lighting; however, no additional lighting is proposed; therefore, the Project would not create a new source of substantial light or glare that would adversely affect the area. Supplemental lighting may be added during construction to illuminate dimly lit classrooms or trenches. However, these light sources are temporary and will be removed once construction is complete. Impacts would be less than significant.

4.2 AGRICULTURE & FORESTRY RESOURCES

	AGRICULTURE & FOREST RESOURCES. (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) 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.) Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
2.					
(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 nonagricultural 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 nonagricultural use or the conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.2.1 Environmental Setting

Agricultural resources include prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and commercial grazing land as defined in the Guidelines for the Farmland Mapping and Monitoring Program, pursuant to Section 65570 of the Government Code, as well as land in a Williamson Act contract.

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor and without intolerable soil erosion. (7U.S.C. 4201(c)(1)(A))

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops such as, citrus, tree nuts, olives, cranberries, fruits, and vegetables. (7 U.S.C. 4201(c)(1)(B))

Additional farmland of statewide or local importance is land identified by state or local agencies for agricultural use but not of national significance. (7 U.S.C. 4201(c)(1)(C))

The California Legislature passed the Williamson Act in 1965 to preserve agricultural and open-space lands by discouraging premature and unnecessary conversion to urban uses. The Williamson Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict their land to agricultural and compatible open-space uses.

The Williamson Act is a means to restrict the uses of agricultural and open-space lands to farming and ranching uses during the length of the contract period. The Williamson Act Program was also envisioned as a way for local governments to integrate the protection of open space and agricultural resources into their overall strategies for planning urban growth patterns.

4.2.2 Impact Analysis

- a) *Would the project 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 nonagricultural use?*

No Impact. The Proposed Project site is designated in the City of Avalon General Plan as Public (City of Avalon 2013). Land use designations surrounding the Project site include Low Density Residential to the north and southwest, Light Industrial to the west, and High- Resort Recreational (high and low density) to the south (City of Avalon 2013). The Proposed Project site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) (Department of Conservation 2016); therefore, the Proposed Project would not result in an impact associated with the conversion of farmland to non-agricultural use.

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

No Impact. The Proposed Project site is designated in the City of Avalon General Plan as Public (City of Avalon 2013). There are no areas adjacent to the Proposed Project site that are zoned for agricultural uses. Although some areas of Santa Catalina Island are designated as Williamson Act-Mixed Enrollment Agricultural Land, the Project site is not included in these designated areas (Department of Conservation 2016). The Proposed Project would not result in an impact associated with Williamson Act lands or agricultural zoning.

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

No Impact. The City of Avalon does not include any forest lands or timberland. Although open space is present in areas outside the City Center, these portions of the island will not be significantly

impacted by the Proposed Project. The Proposed Project would not take place within the forest lands. The Project would not result in an impact associated with forest land or timberland.

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

No Impact. Implementation of the Proposed Project would not result in any change to land use on the Project site. The Proposed Project does not contain forest lands, or lands for forest uses. Therefore, the Proposed Project would not result in an impact associated with forest land or the conversion of forest land to non-forest use.

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

No Impact. The Proposed Project is designated for Public land use (City of Avalon 2013) and the surrounding designations include industrial, residential, and recreational land uses. The Project site is not within an area identified as Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Department of Conservation 2016). The Proposed Project does not include activities involving conversion of agricultural or forest lands; therefore, no impact would occur.

4.3 AIR QUALITY

3.	AIR QUALITY. (Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.) Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	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?	<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"/>

This section describes the existing air quality setting and potential effects from Project implementation on the site and its surrounding area. Construction air quality modeling was performed through use of the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The model output is provided in Appendix A.

4.3.1 Environmental Setting

The Proposed Project site is located in the City of Avalon on Santa Catalina Island that is part of the County of Los Angeles. The Proposed Project site is located within the South Coast Air Basin (Air Basin),

and air quality regulation is administered by the South Coast Air Quality Management District (SCAQMD). The SCAQMD implements the programs and regulations required by the federal and state Clean Air Acts.

Atmospheric Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographical features. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with physical features of the landscape to determine their movement and dispersal, and consequently, their effect on air quality.

Avalon has a Mediterranean climate characterized by warm, dry summers and cool, moist winters. The semi-permanent high-pressure system west of the Pacific coast strongly influences Avalon and California's weather. It creates sunny skies throughout the summer and influences the pathway and occurrence of low-pressure weather systems that bring rainfall to the area during October through April. As a result, wintertime temperatures in Avalon are generally mild, while summers are warm and dry. The predominant wind direction is from northwest. These predominant wind patterns are occasionally broken during the winter by storms coming from the north and northwest and by episodic Santa Ana winds, which are strong northerly to northeasterly winds that originate from high-pressure areas centered over the desert of the Great Basin. These winds are usually warm, very dry, and often full of dust. They are particularly strong over the Pacific Ocean and can cause large waves and strong winds around Santa Catalina Island.

Average temperatures for the Avalon Pleasure Pier, which is the nearest monitored location, range from an average low of 47 degrees Fahrenheit (°F) in January to an average high of 73 °F in August. Rainfall averages approximately 13 inches a year with almost all annual rainfall coming from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Regulatory Setting

The Proposed Project site lies within the Air Basin, which is managed by the SCAQMD. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone, sulfur dioxide (SO₂), nitrogen dioxide (NO₂), inhalable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead. The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility.

Areas are classified under the Federal Clean Air Act as either "attainment" or "nonattainment" areas for each criteria pollutant, based on whether the NAAQS have been achieved or not. Attainment relative to the state standards is determined by the California Air Resources Board (CARB). The Air Basin has been designated by the Federal Environmental Protection Agency (EPA) as a nonattainment area for O₃ and PM_{2.5}. Currently, the Air Basin is in attainment with the NAAQS for CO, SO₂, NO₂, and PM₁₀. The Air Basin is designated as partial nonattainment for lead and is based on two source specific monitors in Vernon and in the City of Industry that are both near battery recycling facilities. The 2012 Lead SIP for Los Angeles County provides measures to meet attainment of lead by December 31, 2015. Current monitoring data shows that lead is now below the standards at all monitoring stations, however it will take three years of meeting the standards before Los Angeles County can request to be re-designated by the EPA.

The EPA has designated Air Basin as extreme nonattainment for the 8-hour average ozone standard. In 2015, the EPA strengthened its 8-hour “primary” and “secondary” ozone standards to 0.070 parts per million (ppm). The previous standard, set in 2008, was 0.075 ppm. The SCAQMD, the agency principally responsible for comprehensive air pollution control in the Air Basin, adopted the 2016 Air Quality Management Plan (AQMP) in March 2016 that provides measures to reduce 8-hour ozone levels to below the federal standard by 2037.

Additionally, the EPA has designated Air Basin as nonattainment for PM_{2.5}. In 1997, the EPA established standards for PM_{2.5} (particles less than 2.5 micrometers), which were not implemented until March 2002. The 1997 PM_{2.5} standard of 15 µg/m³ was attained on August 24, 2016. However, on December 14, 2012, the EPA revised the primary annual PM_{2.5} NAAQS from 15 µg/m³ to 12 µg/m³. The 2012 AQMP provides measures to reduce PM_{2.5} emissions to within the federal standard by December 31, 2025. PM_{2.5} is a subset of the PM₁₀ emissions whose standards were developed to complement the PM₁₀ standards that cover a full range of inhalable particle matter. For the PM₁₀ health standards, the annual PM₁₀ standard was revoked by the EPA on October 17, 2006; and the 24-hour average PM₁₀ attainment status was for the Air Basin was redesignated to attainment (maintenance) on July 26, 2013.

The Air Basin has been designated by CARB as a nonattainment area for ozone, NO₂, PM₁₀, and PM_{2.5}. Currently, the Air Basin is in attainment with the state ambient air quality standards for CO, SO₂, and sulfates and is unclassified for visibility-reducing particles and hydrogen sulfide. The adopted AQMPs provide measures to meet the state standards for ozone, NO₂, PM₁₀, and PM_{2.5}. Table 2 presents the designations and classifications applicable to the Proposed Project area.

Table 2: Designations/Classifications for the Project Area

Pollutant	Averaging Time Standard	National Standards Attainment Date ¹	California Standards ²
1979 1-Hour Ozone (O ₃) ³	1-Hour (0.12 ppm)	Nonattainment (Extreme) 2/6/2023	Nonattainment
1997 8-Hour Ozone (O ₃) ⁴	8-Hour (0.08 ppm)	Nonattainment (Extreme) 6/15/2024	
2008 8-Hour Ozone (O ₃)	8-Hour (0.075 ppm)	Nonattainment (Extreme) 7/20/2032	
2015 8-Hour Ozone (O ₃)	8-Hour (0.070 ppm)	Nonattainment (Extreme) 8/3/2038	
Carbon Monoxide (CO)	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance) 6/11/2007 (attained)	Maintenance
Nitrogen Dioxide (NO ₂) ⁵	1-Hour (100 ppb)	Unclassifiable/Attainment Attained	Attainment
	Annual (0.053 ppm)	Attainment (Maintenance) 9/22/1998	
Sulfur Dioxide (SO ₂) ⁶	1-Hour (75 ppb)	Designation Pending/ Pending	Attainment
	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/Attainment 3/19/1979 (attained)	
Particulate Matter (PM ₁₀)	24-Hour (150 µg/m ³)	Attainment (Maintenance) 7/26/2013	Nonattainment

Particulate Matter (PM _{2.5})	24-Hour (35 µg/m ³)	Nonattainment (Serious) 12/31/2019	Nonattainment
	1997 Annual (15.0 µg/m ³)	Attainment 8/24/2016	
	Annual (12.0 µg/m ³)	Nonattainment 12/31/2025	
Lead (Pb)	3-Months Rolling (0.15 µg/m ³)	Nonattainment (Partial) ⁷ 12/31/2015	Nonattainment

¹ Obtained from <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14>

² Obtained from <http://www.arb.ca.gov/design/adm/adm.htm>.

³ 1-hour O₃ standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard based on 2008-2010 data has some continuing obligations under the former standard.

⁴ 1997 8-hour O₃ standard (0.08 ppm) was reduced (0.075 ppm) in 2008; the 1997 O₃ standard and most related implementation rules remain in place until the 1997 standard is revoked by U.S. EPA.

⁵ New NO₂ 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO₂ standard retained.

⁶ The 1971 annual and 24-hour SO₂ standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO₂ 1-hour standard. Area designations are expected in 2012, with Basin designated Unclassifiable/Attainment

⁷ Partial Nonattainment designation – Los Angeles County portion of Basin only. Expect redesignation to attainment based on current monitoring data.

Monitored Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates of the existing emissions in the Air Basin provided in the Final 2016 AQMP, March 2017, indicate that, collectively, mobile sources account for 33 percent of the volatile organic compounds (VOC), 88 percent of the NO_x emissions, and 35 percent of directly emitted PM_{2.5}, with another 10 percent of PM_{2.5} from road dust. However, the mobile source regulations currently in place are anticipated to reduce the share of emissions currently produced by mobile sources and by 2031 mobile source emissions are anticipated to create 14 percent of VOC emissions, 30 percent of NO_x emissions and 23 percent of PM_{2.5} emissions with another 14 percent of PM_{2.5} from road dust.

Although the SCAQMD monitors the air quality at various locations throughout the Air Basin, none of the monitoring stations are located on Santa Catalina Island and as such there are no monitoring stations that are representative of the air pollutants at the Project site. According to the City's General Plan EIR¹, Air quality in Avalon is generally good. The City regulates the number of vehicles permitted within the City limits and most residents drive small vehicles or autoettes. Common generators of pollutants, such as vehicle emissions, construction, and industrial operations, are limited within the City and the island as a whole. Therefore, activities that exceed SCAQMD thresholds are relatively infrequent.

4.3.2 Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

¹ From City of Avalon 2030 General Plan/Local Coastal Plan Final EIR, 2013

Less than Significant Impact. CEQA requires a discussion of any inconsistencies between a Proposed Project and applicable general plans (GP) and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the Proposed Project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the Proposed Project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the Proposed Project would interfere with the region's ability to comply with federal and state air quality standards. If the decision-makers determine that the Proposed Project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A Proposed Project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- (2) Whether the project will exceed the assumptions in the AQMP in 2010 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in this Air Analysis, it was determined that short-term construction impacts and long-term operations impacts would not result in significant impacts based on the SCAQMD regional, local, and toxic air contaminant thresholds of significance.

Therefore, the Proposed Project is not expected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the Proposed Project with the assumptions in the AQMP. The emphasis of this criterion is to insure that the analyses conducted for the Proposed Project are based on the same forecasts as the AQMP. The Regional Comprehensive Plan and Guide consist of three sections: Core Chapters, Ancillary Chapters, and Bridge Chapters. The Growth Management, Regional Mobility, Air Quality, Water Quality, and Hazardous Waste Management chapters constitute the Core Chapters of the document. These chapters currently respond directly to federal and state

requirements placed on the Southern California Association of Governments (SCAG). Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this Project, the City of Avalon General Plan defines the assumptions that are represented in the AQMP.

The Proposed Project consists of removal of contaminated soils, improvements to the athletic field, and upgrades to the campus buildings that include new HVAC systems as well as ADA accessibility improvements to the existing School. The Proposed Project site is designated as Public in the General Plan and is zoned Public (P). The Proposed Project is consistent with the current land use designations and would not require a General Plan Amendment or zone change. In addition, development of the Proposed Project would not result in an increase in employee or student capacity at the School. Project construction would be required to comply with SCAQMD Rules and Regulations, including Rules 402 and 403 that control the emissions of air contaminants, odors, and fugitive dust, as well as Rule 1466 which controls emissions related to toxic air contaminants including lead consideration. Therefore, based on the above, the Proposed Project is not anticipated to exceed the AQMP assumptions for the Proposed Project site and is found to be consistent with the AQMP for the second criterion.

Based on the discussion above, the Proposed Project will not result in an inconsistency with the SCAQMD AQMP. Accordingly, the Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.

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

Less than Significant Impact. As shown above in Table 2, the Proposed Project area is designated as a federal and/or state nonattainment area for ozone and PM_{2.5}. To estimate if the Proposed Project may adversely affect the air quality in the region, the SCAQMD has prepared CEQA Air Quality Handbook (SCAQMD 1993) to provide guidance to those who analyze the air quality impacts of proposed projects. The SCAQMD CEQA Handbook states that any project in the Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes of this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table 3.

Table 3: Regional Thresholds of Significance

	Pollutant Emissions (Pounds/Day)						
	VOC	NOx	CO	SOx	PM ₁₀	PM _{2.5}	Lead
Construction	75	100	550	150	150	55	3
Operation	55	55	550	150	150	55	3

Source: SCAQMD, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the Project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the Project-related air emissions in the project vicinity. SCAQMD has also provided *Final Localized Significance Threshold Methodology* (LST Methodology), July 2008, which details the methodology to analyze local air emission impacts. The LST Methodology found that the primary emissions of concern are NO₂, CO, PM₁₀, and PM_{2.5}.

The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. The Avalon K-12 campus is approximately 11.5 acres, however less than half of the campus would be disturbed during construction activities associated with the Proposed Project. As such, the 5-acre Project site provided in the Look-Up Tables was utilized for this analysis. Since Santa Catalina Island is not located within a Source Receptor Area detailed in the Look-Up Tables, the nearest Source Receptor Area to the project site of South Coastal LA County was utilized in this analysis. Construction activities would occur as near as 15 feet to the existing homes located on the north side of the Project site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25 meter thresholds. Table 4 below shows the LSTs for NOx, CO, PM₁₀ and PM_{2.5} for both construction and operational activities.

Table 4: Local Thresholds of Significance

Activity	Allowable Emissions (pounds/Day) ¹			
	NOx	CO	PM ₁₀	PM _{2.5}
Construction	123	1,530	14	8
Operation	123	1,530	4	2

¹ The nearest sensitive receptors are multi-family homes located as near as 15 feet (5 meters) north of the project site. According to SCAQMD Methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

Source: SCAQMD's Mass Rate Look-Up Tables for five acres in Air Monitoring Area found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>

Construction Emissions

Construction of the Proposed Project would create air emissions primarily from equipment exhaust and fugitive dust. The air emissions from the Proposed Project were analyzed through use of the CalEEMod model (see Appendix A). Construction activities for the Proposed Project would be completed in phases consisting of the removal of contaminated soils, as well as

improvements to the campus buildings that include new HVAC systems, ADA accessibility improvements, and improvements to the athletic field. The construction equipment utilized during each phase was provided by the District and included the haul trucks operating on the Island as well as traveling an average length of 65 miles, which is the distance to the Simi Valley Landfill and is also the approximate distance to the Air Basin limits, for haul trucks that will travel outside the Air Basin. It was assumed that the transport of workers to the Island would occur on regularly scheduled ferry trips, that would occur with or without the Proposed Project, and therefore would not result in increased emissions from ferry boats. In addition, all equipment and materials transported to the Project site as well as all the dirt exported from the Project site would occur on regularly scheduled freight trips that would occur with or without the Proposed Project, and therefore would not result in increased emissions from freighters.

Table 5 shows the estimated worst-case summer or winter daily emissions that would be predicted from each phase of the Proposed Project, which is based on the construction equipment provided by the District of what is anticipated to be used during construction activities.

Table 5: Construction-Related Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions in pounds/day					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Combined Total Emissions	8.69	72.05	67.96	0.19	10.85	6.28
- Classroom Soil Remediation	1.20	10.59	9.79	0.03	3.51	1.95
- Classroom Upgrades	3.15	26.29	23.08	0.07	2.43	1.30
- Athletic Field Soil Remediation	1.14	9.85	9.83	0.03	3.51	1.91
- Athletic Field Improvements	3.20	25.32	25.26	0.06	1.40	1.12
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceed?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.

As shown in Table 5, short-term emissions would not exceed SCAQMD regional criteria pollutant thresholds. In addition, construction emissions would be short-term, limited only to the period when construction activity is taking place. As such, construction-related regional emissions would be less than significant for the Proposed Project.

The Proposed Project's construction-related air emissions from fugitive dust and onsite diesel emissions may have the potential to exceed the state and federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. The nearest sensitive receptors to the Proposed Project's improvements are single-family homes, located adjacent to the Proposed Project site.

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the methodology described in LST Methodology, prepared by SCAQMD, revised July 2008. In order to determine if any of the analyzed pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the LST

Look-Up Tables. Table 6 shows the onsite emissions from the CalEEMod model for the different construction phases and the calculated emissions thresholds.

Table 6: Construction-Related Local Criteria Pollutant Emissions

Activity	Onsite Pollutant Emissions in pounds/day			
	NO _x	CO	PM ₁₀	PM _{2.5}
Combined Total Emissions	67.14	61.22	8.8	5.71
- Classroom Soil Remediation	10.39	9.37	3.38	1.91
- Classroom Upgrades	22.21	18.19	0.98	0.90
- Athletic Field Soil Remediation	9.29	9.26	3.32	1.86
- Athletic Field Improvements	25.25	24.40	1.12	1.04
SCAQMD Threshold for 25 meters or less¹	123	1,530	14	8
Exceed?	No	No	No	No

¹ The nearest sensitive receptors are multi-family homes located as near as 15 feet (5 meters) north of the project site. According to SCAQMD Methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

Source: CalEEMod Version 2016.3.2 and SCAQMD's Mass Rate Look-Up Tables for five acres in Air Monitoring Area 4.

The data provided in Table 6 shows that construction-related emissions would not exceed SCAQMD's local air concentration thresholds. In addition, construction emissions would be short-term, limited only to the period when construction activity is taking place. As such, construction related local air concentrations would be less than significant for the Proposed Project.

Operational Emissions

The Proposed Project consists of removal of contaminated soils, upgrades to the campus buildings that include new HVAC systems as well as ADA accessibility improvements to the existing campus and finally improvements to the athletic field. Development of the Proposed Project would not result in an increase in employee or student capacity at the School or would create any additional vehicle trips. Operational emissions associated with the Proposed Project would likely be slightly greater than the emissions currently occurring within the Project site due to increased energy usage associated with operation of the proposed HVAC units. However, most of the emissions associated with creation of electricity are created outside of the Air Basin and as such, would not impact the air quality of the Air Basin. Therefore, although a minor increase in emissions is anticipated as a result of the Proposed Project, emissions would be primarily created outside of the Air Basin and would be well below applicable SCAQMD trigger levels. As such, operation of the Proposed Project would not violate air quality standards or contribute substantially to an existing or projected air quality violation. Operational impacts would be less than significant.

Accordingly, the Proposed Project would not result in a cumulative considerable net increase of any criteria pollutant.

c) *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Less than Significant Impact. The nearest sensitive receptors to the Project site are multi-family homes located as near as 15 feet north of the limits of construction activities for the Proposed Project. In addition, onsite students, teachers, and other school staff would also be in close proximity to construction activities associated with the Proposed Project. As discussed above in 4.3.2 (b), the local concentrations of criteria pollutant emissions have been calculated for construction and operational activities. The operational air analysis found that the Proposed Project would not create any quantifiable criteria pollutant emissions; therefore impacts to human health are considered less than significant. The analysis above found that less than significant criteria pollutant concentrations would occur during construction and operation of the Proposed Project.

In addition, to the criteria pollutant emissions impacts analyzed above, construction activities have the potential to expose nearby sensitive receptors to toxic air contaminants (TACs), which would be created from the operation of diesel-powered equipment in the form of diesel particulate matter (DPM). According to SCAQMD methodology, health effects from TACs are usually described in terms of “individual cancer risk”. “Individual Cancer Risk” is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. Given the relatively limited number of heavy-duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the Proposed Project would not result in a long-term (i.e., 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet’s usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023 no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the Proposed Project.

Therefore, implementation of the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

d) Would the project result in substantial emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. Any diesel equipment used during construction of the Proposed Project would consist of mobile equipment that would be changing locations, allowing the odors to disperse rapidly and not impact any nearby receptors. Should diesel equipment be required during maintenance at the Project site, it would also change locations, allowing the odors to disperse rapidly and not impact any nearby receptors. Construction and operation at the Project site would not introduce any other objectionable odors. Therefore, construction and operation of the Proposed Project would not create objectionable odors adversely affecting a substantial number of people, and impacts would be less than significant.

4.4 BIOLOGICAL RESOURCES

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

4.4.1 Environmental Setting

Biological resources include habitat and vegetative communities, migratory corridors, plants, wildlife, fisheries, special status species (regulated by a law, regulation, or policy, such as threatened and endangered species), and waters of the United States. A Biological Resources Report was prepared in May 2019 by Chambers Group that summarizes the result of the database search and literature review conducted for the Project site. The purpose of the desktop review was to determine if there are any records of listed and/or sensitive plant and wildlife species and communities, and potential wetlands and/or waters under state or federal jurisdiction, occurring on or in the immediate vicinity of the Proposed Project (Appendix B).

4.4.2 Impact Analysis

(a) *Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as 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 Impact. The Proposed Project site is completely developed with the Avalon K-12 school campus, which consists of seven permanent buildings, one modular building, and 22 portable buildings. Ground disturbing activities will be required for contaminated soils removal, trenching for HVAC system installation, and for the replacement of the natural turf athletic field with synthetic turf. No proposed activities would occur outside of the school campus or previously developed areas. No impacts to native vegetation are anticipated to occur.

While sensitive species were historically identified as having known occurrences within the Proposed Project site, these records were dated prior to development of the Proposed Project site. Based on the lack of suitable habitat for any sensitive species, no sensitive plant or wildlife species are expected to occur within the Proposed Project site. The Proposed Project site is fully developed, and no suitable habitat is present; therefore, no rare plants are expected to occur within the Project site. Impacts would be less than significant.

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

No Impact. As previously stated in Section 4.4.2 Impact (a), the Proposed Project site does not contain any suitable habitat for wildlife species, sensitive plant species, and is not within or adjacent to any U.S. Fish and Wildlife Service (USFWS) designated critical habitats. The Proposed Project site is fully developed and all proposed activities will occur within the existing campus. No impact would occur.

- (c) Would the project 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. According to the prepared Biological Resources Report (Appendix B), the Proposed Project is located within the San Nicholas Island-Santa Catalina Island Watershed. No blue-lines are indicated within the Proposed Project site. One drainage appears to be located below the Project site; however, the Proposed Project site is fully developed, and no waterways occur within the Project site. Therefore, no impacts to waters are anticipated to occur as a result of work activities. According to the USFWS National Wetlands Inventory (NWI) Map, no mapped wetlands are located within or adjacent to the Proposed Project site. No impact would occur.

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

Less than Significant Impact. The Proposed Project site is a fully developed existing campus. The California Natural Diversity Database (CNDDB) and USFWS database searches resulted in a list of two federal- and state-listed threatened or endangered wildlife species that have records of occurrence in the vicinity of the Proposed Project site. However, the Proposed Project site lacks suitable habitat and therefore these species are not expected to occur within the Proposed Project site except to potentially migrate to a more favorable destination.

In addition to these species, one Species of Special Concern was identified within the Proposed Project site vicinity. However, this species has not been observed within or adjacent to the Proposed Project site since 1924. Due to the development of the Proposed Project site and lack of suitable habitat, this species is not anticipated to occur within the Project boundary. Therefore, implementation of the Proposed Project would result in a less than significant impact regarding wildlife movement or nursery sites.

- (e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

No Impact. No local policies or ordinances protecting biological resources, such as a tree ordinance, apply to the Project site. No impact would occur.

- (f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservancy Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Less than Significant Impact. According to the Los Angeles County Department of Regional Planning, the Proposed Project, and the City of Avalon, is located within the Coastal Resource Areas, but is not located within the County's Significant Ecological Areas. Biological resource management and regulation within the Santa Catalina Island Costal Zone is implemented through the Santa Catalina Island Local Coastal Program (Los Angeles County 2015). The Proposed Project includes contaminated soil removal, athletic field replacement, campus building upgrades, and updates to ensure ADA compliance. All proposed activities will occur within the existing campus, and no activities are anticipated in any of the surrounding open space areas or environmentally sensitive habitat areas. As previously stated in Section 4.4.2 Impacts (a) and (b), there are no sensitive habitat onsite because the Proposed Project site is a fully developed area. Impacts would be less than significant.

4.5 CULTURAL RESOURCES

5.	CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.5.1 Environmental Setting

Chambers Group prepared an Archaeological Literature Review and Records Search on February 2019 to assess the potential for significant archaeological deposits and/or materials within the

Proposed Project site (Appendix C). In 2017 PCR Services prepared the District-Wide Cultural Resources Assessment. The goal of this District-Wide Cultural Resources Assessment was to assist the District with complying with the historical resources requirements of CEQA when applicable and to implement practical approaches to preserving culturally significant resources whenever possible. As part of the District-Wide Cultural Resources Assessment, PCR services recommended that Avalon K-12 is eligible for the National Register of Historic Places (NRHP). The District-Wide Cultural Resources Assessment stipulated that a Phase II Intensive Historic Resources Assessment be prepared as part of the compliance activities. This Phase II Intensive Historic Resources Assessment was prepared by Paleo West Archaeology in May 2019 to determine if the Proposed Project would have an adverse effect on the historic significance of the Avalon K-12 facilities (Appendix D).

- a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

Less than Significant Impact. PCR services recommended that Avalon K-12 is eligible for the NRHP under Criterion C and the California Register of Historical Resources (CRHR) under Criterion 3 as a distinctive example of Spanish Revival-style architecture that was rehabilitated by prominent architect Harold C. Wildman. PCR Services identified four buildings that contributed to the historic significance of the resource (Building A – High School Building, Building B – Elementary School Building, Building D – Library, and Building E – Gymnasium Office and Locker Room). Detailed character defining features are provided in Appendix D.

According to CEQA, a project that has been determined to conform with the Secretary of the Interior's Standards for the Treatment of Historic Properties can generally be considered to be a project that will not cause a significant impact (14 CCR Section 15126.4(b)(1)). In the case of historic built environment resources, a significant impact is a substantial adverse change to the historic integrity of a resource. A substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of an historical resource would be impaired.

The Proposed Project is a phased project that includes contaminated soil removal, athletic field replacement, campus building upgrades, and updates to ensure ADA compliance. These include exterior improvements including HVAC system installation, window replacements and new Low-E glazing on some existing windows, removal and replacement of degraded asphalt, drinking fountain upgrades, new building signage, cosmetic upgrades including paint, accessibility upgrades, replacement of existing natural turf field with a new synthetic turf athletic field, replacement of existing scoreboard with a new one, providing new restrooms and a concession stand for field use, providing new bleachers for visitors, and utility system upgrades as required to support the new field.

All other improvements will not have a physical or visual impact that could potentially affect the historic integrity of the resource or will not be visible from the exterior of the buildings. The HVAC system installation, window replacements and new Low-E glazing on some existing windows, removal and replacement of degraded asphalt, drinking fountain upgrades, new building signage, cosmetic upgrades including paint, accessibility upgrades will not result in the destruction or significant modification of the character defining features of the contributing buildings. The HVAC units will be placed at a set-back location on the roof of the buildings, which will minimize the potential visual impact and not significantly change the appearance or the massing of the buildings

in a way that compromises their ability to convey their significance. Original wood-framed windows will not be replaced or significantly modified to the point at which they no longer contribute to the historic integrity of the resource. The application of Low-E glazing to the historic period windows will not result in their destruction or removal; and the overall appearance and placement of the windows will remain unchanged.

No windows that contribute to the historic significance of the contributing buildings will be removed, replaced, or significantly modified. The upgrade of water fountains, new building signage, exterior paint, and accessibility upgrades will not result in any significant physical modifications to the buildings that will compromise their historic integrity. All other planned exterior improvements, including those for the athletic field, will have no effect on the historic integrity of the contributing buildings. Therefore, the Proposed Project would have no adverse effect to the character defining features of the Buildings 1000, 3000, 4000, and 6000. The Proposed Project improvements will not have a physical or visual impact that could potentially affect the historic integrity of the resource or will not be visible from the exterior of the buildings. Because the Proposed Project does not appear to have the potential to adversely affect the historic significance of Avalon K-12, Compliance Activity C does not appear to be necessary. Therefore, impacts would be less than significant.

- b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less than Significant Impact with Mitigation Incorporated. An Archaeological Construction Monitoring report was prepared for Avalon High School in 2013, and an Archaeological Literature Review and Record Search was conducted in January 2019 for the Avalon K-12 HVAC, ADA, Contaminated Soil Removal & New Synthetic Turf Field Project. Results from the 2013 Archaeological Construction Monitoring Report resulted in the discovery of historic-era artifacts during a subsurface exploratory remediation investigation in designated trenches in the vicinity of the original high school building, the elementary building, and playground area. Specifically, it appears that the deposit represents multiple “dump” episodes that occurred over several years and possibly over decades sometime between 1888 and 1923, prior to the development of the original high school building (PCR 2013).

The Archaeological Literature Review and Record Search conducted in January 2019 included background studies of the Proposed Project site as part of a Phase I Cultural Resource Study (Appendix C). The Native American Heritage Commission (NAHC) Sacred Lands File search did not identify any sacred sites or tribal cultural resources within the search radius. The cultural record search identified eight previous cultural resource studies conducted within the Project area. Since no cultural resources were identified within the Project area as a result of the record search and literature review, no significant impacts are expected to occur as part of the Proposed Project; and no further surveys for cultural resources are recommended. However, because resources are often buried and not easily identifiable, in the event of an unanticipated discovery, the following mitigation is recommended:

MM CUL-1: In the event that unanticipated cultural resources are encountered during ground-disturbing activities, a qualified archaeologist shall be contacted to assess the significance of the find. In the case that previously undiscovered resources are identified during construction activities, excavations within 50 feet of the find shall be temporarily

halted or diverted. If the qualified archaeologist determines the find to be significant, construction activities can resume after the find is assessed and mitigated accordingly.

- c) *Would the project disturb any human remains, including those interred outside of dedicated cemeteries?*

Less than Significant Impact with Mitigation Incorporated. There were no cultural resources identified within the Proposed Project site as a result of the record search and literature review. However, in the event that the discovery of human remains occurs during ground-disturbing activities, the following regulations must be followed.

MM CUL-2: California State law (California Health and Safety Code 7050.5) and federal law and regulations (Archaeological Resources Protection Act [ARPA], 16 United States Code [U.S.C.] 470 and 43 Code of Federal Regulations, [CFR] 7, Native American Graves Protection and Repatriation Act [NAGPRA] 25 U.S.C. 3001 and 43 CFR 10, and Public Lands, Interior 43 CFR 8365.1-7) require a defined protocol if human remains are discovered in the state of California regardless if the remains are modern or archaeological. Upon discovery of human remains, all work within a minimum of 200 feet of the remains must cease immediately, and the County Coroner must be notified. The appropriate land manager/owner or the site shall also be notified of the discovery. If the remains are located on federal lands, the federal land manager(s), federal law enforcement, and/or federal archaeologist should also be notified. If the human remains are determined by the Coroner to be prehistoric, the appropriate federal archaeologist must be called. The archaeologist will initiate the proper procedures under ARPA and/or NAGPRA. If the remains can be determined to be Native American, the steps as outlined in NAGPRA 43 CFR 10.6 Inadvertent Discoveries must be followed. Therefore, impacts would be less than significant with mitigation incorporated.

4.6 ENERGY

6.	ENERGY Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use 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"/>

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

Less than Significant Impact. The Proposed Project includes ground-disturbing activities to remove existing contaminated soils, the installation of HVAC equipment, the replacement of the

existing athletic field, and several other ADA compliance upgrades around the school campus. The Proposed Project would, at a minimum, implement CCR Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The Proposed Project would, therefore, result in a less than significant impact.

- b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Less than Significant Impact. The Proposed Project would comply with the CRR Title 24 which regulates the amount of energy consumed by new development for heating, cooling, ventilation, and lighting which would apply to the operation of the HVAC equipment. The Proposed Project would result in less than significant impacts.

4.7 GEOLOGY AND SOILS

7.	GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.7.1 Environmental Setting

Informed land-use decisions require information about California's geologic and seismic hazards, such as surface rupture, ground failure, landslides, liquefaction, soil erosion, and subsidence. The California Geological Survey (CGS) provides technical information and advice about landslides, erosion, sedimentation, and other geologic hazards to the public, local governments, agencies, and industries that make land-use decisions in California. Surface rupture is the breakage of ground along the surface trace of a fault caused by the intersection of the fault surface area ruptured in an earthquake. Liquefaction is a process by which water-saturated granular soils transform from a solid to a liquid state during strong ground-shaking. A seismically induced landslide is a general term for falling, sliding, or flowing mass of soil, rocks, water, and debris caused by an earthquake. Erosion is displacement of soil, usually by moving water and wind.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. This state law was a direct result of the 1971 San Fernando Earthquake, which was associated with extensive surface fault ruptures that damaged numerous homes, commercial buildings, and other structures. Surface rupture is the most easily avoided seismic hazard. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Seismic Hazards Mapping Act, passed in 1990, addresses nonsurface fault rupture earthquake hazards, including liquefaction and seismically induced landslides.

Previous geotechnical reports were prepared for installation of relocatable classrooms, an extension of a fire road, and for the gymnasium in 1988, 1990, and 1998. Based on these geotechnical and soils reports, modifications were made to existing fill soils onsite including excavating existing fill soils, removing decayable debris, and recompacting to a minimum of 90% of maximum density at near optimum moisture content (ASE 1988, 1990, 1998). This Proposed Project would not be relocating or adding any new structures on the existing campus.

Ninyo & Moore prepared a Preliminary Geological and Other Hazards Evaluation (Appendix E) that evaluated geological hazards in accordance with California Department of Education (CDE) code. The results of this evaluation are discussed in the impact analysis sections below. In addition, a Limited Geotechnical Evaluation of Soil/Bedrock Conditions on Slope North of Ballfield, Avalon K-12 School was prepared by Leighton Consulting, Inc. to evaluate the geotechnical suitability of the soil/bedrock conditions in the slope north of the ballfield, as the northern limits of the athletic field are planned to be expanded to provide more space for the field. A volume of approximately 690 cubic yards would be removed from the slope, and a retaining wall will be engineered and construction to support the northern side of the canyon adjacent to the athletic field. Once the soil/bedrock has been removed from the slope in preparation for construction of the retaining wall, the District intends to use the material generated as backfill for other areas of the campus where needed during modernization activities. The report evaluated the geotechnical suitability of the material to be used as backfill, and results are included in the analysis below, as appropriate. A Geotechnical Exploration Avalon K-12 School Sports Field and Site Improvements Report was prepared by Leighton in September 2019 to evaluate conditions at the athletic field site.

In addition, a Geotechnical and Geological Engineering Investigation Report was prepared by Koury Engineering in February of 2020. This report focused on improvements to the campus including

construction of retaining walls and ramps near Buildings 5000 and 6000, as well as other additional including sidewalks, landscaping, hardscape, and accessibility upgrades. The analysis including field exploration, laboratory testing, and assessment of groundwater. Results of the analyses are incorporated below, and all geotechnical reports are appended as Appendix E.

4.7.2 Evaluation

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

No Impact. The Project site is located on Santa Catalina Island which is not located on top of a fault line, or within an Alquist Priolo Earthquake Fault Zone. The Project site is located approximately 17 miles southeast of the nearest active fault, the Palos Verdes fault (Ninyo & Moore 2019). The closest active faults to the Project site include the Palos Verdes fault, Coronado Bank fault, and the Newport-Inglewood fault located approximately 17.3 miles, 24.4 miles, and 29.7 miles from the site respectively (Leighton 2019). The Proposed Project would be considered to have a less than significant impact on directly or indirectly causing adverse impacts involving rupture of a known earthquake fault.

a)ii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less than Significant Impact. Ground-shaking from a major earthquake could be a potential seismic hazard affecting the Project site. It is estimated that a 7.2 magnitude earthquake may occur on the nearest segment of the Palos Verdes Fault, the nearest fault to the Project site. Due to the proximity of the site to the faults, effects from strong ground motion associated with a large earthquake may occur at the Project site (Koury Engineering 2020). The Proposed Project site is not located directly on or adjacent to any fault zones. The Proposed Project activities will comply with current building codes and will be compliant with the seismic safety codes and ADA accessibility requirements. Impacts would be less than significant.

a)iii) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less than Significant Impact. Liquefaction is a process where soil behaves temporarily as a viscous liquid and experiences loss of soil strength. Liquefaction typically occurs in areas where sediment is water-saturated during moderate to large earthquakes. The California Geological Survey (2016) does not identify the island as susceptible to liquefaction. As per the General Plan, the water table is low and liquefaction is considered a low risk (City of Avalon 2013). Since the depth to groundwater is anticipated to be greater than 50 feet below ground surface, the potential for liquefaction to occur at the site is considered low (Leighton 2019). Impacts would, therefore, be less than significant.

a)iv) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Less than Significant Impact. The Proposed Project site is not identified as an area prone to seismically induced landslides. The Project site is relatively flat which would not induce or facilitate landslides. There are various known landslide areas in the City which are located along Pebbly Beach, Vieudelou Avenue, Hill Street, Olive Street, and Maiden Lane. The Proposed Project is not located in the immediate vicinity of these landslide areas (City of Avalon 2013). The athletic field portion of the Proposed Project includes excavation into a hillside slope north of the existing athletic field; and this slope is approximately 1.3: 1 (horizontal: vertical). The Geotechnical Exploration report prepared for the athletic field expansion found that, with proposed slopes engineered and constructed at a gradient of 2:1 or flatter, the slope would remain stable (Leighton 2019). In addition, the Project proposes to construct new retaining walls and ramps near Buildings 5000 and 6000. The proposed ramps and retaining walls will include excavation into the hillside east of the athletic field to provide appropriate path of travel from Building 5000 to the athletic field. The retaining walls may require minor footings that should be supported on at least 2 ½ feet of new engineered fill and should be embedded at least 18 feet inches below the lowest adjacent grade (Koury Engineering 2020). Since the Proposed Project site is not located within a known area that has been identified as potentially susceptible to seismically induced landslides, with implementation of appropriate gradients and recommended engineering design, impacts would be less than significant.

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

Less than Significant Impact. The Proposed Project site would involve the installation of an HVAC system, removal of contaminated soils, ADA compliance upgrades to the existing school structures and the replacement of the existing natural turf athletic field with synthetic turf. The Project also includes the removal of contaminated soils from up to five feet below the Project site which includes ground-disturbing activities. To minimize erosion on the athletic field portion of the Project, BMPs will be implemented including requiring all disturbed areas to be replanted with erosion-resistant vegetation suited to the area or covered with erosion control mats. With implementation of District BMPs to reduce erosion, impacts would be less than significant.

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

Less than Significant Impact. As discussed above, the Project site is not located in an area of slope instability and is not susceptible to liquefaction (CGS 2015a). In addition, the Proposed Project site is relatively flat. The Proposed Project improvements will occur within the existing campus grounds which would not result in an increased risk for landslide, lateral spreading, subsidence, liquefaction or collapse. Reuse of non-contaminated existing soil onsite, especially from soil generated from the cutting of the slope north of the athletic field, would result in less than significant impacts as the soil is geotechnically suitable for reuse (Leighton 2018). In addition, if needed, retaining walls will be provided for Project portions that include cutting into slopes such as the access ramp to the east of the athletic field. Retaining walls will have heights in the range of 1 ½ to 5 feet, and a drainage system will be provided behind the walls to reduce the potential for development of hydrostatic pressure. A structural engineer will be consulted to determine if the walls heights and design are appropriate prior to construction. With inclusion of appropriate design measures described here, impacts would be less than significant.

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

Less than Significant Impact. The Project site has been previously graded and developed with a K-12 school including an athletic field. The results of laboratory testing on soils near the athletic field indicate that near-surface soils possess a very low expansion potential. In addition, no other expansive soils have been identified elsewhere on the Project site (Leighton 2019). The subsurface soils encountered at shallow depths range from silty sand to gravel with sand, that have a low susceptibility to expansion. The recommendations provided regarding drainage and moisture content in the Koury Engineering report (2020) will be incorporated into the design and construction. Impacts would be less than significant.

- e) *Would the project 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 not involve the use of septic tanks or any other alternative waste water disposal systems. No impact would occur.

4.8 GREENHOUSE GAS EMISSIONS

8.	GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Conflict with 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"/>

4.8.1 Environmental Setting

This section describes the potential global climate change effects from implementation of the Proposed Project. Construction greenhouse gas (GHG) emission modeling was performed through use of the CalEEMod Version 2016.3.2. The operational GHG emissions would be limited to the operation of the new HVAC units and were modeled through use of a spreadsheet based on formulas developed by the EPA and Department of Energy. Both models output files are provided in Appendix A.

4.8.2 Impact Analysis

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

Less than Significant Impact. Significant legislative and regulatory activities directly and indirectly affect climate change and GHGs in California. The primary climate change legislation in

California is AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing greenhouse gas emissions in California, and AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. In addition to AB 32, Executive Order B-30-15 was issued on April 29, 2015 that aims to reduce California's GHG emissions 40 percent below 1990 levels by 2030. In September 2016, AB 197, and SB 32 codified into statute the GHG emission reduction targets provided in Executive Order B-20-15.

CARB is the state agency charged with monitoring and regulating sources of emissions of GHGs in California that contribute to global warming in order to reduce emissions of GHGs. The CARB Governing Board approved the 1990 GHG emissions level of 427 million tons of CO₂ equivalent (MtCO₂e) on December 6, 2007. Therefore, in 2020, annual emissions in California are required to be at or below 427 MtCO₂e. The CARB Board approved the Climate Change Scoping Plan (Scoping Plan) in December 2008, the First Update to the Scoping Plan in May 2014, and California's 2017 Climate Change Scoping Plan in November 2017. The Scoping Plans define a range of programs and activities that will be implemented primarily by state agencies but also include actions by local government agencies. Primary strategies addressed in the Scoping Plans include new industrial and emission control technologies; alternative energy generation technologies; advanced energy conservation in lighting, heating, cooling, and ventilation; reduced-carbon fuels; hybrid and electric vehicles; and other methods of improving vehicle mileage. Local government will have a part in implementing some of these strategies. The Scoping Plans also call for reductions in vehicle-associated GHG emissions through smart growth that will result in reductions in vehicle miles traveled (CARB 2008, 2014, 2017).

The CalEEMod model used above to calculate the criteria pollutant emissions was also utilized to calculate the GHG emissions associated with construction and operation of the Proposed Project (see Appendix B). The CalEEMod model calculated GHG emissions generated from construction activities for the Proposed Project that include removal of contaminated soils, upgrades to the campus buildings that include new HVAC systems as well as ADA accessibility improvements to the existing campus and finally improvements to the athletic field. Per the analysis methodology presented in the SCAQMD Working Group meetings, the construction emissions were amortized over 30 years. Development of the Proposed Project would not result in an increase in employee or student capacity at the school or would create any additional vehicle trips. As such, GHG emissions created from the operation of the Proposed Project would be limited to the increased electricity usage associated with the proposed HVAC units that include three packaged AC units and 18 condensing units and were analyzed through a spreadsheet based on formulas developed by the EPA and Department of Energy (see Appendix B). Table 7 shows the estimated GHG emissions that would be predicted from development of the Proposed Project.

Table 7 – Annual Greenhouse Gas Emissions from the Proposed Project

Activity	Greenhouse Gas Emissions in metric tons/year			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Construction				
- Contaminated Soil Removal	25.30	0.01	0.00	25.46
- Classroom Soil Remediation	135.04	0.04	0.00	136.07
- Classroom Upgrades	377.61	0.09	0.00	379.88
- Athletic Field Soil Remediation	116.74	0.03	0.00	117.57
- Athletic Field Improvements	257.84	0.07	0.00	259.63
Total Construction Emissions	912.53	0.24	0.00	918.61
Total Construction Emissions Amortized over 30 Years¹	30.42	0.01	0.00	30.62
Operations				
HVAC Energy Use ²	--	--	--	15.16
Total Project Emissions	30.42	0.01	0.00	45.78
SCAQMD Draft Threshold for all Land Use Types				3,000
Exceed Threshold?				No

Notes:

¹ Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.

² Based on all HVAC Systems with programmable thermostats and no weekend use. Most current SCE emissions factors are only provided for CO₂e and not broken down by specific GHG components.

Source: CalEEMod Version 2016.3.2 and formulas provided by EPA and Department of Energy (see Appendix A).

This analysis proposes to use the “Tier 3” quantitative threshold for all land use projects² as recommended by the SCAQMD. The SCAQMD proposes that if a project generates GHG emissions below 3,000 MTCO₂e, it could be concluded that the Project’s GHG contribution is not “cumulatively considerable” and is therefore less than significant under CEQA. As shown in Table 7, the Proposed Project would generate 45.78 MTCO₂e per year, which would not exceed SCAQMD draft annual threshold of 3,000 MTCO₂e. As such, it could be concluded that the Project’s GHG contribution is not “cumulatively considerable” and is therefore less than significant under CEQA.

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

Less than Significant Impact. The California State Legislature adopted AB 32 in 2006, that requires the State’s GHG emissions by 2020 to meet the GHG emissions level created in 1990 and adopted AB 197 and SB 32 in 2016, that requires the State’s GHG emissions to be 40 percent below 1990 levels by 2030.

In order to achieve the target provided in AB 32, the SCAQMD developed a Working Group that developed a tiered approach in order to determine if proposed land use projects would

² Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting # 15. *South Coast Air Quality Management District. September 2010.*

contribute to an exceedance of the GHG emissions targets detailed in AB 32. As shown above in Section 4.8.2(a), the Proposed Project would generate 45.78 MTCO₂e per year from construction and operation of the Proposed Project. The GHG emissions generated from the Proposed Project would be within the “Tier 3” quantitative threshold of 3,000 MTCO₂e per year for all land use projects as recommended by the SCAQMD.

The SCAQMD has not yet updated its “Tier 3” quantitative threshold to address AB 197 and SB 32. However, it is anticipated that the “Tier 3” thresholds would be reduced around 40 percent, which is equivalent to how much more stringent AB 197 and SB 32 are over AB 32. Since the Proposed Project’s GHG emissions are 99 percent below the “Tier 3” threshold, it is anticipated that the Proposed Project’s GHG emissions would remain less than significant under any future thresholds developed to address AB 197 and SB 32. Therefore, the Proposed Project would not conflict with any applicable plan, policy, or regulation adopted for reducing the emissions of GHGs. A less than significant impact would occur.

4.9 HAZARDS AND HAZARDOUS MATERIALS

9.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e)	For a project located within an airport land use plan or, where such a plan had not been adopted, within 2 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

(h)	Be located less than the following distances from the edge of respective power line easements: (1) 100 feet of a 50-133-kilovolt (kV) line; (2) 150 feet of a 220-230-kV line; or (3) 350 feet of a 500-550-kV line?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i)	Be located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(j)	Be situated within 2,000 feet of a significant disposal of hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.9.1 Environmental Setting

Ninyo & Moore prepared a Preliminary Geological and Other Hazards Evaluation (Appendix E) that evaluated geological hazards in accordance with California Department of Education (CDE) code. The results of this evaluation are discussed in the impact analysis sections below. In addition, a Remedial Action Plan (RAP) was prepared by GSI which describes in detail the environmental investigation conducted, results and proposed cleanup to address contaminated soil at the Project site. The RAP will: 1) allow cleanup of the Property, partially impacted with elevated arsenic, lead and PAH levels in soil, and 2) following cleanup, allow the Long Beach Unified School District to install heating/ventilation/air conditioning and make accessibility and other improvements to permanent buildings on campus. Additionally, a Soil Management Plan will provide protection should contamination other than the delineated contaminated soils be encountered.

4.9.2 Impact Analysis

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

Less than Significant Impact. The proposed construction activities will involve the transport, use, and disposal of contaminated soil and potentially hazardous materials. Typical potentially hazardous materials handled during construction include grease, lubricants, fuels, solvents, and aerosols. In addition, the Proposed Project will remove subsurface contaminated soils. The Proposed Project will abide by the applicable regulations relating to transporting, using, and disposing of such materials. In addition, the proposed construction activities will be temporary until the end of construction. Thus, it would not create a significant hazard to the public or environment. In fact, since one of the goals of the Proposed Project is to remove a portion of the contaminated soils from the school site, the amount of contaminated soils and potentially hazardous materials in the soils onsite will be reduced. During normal operations, the Avalon K-12 school is anticipated to have minimal usage of potentially hazardous materials typically found in common school facilities such as janitorial and landscaping chemicals. Such chemicals are already used at the existing campus, and would be handled, stored, and disposed of in accordance with applicable regulations and under District guidelines. Impacts would be less than significant.

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

Less than Significant Impact. While the Proposed Project will utilize potentially hazardous materials during construction, the transport, use, and disposal of such materials will abide by applicable regulations that will reduce the likelihood of an accidental release that would create a significant hazard to the public. The Proposed Project also involves the removal of contaminated soil onsite. The purpose of this portion of the Proposed Project is to reduce the potential for accident conditions that would release potentially hazardous materials from the contaminated soils into the environment. After removal of a portion of the contaminated soils onsite, impacts would be reduced. In fact, since one of the goals of the Proposed Project is to remove a portion of the contaminated soils from the school site, the amount of potentially hazardous materials in the soils onsite will be reduced. Typical potentially hazardous materials and building materials found in common school facilities, as well as the contaminated soils, will be handled, stored in lockable containers, and disposed of in accordance with applicable regulations and under District guidelines. With implementation of BMPs and minimization measures such as compliance with AQMD Rules 403 and 1466, storage of contaminated soils in lockable containers, and fencing off the site during construction, impacts would be less than significant.

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

Less than Significant Impact. The Avalon K-12 campus is an existing school; no other schools are located within one quarter mile of an existing or proposed school. The Proposed Project would involve the use of heavy equipment during construction that would emit emissions associated with internal combustion engines, i.e., diesel and gasoline. Once operational, the Proposed Project would involve the use of chemicals associated with maintenance operations which would be subject to federal, state, and local health and safety requirements. The delineated contaminated soil removal is planned to be initiated during the summer of 2022, when school is not in session. As discussed above in Section 4.9.2 Impact (a), adherence to all local, county, state, and federal policies and regulations would reduce impacts to a level less than significant. In addition, the Project will include implementation of BMPs and minimization measures such as compliance with AQMD Rules 403 and 1466, storage of contaminated soils in lockable containers, and fencing off the site during construction. Therefore, implementation of the Proposed Project would result in less than significant impacts associated with hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- d) *Would the project 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?*

Less than Significant Impact. The Avalon K-12 Project site is on a list of hazardous materials sites (Cortese List) and is designated an active cleanup site by DTSC. A RAP has been developed in support of the development of a Removal Action Workplan. The implementation of the RAP is part of the Proposed Project, which will involve removal/abatement of building materials as well as contaminated soils in designated areas up to 5 feet bgs and transport the contaminated soils offsite to designated hazardous materials disposal sites. After removal of contaminated soils, the potential impacts to the public would be greatly reduced. During Project construction and contaminated soil removal, the District will implement BMPs and minimization measures such as compliance with

AQMD Rules 403 and 1466, storage of contaminated soils in lockable containers, and fencing off the site during construction. Impacts would be less than significant.

- e) *For a project located within an airport land use plan or, where such a plan had not been adopted, within 2 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?*

Less than Significant Impact. The Pebbly Beach Heliport is located within two miles of the Proposed Project site; however, the Project would not result in a safety hazard or excessive noise for people residing or working in the area. Implementation of the Proposed Project would not result in an impact associated with a public airport.

- f) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less than Significant Impact. The Proposed Project site and surrounding areas are currently developed. The Proposed Project involves removal of contaminated soil, HVAC installation, ADA upgrades, and field replacement at the existing Avalon K-12 school. Portions of Falls Canyon Road may be impacted during construction at the campus; however, Falls Canyon Road dead ends at the athletic field, and emergency access would not be impacted. These activities would not create interference with established emergency response or emergency evacuation plans as there is no proposed alteration of infrastructure utilized in an evacuation plan. The Avalon K-12 school currently has two gathering spaces for students in the event of an emergency; the secondary students gather on the playground next to the gym and elementary school students gather between the second and bottom rows of bungalows at the eastern edge of campus. In the event that these designated areas are in construction or deemed unsafe, backup areas for evacuation are already designated at the upper athletic field and the lower field. Each of these backup locations are large enough for all students, and serve as adequate reunification sites (LBUSD 2020b). Therefore, implementation of the Proposed Project would result in a less than significant impact associated with an emergency evacuation plan.

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

Less than Significant Impact. Fire Hazard Severity Zones are provided by the California Department of Forestry and Fire Protection (CDF), which identifies and maps areas that are designated as Very High Fire Hazard Severity Zones (VHFHSZ) or Non-Very High Fire Hazard Severity Zones (Non-VHFHSZ) for State, Federal, and Local Responsibility Areas (CalFire 2011). The Proposed Project site is an existing K-12 school campus; however, according to the General Plan, the entire Santa Catalina Island, including the City of Avalon, is designated as a very high fire hazard zone by the California Department of Forestry and Fire Protection (City of Avalon 2013). The City of Avalon Fire Department provides fire protection service within the Avalon City limits and there are two saltwater reservoirs within the City limits to provide water for fire suppression. Construction activities at the existing Avalon K-12 school will include BMPs as outlined in section 4.20, and thus would not expose people or structures to significant risk of loss, injury or death involving wildland fires as the Project area is located within a Non-VHFHSZ. Adherence to applicable District regulations pertaining to the building and operations of the school will result in less than significant impacts.

- h) *Would the project be located less than the following distances from the edge of respective power line easements: (1) 100 feet of a 50-133-kilovolt (kV) line; (2) 150 feet of a 220-230-kV line; or (3) 350 feet of a 500-550-kV line?*

Less than Significant Impact. Ninyo & Moore requested information from Southern California Edison (SCE) on May 21, 2019, regarding overhead and underground electrical lines with the specified distances from the site. According to Mr. John Long with SCE, the highest voltage of electrical lines on the island is 12kV. Review of GoogleEarth images suggests there are pole-mounted electrical lines located adjacent to the southern site boundary, as well pole-mounted electrical lines located within about 215 feet of the southern property boundary (Ninyo & Moore 2019). Due to the low voltage of the electrical lines, impacts would be less than significant.

- i) *Would the project be located near an aboveground water or fuel storage tank or within 1,500 feet of an easement of an aboveground or underground pipeline that can pose a safety hazard to the site?*

Less than Significant Impact. The Preliminary Geological and Other Hazards Analysis (Appendix E) evaluated the presence of nearby tanks or pipelines that may pose a safety hazard. According to Mr. Long with SCE, underground propane/natural gas pipelines are located within 1,500 feet of the site. These lines are located along Falls Canyon Road and Avalon Canyon Road and have a maximum allowable operating pressure (MAOP) of 10 pounds per square inch (psi). The AFD and APWD had no information regarding underground pipelines located within 1,500 feet of the Project site.

According to the SFM, “there are no pipelines jurisdictional to the State Fire Marshal in the area.” Review of the NPMS on-line Public Viewer did not identify underground petroleum or natural gas pipelines within 1,500 feet of the site.

According to the CPUC website, “The CPUC regulates the transportation rates and terms of service of pipeline companies that transport petroleum products owned by other companies. The CPUC does not ... have safety jurisdiction over petroleum pipelines.”

No natural gas transmission or high-pressure distribution pipelines are located within 1,500 feet of the Project site. Saltwater pipelines are located within 1,500 feet of the pipe along Falls Canyon Road, north of the Project site, which operate at a pressure of 80 psi. Large water tanks or reservoir are not located on the site. A 420,000-gallon potable water reservoir is located approximately 330 feet north of the site (Ninyo & Moore 2019). The potential hazards from pipelines or reservoirs would have a less than significant impact.

- j) *Would the project be situated within 2,000 feet of a significant disposal of hazardous waste?*

Less than Significant Impact. No hazardous waste disposal sites are located within 2,000 feet of the project site (Google Maps 2019). The Avalon K-12 Project site is designated an active cleanup site by DTSC. During multiple geologic and geotechnical investigations at the Avalon K-12 school site, fill material and debris within the soils was found to include COCs including arsenic, lead, dioxins/furans, PAHs. A RAP was previously developed in support of the development of a Removal Action Workplan. The implementation of the RAP is part of the Proposed Project, which will involve removal/abatement of contaminated soils in designated areas up to 5 feet bgs and transport the contaminated soils offsite to designated hazardous materials disposal sites. After the removal of

contaminated soils, the potential impacts to the public would be greatly reduced. Less than significant impacts will occur.

4.10 HYDROLOGY AND WATER QUALITY

10.	HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Violate any water quality standards or waste discharge requirements, 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:				
	i) Result in a 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 flood on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

4.10.1 Impact Analysis

- a) *Would the project violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?*

Less than Significant Impact. The Proposed Project is a multi-phased project that includes contaminated soil removal, athletic field replacement, campus building upgrades, HVAC installation, and updates to ensure ADA compliance. The Project site is located within the Los Angeles Regional Water Quality Control Board (RWQCB) jurisdiction, which is responsible of the preparation of the Los Angeles Region's water quality control plan. The Project would be compliant with the National Pollutant Discharge Elimination System (NPDES) Multiple Separate Storm Sewer System (MS4) Permit which requires the implementation of BMPs. The replacement of the existing natural field with synthetic turf would introduce decreased permeability to the field. The Proposed Project will include the installation of an infiltration device to reduce additional runoff caused by the impervious

surface. The other upgrades would not have an impact on surface or groundwater quality. Although potential runoff from the construction and operation of the Proposed Project may increase on-site erosion, run-off and degrade water quality, with implementation of BMPs, impacts would be less than significant.

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

Less than Significant Impact. The Project site is developed and located in an urbanized area surrounding by residential development and light industrial uses. The Proposed Project includes school modernization including the replacement of the existing natural turf athletic field. The addition of the artificial turf will result in less pervious surfaces on this portion of campus. The Proposed Project will include the installation of an infiltration device to reduce additional runoff caused by the impervious surface. While the Proposed Project has the potential to impact groundwater recharge, the Proposed Project would not increase the number of students or staff; and additional water resources would not be required to accommodate any such growth. Therefore, implementation of the Proposed Project would not result in impacts associated with groundwater recharge or groundwater depletion.

- c) *Would the project 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 Impact. The Proposed Project is in an urbanized location and is currently developed. Ground-disturbing activities would occur during the contaminated soil removal, HVAC installation, utility and ADA upgrades, and athletic field replacement. Any construction which would result in ground-disturbing activities would be required to comply with the SWPPP and implement BMPs from the City's MS4 Permit that would reduce any potential erosion or siltation on or off site. Further, the drainage pattern of the Proposed Project site and surrounding area is well established, and no streams or rivers are located on the Proposed Project site. Therefore, implementation of the Proposed Project would result in less than significant impacts associated with the existing drainage pattern.

- ii) *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*

No Impact. As mentioned above in Section 4.10.1 Impact (c(i)), the Proposed Project site is in an urbanized location and does not include any streams or rivers on the site; therefore, implementation of the Proposed Project would not result in impacts associated with stream course alteration or increase runoff rates. In addition, the Proposed Project includes replacement of the existing natural turf athletic field. The addition of the artificial turf will result in less pervious surfaces on this portion of campus. The Proposed Project will include the installation of an infiltration device to reduce additional runoff caused by the impervious surface. Therefore, the Proposed Project will not result in flooding on- or off-site; and no impact would occur.

- 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*

Less than Significant Impact. The Proposed Project activities will result in ground disturbance during both contaminated soil removal and modernization activities. The replacement of the athletic field will result in less pervious ground that may increase runoff. However, the installation of an infiltration device, implementation of BMPs and compliance with the NPDES permit will reduce erosion, siltation, and reduce the amount of surface runoff that may result in flooding. Any construction which would result in ground-disturbing activities would be required to comply with the SWPPP and implement BMPs from the City's MS4 Permit that would reduce any potential for substantial additional sources of polluted runoff. While the Proposed Project contains and will use potentially hazardous materials, BMPs will reduce the addition of polluted runoff into the sewer and drainage systems. The Proposed Project would not impede any current stormwater drainage systems existing at the project site and would not result in the increase of student capacity that would result in the exceedance of the capacities of stormwater drainage systems. Impacts would, therefore, be less than significant.

- iv) impede or redirect flood flows?*

Less than Significant Impact. The Proposed Project site is located west of a special flood area in the City. However, the Project site is not located in a 100-year flood hazard zone per the Federal Management Agency (FEMA 2008). The Project site is located in Flood Zone X (Map # 06037C2204F) which is an area of minimal flood hazard. Flood impacts would be less than significant.

- d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Less than Significant Impact. The Project site is located approximately 0.5 miles from the Pacific coast. Seiches are large waves generated by ground shaking effects within enclosed bodies of water. Tsunamis are tidal waves generated by fault displacement or major ground movement. While Santa Catalina Island's low elevation areas may make it susceptible to tsunamis, the Project site is approximately 200 feet above sea level, relatively flat and not located in any flood hazard, tsunami, or seiche zones. Impacts would be less than significant.

- e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Less than Significant Impact. The Project would be compliant with all city, State, and federal regulations, including compliance with the NPDES permits and implementation of BMPs. The Proposed Project is not expected to utilize significant amounts of groundwater during construction, and will not interfere with any groundwater management plans because all proposed activities are occurring within the existing campus. Impacts would be less than significant.

4.11 LAND USE AND PLANNING

11.	LAND USE/PLANNING Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b)	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"/>

4.11.1 Impact Analysis

a) Would the project physically divide an established community?

No Impact. The existing Avalon K-12 campus, which is the Proposed Project site, is bounded by residential housing to the north, a warehouse to the west, a golf course to the east, and a natural hillside to the south. The Proposed Project site is designated in the City of Avalon General Plan as Public (City of Avalon 2013). Land use designations surrounding the Project site are mostly High Density Residential and High-Density Resort Residential (City of Avalon 2013). The Project does not introduce new roads or facilities that would divide an established community and continued use of the school would not result in a new barrier in the community. No impacts are expected to occur.

b) Would the project 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 Proposed Project site is designated as Public and is immediately surrounded by area designated as High Density Residential and High Density Resort Residential (City of Avalon 2013). The Proposed Project would not alter the function of the existing structure and would be compliant with the land use plan, policies, and regulations. No impacts are expected.

4.12 MINERAL RESOURCES

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

4.12.1 Environmental Setting

Mineral resources are commercially viable mineral or aggregate deposits, such as sand, gravel, and other construction aggregate. The California Geological Survey provides objective geologic expertise and information about California's diverse nonfuel mineral resources. Maps, reports, and other data products developed by the staff assist governmental agencies, mining companies, consultants, and the public in recognizing, developing, and protecting important mineral resources. The California Department of Conservation protects mineral resources to ensure adequate supplies for future production. The California Surface Mining and Reclamation Act of 1975 (SMARA) was developed to encourage production and conservation of mineral resources, prevent or minimize adverse effects to the environment, and protect public health and safety.

4.12.2 Impact Analysis

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

No Impact. No significant mineral deposits are present at the Proposed Project site as per the State of California's Division of Mines and Geology Map and no significant mineral deposits are present at the Project site (City of Avalon 2013). As discussed in the City of Avalon's General Plan, mineral resources are typically located in the areas zoned as Open Space. The Proposed Project would not change the uses at the Project site and is not zoned as an Open Space. No impact would occur.

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

No Impact. There are no existing or historic mineral resource recovery sites in or near the Proposed Project site. Implementation of the Project would result in no impact.

4.13 NOISE

13.	NOISE Would the project result in:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c)	For a project located in 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 checked="" type="checkbox"/>	<input type="checkbox"/>

This section describes the existing noise setting and potential noise and vibration effects from Project implementation on the site and its surrounding area. Construction noise modeling was performed through use of the Roadway Construction Noise Model (RCNM) Version 1.1. The model output is provided in Appendix F along with the noise measurement printouts and a photo index of the noise measurements.

4.13.1 Environmental Setting

The Proposed Project site is located within the City of Avalon. Currently, the primary sources of noise within the study area consists of school activities, including noises created by children between classes, recesses and lunch as well as from vehicle traffic on Avalon Canyon Road that is located on the east side of the project site. In order to determine the existing noise levels, three short-term (10 minute) ambient noise measurements were taken in the vicinity of the Proposed Project between 9:40 a.m. and 10:23 a.m. on Monday, April 29, 2019, while school was in session. The results of the noise level measurements are presented in Table 8 and the noise measurement printouts along with photos of the noise measurements sites are provided in Appendix F.

Table 8: Existing Noise Level Measurements

Site Description	Start Time of Measurement	Primary Noise Sources	Noise Levels
Located on the northern portion of the Baseball Field, approximately 75 feet south of the homes located on the north side of the project site.	9:40 a.m.	Industrial activities located northwest of the Campus and from school activities.	42.8 dBA L_{eq} 56.0 dBA L_{max}
Located on the north side of Falls Canyon Road, and approximately 90 feet north of the Gymnasium.	9:58 a.m.	Kids during recess getting snacks at north side of Gymnasium	57.4 dBA L_{eq} 78.5 dBA L_{max}
Located on the eastern portion of the Campus, approximately 50 feet west of Avalon Canyon Road centerline.	10:13 a.m.	Vehicles on Avalon Canyon Road.	55.5 dBA L_{eq} 69.1 dBA L_{max}

Source: Larson-Davis Model 831 precision sound level meter programmed in "slow" mode to record noise levels in "A" weighted form.

City of Avalon Noise Standards

For construction activities within the City of Avalon, General Plan Policy VIII-20, and Municipal Code Section 5-13.05 exempts construction noise from the City's noise standards, provided that construction activities are conducted between 8:00 a.m. and 7:00 p.m. Monday through Saturday.

For operational activities within the City of Avalon, General Plan Policy VIII-16 requires that noise levels at the nearby multi-family homes do not exceed the "normally acceptable" noise exposure level of 65 dBA CNEL.

4.13.2 Impact Analysis

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

Less than Significant Impact. The Proposed Project would consist of removal of contaminated soil, upgrades to the campus buildings that include new HVAC systems as well as ADA accessibility improvements to the existing campus and finally improvements to the athletic field. Both construction and operation of the Proposed Project would have the potential to generate noise in excess of standards and have been analyzed separately below.

Construction-Related Noise

Construction activities for the Proposed Project would consist of the removal of contaminated soils and improvements to the campus buildings that include new HVAC systems, ADA accessibility improvements, and improvements to the athletic field, as well as additional contaminated soils removal. The nearest existing sensitive receptors are multi-family homes located adjacent to the north side of the campus.

General Plan Policy VIII-20 and Municipal Code Section 5-13.05 exempts construction noise from the City's noise standards, provided that construction activities are conducted between 8:00 a.m. and 7:00 p.m. Monday through Saturday. Construction activities for the Proposed Project will adhere to the time restrictions provided in the General Plan and Municipal Code. However, the construction noise standards do not provide any limits to the noise levels that may be created during construction activities at the nearby sensitive receptors and even with adherence to the City standards, the resultant construction noise levels may result in a significant substantial temporary noise increase at the nearby sensitive receptors.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the OSHA agency limits for noise exposure have been utilized. The use of a significance threshold using an OSHA standard is considered conservative. The OSHA standard limits noise exposure of workers to 90 dB or less over 8 continuous hours and this standard has been utilized to analyze the construction noise impacts to the sensitive receptors located at the nearby offsite residences.

The Federal Highway Administration (FHWA) compiled noise level data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table 9, below, provides a list of the construction equipment measured, along with the associated measured noise emissions and measured percentage of typical equipment use per day. From this acquired data, FHWA developed the Roadway Construction Noise Model (RCNM). The RCNM, which uses the Spec 721.560 L_{max} at 50 feet, has been used to calculate the construction equipment noise emissions (see Appendix F).

Table 9: Construction Equipment Emissions and Usage Factors

Equipment	Acoustical Use Factor ¹ (Percent)	Spec 721.560 L _{max} @ 50 Feet ² (dBA, slow ³)	Actual Measured L _{max} @ 50 feet ⁴ (dBA, slow)
Backhoe	40	80	78
Concrete Mixer Truck	40	85	79
Concrete Pump	20	82	81
Concrete Saw	20	90	90
Crane	16	85	81
Dozer	40	85	82
Dump Truck	40	84	76
Excavator	40	85	81
Flatbed Truck	40	84	74
Front End Loader	40	80	79
Generator	50	82	81
Gradall	40	85	83
Mounted Impact Hammer	20	90	90
Paver	50	85	77
Roller	20	85	80
Tractor	40	84	N/A
Welder/Torch	40	73	74

¹ Acoustical use factor is the percentage of time each piece of equipment is operational during a typical workday.

² Spec 721.560 is the equipment noise level utilized by the Roadway Construction Noise Model program.

³ The “slow” response averages sound levels over 1-second increments. A “fast” response averages sound levels over 0.125-second increments.

⁴ Actual Measured is the average noise level measured of each piece of equipment during the Central Artery/Tunnel project in Boston, Massachusetts primarily during the 1990s.

Source: Federal Highway Administration, 2006.

The anticipated areas of construction and construction equipment that will be utilized during development of each area were obtained from the Project applicant. For each area of development, the nearest piece of equipment was placed at the shortest distance of the proposed area to the nearest sensitive receptor and each subsequent piece of equipment was placed an additional 50 feet away. The results are shown below in Table 10.

Table 10: Proposed Project Construction Noise Levels at Nearby Homes

Construction Phase	Distance to Nearest Home ¹ (feet)	Construction Noise Level (dBA L _{eq})
Contaminated Soil Removal	100	70
Classroom Improvements	100	71
Phase 3 – Athletic Field Improvements	15	85

Source: RCNM Version 1.1.

Table 10 shows that the greatest construction noise impacts would occur during the athletic field improvements with a noise level as high as 85 dBA L_{eq} at the nearest homes. Table 10 also shows that construction noise impacts from the Proposed Project would be below the OSHA standard of 90 dB for all phases of construction activities. Therefore, through adherence to the construction-related noise standards provided in the General Plan and Municipal Code, the Proposed Project would not generate noise levels in excess of standards.

Operation-Related Noise

The Proposed Project consists of removal of contaminated soils, upgrades to the campus buildings that include new HVAC systems as well as ADA accessibility improvements to the existing campus and finally improvements to the athletic field. Development of the Proposed Project would not result in an increase in employee or student capacity at the School or would create any additional vehicle trips. The only new noise sources associated with operation of the Proposed Project would be from the proposed HVAC units. It should be noted that there are currently several HVAC units on the campus that would be removed and replaced with more efficient condenser units that create lower noise levels, however the Proposed Project would result in a net increase of HVAC units and the new units may exceed the City noise standards at the nearby homes.

The City of Avalon does not provide any noise standards specifically from onsite noise sources, such as HVAC units. However, General Plan Policy VIII-16 requires that noise levels at the nearby multi-family homes do not exceed the “normally acceptable” noise exposure level of 65 dBA CNEL. It should be noted that all of the HVAC units would only be utilized between 7:00 a.m. and 7:00 p.m. Monday through Friday, so operation of the Proposed Project would not create any additional noise during the noise sensitive nighttime hours.

Since it is not known at this time the exact rooftop HVAC models that would be utilized, the outdoor sound rating of 80 dB at one meter that is provided in the Trane Product Catalog for a 5 ton (60,000 BTU per hour) packaged rooftop air conditioner, which is the largest proposed air conditioner to be installed as part of the Proposed Project has been utilized in this analysis. Table 11 shows the calculated noise levels of the nearest HVAC unit to the existing homes, based on a standard attenuation rate of 6 dB per doubling of distance.

Table 11 – Operational On-Site Noise Impacts to the Nearest Homes

Noise Source	Reference Noise Measurement		Project Impacts at Nearest Homes	
	Distance from Receptor to Source (feet)	Noise Level (dBA Leq)	Distance from Receptor to Source (feet)	Noise Level ¹ (dBA Leq)
Nearest HVAC Unit to Homes	4	80	140	47
City Noise Standard ²				65
Exceed City Standard?				No

Notes:

¹ Project noise impacts calculated based on typical noise propagation rates of 6 dB per doubling of distance.

² From Figure VIII-1 of the General Plan for “Normally Acceptable” noise exposure level for multi-family residential uses.

The data provided in Table 11 shows that anticipated worst-case noise level created from the proposed HVAC units would be within the City’s multi-family residential noise standard of 65 dBA CNEL at the nearest homes to the Project site. As such, operations-related onsite noise impacts to the nearby homes would be less than significant for the Proposed Project. Accordingly, the Proposed Project would not expose persons to noise levels in excess of standards established by the City of Avalon.

- b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less than Significant Impact. The Proposed Project would consist of removal of contaminated soils, upgrades to the campus buildings that include new HVAC systems as well as ADA accessibility improvements to the existing campus and finally improvements to the athletic field. Construction activities would require the operation of off-road equipment and trucks that are known sources of vibration. Construction activities may occur as near as 15 feet to the multi-family homes located on the north side of the Project site.

Since neither the City’s General Plan nor the Municipal Code provide any thresholds or policies related to vibration, Caltrans guidance³ has been utilized, which defines the threshold of perception from transient sources at 0.25 inch-per-second peak particle velocity (PPV). Table 12 shows the typical PPV produced from some common construction equipment.

³ From *Transportation and Construction Vibration Guidance Manual*, prepared by Caltrans, September 2013.

Table 12: Typical Construction Equipment Vibration Emissions

Equipment	Peak Particle Velocity in inches per second at 25 feet	Vibration Level (L _v) at 25 feet
Pile Driver (impact)	0.644	104
Pile Driver (sonic)	0.170	93
Clam Shovel Drop	0.202	94
Hydromill		
- in soil	0.008	66
- in rock	0.017	75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drill	0.089	87
Loaded truck (off road)	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: Federal Transit Administration 2006.

From the list of equipment shown in Table 12, a loaded truck driving off-road with a vibration level of 0.076 inch-per-second PPV would be the source of the highest vibration levels of all equipment utilized during construction activities for the Proposed Project. Based on typical propagation rates this would result in a vibration level of 0.13 inch-per-second PPV at the nearest home to construction activities. The construction-related vibration levels would be within the 0.25 inch-per-second PPV threshold detailed above. Construction-related vibration impacts would be less than significant.

The on-going operation of the Proposed Project would not result in the creation of any known vibration sources. Therefore, a less than significant vibration impact is anticipated from the operation of the Proposed Project.

Accordingly, the Proposed Project would not expose persons to excessive groundborne vibration or groundborne noise levels.

- c) *For a project located in 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?*

Less than Significant Impact. The Proposed Project site is not located within two miles of a public airport and is not in the vicinity of a private airstrip. The nearest airport is Catalina Airport, which is located approximately 6.5 miles northwest of the Proposed Project site. The project site is located outside of the 65 dBA CNEL noise contours of Catalina Airport. The Proposed Project would not expose people residing or working in the surrounding area to excessive levels of airport-generated noise. As such, airport and airstrip noise impacts to the Proposed Project would be less than significant.

4.14 POPULATION AND HOUSING

14.	POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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"/>

4.14.1 Environmental Setting

Housing impacts may result directly from a project which includes housing units or indirectly from revisions to the Housing Element in a General Plan or changes in housing demand associated with new nonresidential development projects.

A project would have a significant adverse impact if it would induce substantial population growth in an area, either directly by proposing new homes and businesses or indirectly through the extension of roads or other infrastructure; displace housing units, causing the construction of replacement housing somewhere else; or displace people, causing the construction of replacement housing somewhere else.

4.14.2 Impact Analysis

- a) *Would the project 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 Proposed Project consists of phases that include contaminated soil removal, athletic field replacement, campus building upgrades, HVAC installation, and updates to endure ADA compliance. There would be no increase in student capacity or enrollment at the school. Therefore, the Proposed Project would not induce an increase of housing in the area. There are several available roadways which provide access to the Project site, and no roadway extension would be required. There would be no impact associated with population growth.

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

No Impact. The Proposed Project involves upgrades to the existing athletic field and existing school structures. The Proposed Project will remain within the school campus and no new construction of buildings are included. The Proposed Project does not contain any residences or housing units that will be displaced. In addition, the proportion of the construction workforce required for the Project is relatively small (approximately 10-20 workers for each phase) and temporary housing options are

available in sufficient quality such that it would not displace existing people or housing. No impact would occur.

4.15 PUBLIC SERVICES

15.	PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b)	Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c)	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d)	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e)	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.15.1 Environmental Setting

Public services include fire, police, schools, parks, and libraries. A project would impact a public service if it would result in an increased demand for that service or if the project would result in a hindrance to that service.

4.15.2 Impact Analysis

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

No Impact. Fire protection services for the Project site are provided by the Avalon Fire Department located at 420 Avalon Canyon Rd, Avalon, CA 90704 approximately 0.2 miles east of the Project site. Fire protection service needs are generally related to the size of the population and geographic area served, the number and types of calls for service, and other community and physical characteristics. Because land uses at the Proposed Project site would remain the same as under current conditions, no increase in the demand for fire services resulting from the Proposed Project is anticipated. While the campus structures and the athletic field will be altered, the changes are not outside of the normal maintenance that is expected for aging facilities. In addition, uses of the facilities will be consistent with previous and current uses. The Proposed Project would not result in the expansion of the school resulting in increased student capacities resulting in increased service needs or interruption of service and performance. The implementation of the Proposed Project would, therefore, not result in a significant impact.

- b) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?*

No Impact. The Long Beach Unified School District maintains its own safety department to provide security for schools. The closest police station to the Project site is located at 215 Sumner Ave, Avalon, CA 90704 approximately 0.5 miles northeast of the Project site. The Project would not induce an increase in population and consequently will not require additional police protection. No significant impacts are expected to occur.

- c) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?*

Less than Significant Impact. The Proposed Project involves the upgrades within the school property boundaries. Construction will occur in phases to allow the school to continue normal operations. Student and staff would be relocated onsite out of permanent spaces during construction and the school would maintain normal operations during the construction. The Proposed Project's impacts would, therefore, be less than significant.

- d) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?*

No Impact. The Project would not result in adverse physical impacts associated with the provision of new or physically altered facilities to maintain acceptable opportunities for parks. The closest park to the Proposed Project site is People's Park located at 410 Avalon Canyon Rd, Avalon, CA 90704 approximately 0.2 miles northeast of the Project site. The Proposed Project would not induce population growth and would not create new residents that would result in the need of new or expanded parks. Therefore, implementation of the Proposed Project would not result in a significant impact associated with parks.

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

No Impact. The Proposed Project is not expected to impact any other public facilities such as hospitals or libraries. The Proposed Project does not include activities that would increase student enrollment and result in the need for expanded public services and facilities. No impact would occur.

4.16 RECREATION

16.	RECREATION. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.16.1 Environmental Setting

Recreational facilities include active and passive facilities. Active recreational facilities include parks, tennis and basketball courts, pools, golf courses, and various other facilities. Passive recreational facilities include plazas and other public places.

A project would result in a significant impact on recreational facilities if it would increase the use of existing parks and facilities such that substantial physical deterioration of the facility would occur or be accelerated or if the project included recreational facilities or required construction that might have an adverse physical effect on the environment.

4.16.2 Impact Analysis

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

Less than Significant Impact. The Proposed Project is a multi-phased project that includes contaminated soil removal, athletic field replacement, campus building upgrades, and updates to ensure ADA compliance. The nearest recreational facilities are People's Park located at 410 Avalon Canyon Rd, Avalon, CA 90704 approximately 0.2 miles northeast of the Project site, and the Catalina Island Golf Course located at 1 Country Club Drive, Avalon, CA 90704 across Avalon Canyon Road southeast from the Proposed Project. The Proposed Project would not induce population growth which would consequently increase the use of the existing neighborhood, regional parks, and other recreational facilities. During construction, the presence of construction equipment and vehicles will utilize the existing roads thereby resulting in a temporary impact to access on nearby roads, and may also result in temporary aesthetic impacts. However, these activities will be limited during the construction period, and the Proposed Project activities will occur within the existing campus. Therefore, implementation of the Proposed Project would result in a less than significant impact associated with recreational facilities.

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

Less than Significant Impact. The Proposed Project site is located at Avalon K-12 School campus, which provides students with on-campus recreational facilities. Implementation of the Proposed Project would not result in the increase of student enrollment that would lead to deterioration of existing recreational facilities. The Proposed Project includes the replacement of the athletic field, thereby improving the recreational facilities within the school. Because the Proposed Project would not result in the increase of student enrollment, it would not require construction or expansion of recreational facilities nearby such as People's Park or the Catalina Island Golf Course. The Proposed Project is intended to upgrade school facilities for an existing student population and would not burden any facility beyond capacity by generating additional recreational users. Furthermore, during construction, normal operations will occur and will not require students or staff to relocate to outside facilities. Therefore, implementation of the Proposed Project would have a less than significant impact associated with the construction or expansion of recreational facilities.

4.17 TRANSPORTATION

17.	TRANSPORTATION. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	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 a geometric design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d)	Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.17.1 Environmental Setting

The existing roadway network surrounding the Proposed Project includes Falls Canyon Road directly north of the Project site which is perpendicular to Avalon Canyon Road east of the Project site.

4.17.2 Impact Analysis

- a) *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?*

Less than Significant Impact. The Proposed Project would not change any existing roadways, bicycle lanes, or pedestrian paths. The Proposed Project activities will remain within the existing campus. The Proposed Project would generate minor increases in traffic associated with short-term construction activities due to the presence and use of construction equipment and vehicles. However, there will not be a significant and permanent increase in traffic after the completion of the Proposed Project. The Proposed Project is not expected to change current local traffic levels. Impacts would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less than Significant Impact. The Proposed Project would not change the operational uses of the site and would not result in the increase of student enrollment. There are no changes to the land uses, or changes to the existing circulation system including access to public or alternative transit. As per the CEQA Guidelines section 15064.3, subdivision (b)(1), projects that reduce VMT, such as pedestrian, bicycle and transit projects, should have a less than significant impact. As per the CEQA Guidelines section 15064.3, subdivision (b)(2), transportation projects which reduce VMT should be presumed to cause a less than significant transportation impact. The Proposed Project is not a transportation project, but would include transportation of contaminated soils off the island including transporting contaminated soils from the Port of Long Beach to the appropriate waste disposal facility. The proposed activities may result in temporary impacts to transportation networks during construction. However, these impacts will occur only during the construction phases and will cease once the Proposed Project has been completed. The Proposed Project does not inhibit the use of any of the current roadways. Impacts would be less than significant.

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

No Impact. The Proposed Project would not change any design features of the existing roadways and would not involve any incompatible uses. Implementation of the Project would not result in an impact.

d) Result in inadequate emergency access?

Less than Significant Impact. The Proposed Project would occur entirely within the Avalon K-12 School campus and would not include any changes to nearby roadways or emergency access routes. There are no proposed road closures or detours that would interrupt the use of the roads during an emergency. The Avalon K-12 school currently has two gathering spaces for students in the event of an emergency; the secondary students gather on the playground next to the gym and elementary school students gather between the second and bottom rows of bungalows at the eastern edge of campus. In the event that these designated areas are in construction or deemed unsafe to access, backup areas for evacuation are also designated at the upper athletic field and the lower field. Each of these backup locations are large enough for all students, and serve as adequate reunification sites (LBUSD 2020b). Impacts would be less than significant.

4.18 TRIBAL CULTURAL RESOURCES

18.	TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<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 Resource 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"/>

4.18.1 Impact Analysis

- i) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

Less than Significant with Mitigation. The Archaeological Literature Review and Record Search conducted in January 2019 included background studies of the Proposed Project site as part of a Phase I Cultural Resource Study (Appendix C). The Native American Heritage Commission (NAHC) Sacred Lands File search did not identify any sacred sites or tribal cultural resources within the search radius.

On January 31, 2019, Project notification letters with invitations to consult on the Project were sent by certified mail to representatives of the three tribes on the District's AB 52 list: the Gabrieleno Band of Mission Indians- Kizh Nation, the Torres Martinez Desert Cahuilla Indians, and the San Gabriel Band of Mission Indians- Gabrieleno Tongva. No response has been received by the District from the Torres Martinez Desert Cahuilla Indians or from the San Gabriel Band of Mission Indians- Gabrieleno Tongva.

The Gabrieleno Band of Mission Indians- Kizh Nation (Tribe) requested consultation on February 22, 2019. The District was in contact with the tribal office between February 25 and March 5 to coordinate a meeting, and a consultation meeting was scheduled for May 16, 2019 between the Tribe and the District. The Tribe stated that the Project site is located within the sacred village of Pimungna (Pimu) and is along a sacred fresh-water creek utilized for travel, transport, daily sustenance of food, medicine, and shelter as well as ceremony for burials, there is a high potential to impact Tribal Cultural Resources still present within the soil from the thousands of years of prehistoric activities that occurred within and around these Tribal Cultural landscapes. They are concerned that there may be tribal cultural resources underlying the disturbed surface layer that could be discovered during construction. They asked that an approved member of the Gabrieleno Band of Mission Indians, Kizh Nation be on site for project excavation to monitor the excavation of the Project and provided mitigation measure language.

Ground-disturbing activities have the potential to result in the discovery of, or inadvertent damage to, archaeological contexts and human remains, and this possibility cannot be eliminated. Consequently, there is a potential for significant impacts on TCRs. Implementation of monitoring and the stop work and treatment procedures to avoid and minimize potential impacts as described in Mitigation Measures TCR-1 through TCR-8 would reduce the potential impacts to less than significant.

TCR-1: Retain a Native American Monitor/Consultant. The Project Applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the NAHC's Tribal Contact list for the area of the project location. This list is provided by the NAHC. The monitor/consultant will only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the Tribal Representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

TCR-2: Unanticipated Discovery of Tribal Cultural and Archaeological Resources. Upon discovery of any archaeological resources, cease construction activities in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified

archaeologist to constitute a “historical resource” or “unique archaeological resource”, time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resource.

TCR-3: Public Resources Code Sections 21083.2(b). For unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

TRC-4: Unanticipated Discovery of Human Remains and Associated Funerary Objects. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC 5097.98 shall be followed.

TCR-5: Resource Assessment & Continuation of Work Protocol. Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).

TRC-6: Kizh-Gabrieleno Procedures for burials and funerary remains. If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the following treatment measures shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. These remains are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial

purposes or to contain human remains can also be considered as associated funerary objects.

TCR-7: Treatment Measures. Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

TCR-8: Professional Standards: Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. The principal archaeologist must meet the Secretary of the Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

- ii) *Would the project cause a substantial adverse change in 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?*

Less than Significant with Mitigation. See response to 4.18.1 a) i). Mitigation measures TCR-1 through TCR-8 would reduce potential impacts to tribal cultural resources to less than significant.

4.19 UTILITIES AND SERVICE SYSTEMS

19.	UTILITIES/SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.19.1 Environmental Setting

Utilities and service systems include potable water and wastewater treatment. The quantity of water consumed and wastewater generated by a project is determined by several factors including the size, type, and characteristics of the project. The need for construction of new or replacement water and wastewater treatment facilities (e.g., reservoirs, storage tanks, water mains, filtration plants, pumps, wells, and other connections or distribution facilities) would depend on the existing capacity and anticipated demand for the project area.

4.19.2 Impact Analysis

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

Less than Significant Impact. The Proposed Project would not exceed wastewater treatment requirements of the Regional Water Quality Control Board (RWQCB). The Project would not result in an increase in student or staff population that would increase water usage. The Proposed Project involves utility upgrades to allow for HVAC installation at the campus. After construction, the use of utilities on site would be similar to existing conditions; however, campus upgrade of modern, more efficient equipment and technological improvements would likely require less energy to operate.

Therefore, implementation of the Proposed Project would result in a less than significant impact associated with relocation or construction of utility infrastructure.

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

Less than Significant Impact. The water usage at the Avalon K-12 campus would not differ substantially from existing conditions after the Proposed Project is complete. The City of Avalon's primary source of fresh water is groundwater which is pumped into the Middle Ranch/Thompson Reservoir. Additionally, Southern California Edison operates a desalination plant located at Pebbly Beach and supplements the current groundwater supplies via reverse osmosis (City of Avalon 2013). While there may be a temporary increase in water usage during construction, there would be no permanent increase in water supply requirements once the Proposed Project activities have been completed. In addition, the District would comply with local, regional, and state water conservation policies and would follow standard BMPs, including Title 22 regulations, in order to reduce water consumption. Implementation of the Proposed Project would not result in an impact associated with sufficient water supplies. Impacts would be less than significant.

- c) *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less than Significant Impact. The Proposed Project site is located in a developed area and is currently serviced by groundwater and the desalination plant with established connections. The Proposed Project will not result in an increase in demand or net increase in wastewater generation because the Proposed Project will not increase the student population. There are no proposed permanent changes to the uses on-site. In addition, the addition of an artificial turf will reduce outdoor water use. Implementation of the Project would result in a less than significant impact.

- d) *Would the project generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure?*

Less than Significant Impact. The Proposed Project would be compliant with all county and State solid waste diversion, reduction, and recycling mandates. Non-hazardous soils or other waste will be transported to the Simi Valley Landfill and Non-Resource Conservation and Recovery Act (RCRA) and RCRA soils will be transported to the Waste Management Kettleman Hills in Kettleman City, California. The Simi Valley Landfill has a projected life of over 60 years, with remaining permitted capacity of 90 million cubic yards (Waste Management 2014). Kettleman Hills has a remaining capacity of 4.9 million cubic yards in its landfill B-18 (Waste Management 2015). These facilities have the capacity to accept the hazardous and non-hazardous soils. Therefore, impacts will be less than significant.

- e) *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Less than Significant Impact. The Proposed Project would result in the generation of solid waste including scrap lumber, concrete, residual waste, packaging material, plastics, and vegetation.

However, the Proposed Project would not cause an increase in student and staff population that would result in the permanent and significant increase of solid waste. As stated in Section 4.19 (d), the District will ensure that the contaminated soil and other construction waste will be delivered to the appropriate waste disposal facility. Impacts would, therefore, be less than significant.

4.20 WILDFIRE

20.	WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

4.20.1 Impact Analysis

- a) *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Less than Significant Impact. According to the General Plan, the entire Santa Catalina Island, including the City of Avalon, is designated as a very high fire hazard zone by the California Department of Forestry and Fire Protection (City of Avalon 2013). However, the Proposed Project will not impair an adopted emergency response plan or evacuation plan. The Proposed Project does not include any modifications of main roads that could be designated as emergency evacuation routes, nor does the Project include construction of facilities that would interfere with an emergency response or evacuation plan. The Avalon K-12 school currently has two gathering spaces for students in the event of an emergency; the secondary students gather on the playground next to the gym and elementary school students gather between the second and bottom rows of bungalows at the eastern edge of campus. In the event that these designated areas are in construction or deemed unsafe, backup areas for evacuation are already designated at the upper athletic field and the lower field. Each of these backup locations are large enough for all students, and serve as adequate reunification sites (LBUSD 2020b). Impacts would be less than significant.

- b) *Would the project, 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?*

Less than Significant Impact. According to the General Plan, the entire Santa Catalina Island, including the City of Avalon, is designated as a very high fire hazard zone by the California Department of Forestry and Fire Protection (City of Avalon 2013). The City of Avalon Fire Department provides fire protection service within the Avalon City limits and there are two saltwater reservoirs within the City limits to provide water for fire suppression.

Areas that are within a very high fire hazard zone are likely susceptible to wildfires. Weather conditions such as hot, dry summers, and high wind speeds can elevate the risk of wildfire. The proposed construction activities would result in the potential risk of fire due to ignition by construction equipment located near any dry vegetation. The presence of flammable liquids would also contribute to risk of fire if ignited by a spark or open flame.

To minimize the potential of fire, or uncontrolled spread of a wildfire, the Proposed Project will implement the following BMPs onsite that would reduce any potential impacts to less than significant.

- Proper labeling, storage, handling and use of hazardous materials
 - Any small quantities of hazardous, combustible and flammable materials in the staging areas will be stored and fenced to be protective from weather exposure. Any materials that are not compatible will be stored separately.
 - Workers will be trained in the danger of wildland fires. Vehicles and equipment will be parked in areas away from any dry vegetation.
 - Staging areas and vehicles will be equipped with a fire extinguisher.
 - Work areas will be kept clean from any flammable or combustible materials.
 - Workers will be trained in the handling and disposal of any hazardous, combustible, or flammable materials.
 - Spill kits will be made available onsite to clean up any flammable liquids
- c) *Would the project 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?*

Less than Significant Impact. The Proposed Project does not include installation of any maintenance associated infrastructures that would exacerbate a fire risk. In addition, the Proposed Project is not located within a very high fire hazard severity zone. Impacts would be less than significant.

- d) *Would the project 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?*

Less than Significant Impact. The Proposed Project site does not include structures that would be exposed to downstream flooding or landslides. The Proposed Project does not include activities which would change the drainage or slope of the Project site. Improvements will occur within the campus and will not include the removal or introduction of new structures that would expose people or structure to significant risks. In addition, the Project site is not located in an area of slope instability Impacts would, therefore, be less than significant.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

21.	MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Does the project have the potential to 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 which 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"/>

4.21.1 Impact Analysis

- 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 with Mitigation. The Proposed Project will occur within a previously disturbed site that is currently functioning as an active and operational school. As discussed in Section 4.4.2, there are no designated critical habitats within the vicinity of the Proposed Project, and the area lacks any suitable habitat for any sensitive species therefore resulting in no sensitive plant or wildlife species expected to occur. The proposed activities do not include disturbance of native habitat or areas not previously disturbed during the school construction.

While the campus buildings were identified to be eligible for the NRHP and CRHR, the Proposed Project improvements are not anticipated to impact the character defining features and result in affecting the historic integrity of the buildings.

The exploratory investigation resulted in the discovery of historic-era artifacts during a subsurface exploratory remediation investigation in designated trenches in the vicinity of the original high school building, the elementary school. However, the results of the Archaeological Literature Review and Record Search did not identify any sacred sites or tribal cultural resources within the search radius of the Proposed Project.

As discussed in Section 4.5, because resources are often buried and not easily identifiable, in the event of an unanticipated discovery, the following is recommended:

MM CUL-1: In the event that unanticipated cultural resources are encountered during ground-disturbing activities, a qualified archaeologist shall be contacted to assess the significance of the find. In the case that previously undiscovered resources are identified during construction activities, excavations within 50 feet of the find shall be temporarily halted or diverted. If the qualified archaeologist determines the find to be significant, construction activities can resume after the find is assessed and mitigated accordingly.

Implementation of these mitigation measures would result in less than significant impact with regard to resources of major periods of California history or prehistory.

- 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 following project has been identified to be located near the Proposed Project according to the Capital Improvement and Major Maintenance Projects.

- Project 180003: Five Corner Pedestrian (Complete Street Project)

The project is currently in the design phase and the construction schedule has not yet been provided. Development of the Proposed Project would have less than significant cumulative impacts. The Five Corner Pedestrian project will occur northeast, approximately 0.2 miles from the Proposed Project. The Proposed Project impacts will not contribute to cumulative impacts because the Proposed Project activities will remain onsite and within the existing campus. Impacts would be less than significant.

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

Less than Significant Impact. Effects to human beings are generally associated with air quality, noise, traffic safety, geology/soils, and hazards/hazardous materials. As outlined in the sections above, no significant impacts are expected for air quality, noise, traffic, geology, and hazards. The RAP, RAW, and associated cleanup agreement would ensure protections are in place to limit

exposure to the contaminated soils during removal. With BMPs implemented and regulations followed, impacts would be less than significant.

SECTION 5.0 – REFERENCES

The following is a list of references used in the preparation of this document.

Airport Land Use Commission (ALUC).

2018 Los Angeles County, Department of Regional Planning.
<http://planning.lacounty.gov/aluc/airports>. Accessed December 2018.

Associated Soils Engineering, Inc. (ASE)

1988 Verification of Soil Bearing Pressure. Proposed Emergency Relocatable Classrooms for Avalon Elementary, Junior High, and High School.

1990 Report of Preliminary Foundation Investigation. Proposed Gymnasium for Avalon Elementary, Junior and Senior High Schools.

1998 Geotechnical Exploration Report. Proposed Relocatable Classrooms and Fire Access Road Avalon Elementary, Junior and Senior High Schools.

Avalon, City of.

2013. 2030 General Plan/Coastal Plan.
http://www.cityofavalon.com/filestorage/3182/3213/2030_General_Plan_Adopted.pdf.
Accessed December 2018.

Avalon, City of.

2019 Capital Improvement and Major Maintenance Projects.
<http://www.cityofavalon.com/CIP>

California Air Resources Board (CARB).

2008. Climate Change Scoping Plan. A Framework for Change. Pursuant to AB 32 December 2008.

2014. First Update to the Climate Change Scoping Plan. Building on the Framework Pursuant to AB 32. May 2014.

2017. Draft: The 2017 Climate Change Scoping Plan. Online URL:
<https://www.arb.ca.gov/cc/scopingplan/revised2017spu.pdf>

California Department of Fire and Forestry Protection (CalFire)

2011 Los Angeles County Very High Fire Hazard Severity Zones in LRA. September 2011.

2016. California Statewide Fire Map. <http://www.fire.ca.gov/general/firemaps>. Accessed December 2016.

California Department of Conservation.

2015a. CGS Information Warehouse: Landslides.
<http://maps.conservation.ca.gov/cgs/informationwarehouse/>. Accessed December 2018.

2015b. CGS Information Warehouse: Mineral Land Classification.
<http://maps.conservation.ca.gov/cgs/informationwarehouse/>. Accessed December 2018.

2016 Los Angeles County Important Farmland Map. Farmland Mapping and Monitoring Program.

California Department of Fish and Wildlife (CDFW).

2015. California Regional Conservation Plans Map.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>. Accessed December 2018.

California Department of Mines and Geology (CDMG)

1982. Mineral Lands Classification Database.
 Online URL: <http://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx>

California Department of Transportation (CA DOT).

2018 California Scenic Highway Mapping System.
http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed December 2018.

California Geological Survey (CGS).

2016. CGS Information Warehouse: Regulatory Maps. Online URL:
<http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>

Department of Toxic Substances Control (DTSC)

2007 Voluntary Cleanup Agreement with Long Beach Unified School District. Authorized April 17, 2007.

2019 Notice of Exemption. Remedial Action Plan Avalon K-12 School Property and City of Avalon Warehouse Property.

Federal Emergency Management Agency (FEMA)

2008 National Flood Hazard Layer FIRMette.

Google Maps

2019 Google Maps accessed online: <https://www.google.com/maps>

Koury Engineering & Testing, Inc.

2020 Geotechnical and Geological Engineering Investigation Report for Various Campus Upgrades Avalon K-12 School. Prepared February 6, 2020.

Long Beach Unified School District (LBUSD)

2020a School Bond Projects Timeline. Online URL: <http://lbschoolbonds.net/e-project-timeline.cfm>

2020b Personal Communication with Carol Henderson, Office Supervisor, Avalon K-12 School. Discussion regarding evacuation zones and maps provided depicting these areas.

Leighton Consulting, Inc.

2018 Limited Geotechnical Evaluation of Soil/Bedrock Conditions on Slope North of Ballfield, Avalon K-12 School, Located at 200 Falls Canyon Road, City of Avalon, Santa Catalina Island, California. Prepared October 24, 2018.

2019 Geotechnical Exploration Avalon K-12 School Sports Field and Site Improvements, Avalon, Santa Catalina Island, Los Angeles County, California. Prepared September 23, 2019.

Los Angeles County

2015 Significant Ecological Areas and Coastal Resource Areas Policy Map. Department of Regional Planning. Online URL:
http://planning.lacounty.gov/assets/upl/project/gp_2035_2014-FIG_9-3_significant_ecological_areas.pdf

Ninyo & Moore

2019 Preliminary Geological and Other Hazards Evaluation. Avalon K-12 School Modernization. May 30, 2019.

PCR Services Corporation

2013 Archaeological Construction Monitoring of the Avalon High School Exploratory Remediation Project

United States Department of Agriculture (USDA).

2017. Web Soil Survey. Online URL:
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

United State Geological Survey (USGS).

2019 U.S. Quaternary Faults.
<https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf>. Accessed May 2019.

2015. Mineral Resources Data System <http://mrdata.usgs.gov/mineral-resources/mrds-us.html>. Accessed December 2018.

U.S. Fish and Wildlife Service (USFWS).

2018 National Wetlands Inventory. Wetlands Mapper website. Accessed December 2018. Available online:
<http://www.fws.gov/wetlands/Data/Mapper.html>.

Waste Management

2015 Kettleman Hills. Chemical Waste Management, Inc.

2014 Simi Valley Landfill & Recycling Center