

DRAFT
INITIAL STUDY/MITIGATED NEGATIVE
DECLARATION
Polytechnic High School Transformation Project
LONG BEACH, CA
(LOS ANGELES COUNTY)

Prepared for:

LONG BEACH UNIFIED SCHOOL DISTRICT
Facilities Development and Planning Branch
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SECTION 1.0 – PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

1.1 PROJECT PURPOSE

Measure E bonds were approved on June 23, 2016, to support upgrades to aging schools within the Long Beach Unified School District (LBUSD, District). The \$1.5 billion school repair and safety bond measure include repairs; technology improvements; heating, ventilation, and air conditioning (HVAC); and school safety improvements. Specific improvements may include but are not limited to:

- Improve plumbing system
- Maintain safe drinking water
- Upgrade schools to meet accessibility and earthquake safety standards
- Other health and safety improvements
- Renovation of libraries, science & computer labs
- Fund construction of new career education spaces
- New or renovated athletic facilities
- New air conditioning systems at aging campuses

Measure Q bonds were approved November 2022 in the amount of \$1.7 billion. The bond includes upgrades to District facilities associated with health, safety and student achievement. Proceeds from the bond will improve plumbing systems, maintain safe drinking water and upgrade schools to meet accessibility and earthquake safety standards, among other health and safety improvements. The bond will also renovate libraries, science and computer labs and fund the construction of new career education spaces. Additional Measure Q improvements will include new or renovated athletic facilities and new air conditioning systems at aging campuses that did not need air conditioning under the previous Measure E program but now have systems approaching end of life.

1.2 PROJECT LOCATION AND SITE CHARACTERISTICS

1.2.1 Location

Polytechnic High School is an existing 26-acre school site located at 1600 Atlantic Avenue, Long Beach, California 90813, accommodating high school students (9-12). Single-family residences on all sides border the site. In addition, Roosevelt Elementary School is located on the southwest side of the site, and several commercial buildings are to the east side of the campus. Polytechnic High School was originally built in the 1930's with additions and buildings added in the 1950's through the 1980's. Poly High School consists of 401,436 square feet of permanent buildings and 9,600 square feet of portable buildings.

1.3 PROJECT BACKGROUND

The District serves nearly 74,000 students in 84 public schools and is the third largest school district in California. On June 2016, Measure E bonds, and in November 2022 Measure Q bonds, were approved to implement District-wide school upgrade projects over the next 8 to 10 years, respectively.

1.4 PROJECT GOALS AND OBJECTIVES

Goals and objectives under Measure E address four key areas consisting of repairs, technology, air conditioning, and safety. Objectives under Measure Q include supporting health, safety, and student achievement. The objective of the Proposed Project is for the District to conduct upgrades in all four areas

at Polytechnic High School to improve classroom conditions, provide up to date equipment for student use, and create a safe educational environment. Specific improvements include the following:

Repairs

- Due to several District campuses being built 60 to 80 years ago, the outdated buildings require repairs to meet American with Disabilities Act (ADA) accessibility requirements; meet fire and life safety standards; and improve on-site building conditions and utilities 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

- Improvements to indoor and outdoor areas include upgrades to the fire alarm system and improvements to recreational areas such as the sports field and gym to provide students with access to safe, supervised activities apart from the daily classroom schedule.

1.5 PROJECT DESCRIPTION

Demolition:

Demolition of eight buildings including buildings 150, 550, 700, 750, 800, 850, 950, and the Gymnasium.

New Buildings and Aquatics Center:

The Proposed Project would be constructed over two phases. The first phase (summer 2025 through winter 2027) will see the construction of a three-story classroom building, along with HVAC and technology modernization in seven existing buildings. The second phase (winter 2027 through summer 2030) will see the demolition of seven existing buildings, the construction of a new drama/band building (building 150), a three-story classroom building (building 1000), a two-story gymnasium building (building 800), an aquatic center with a pool and support facilities (Building 850), a two-story administration/classroom/wellness building (building 700), a new baseball field and student pick up and drop off along Jack Rabbit Lane.

Scope includes, but is not limited to:

- HVAC system installation
- ADA – Accessibility upgrades
- Restroom upgrades

- Fire Alarm upgrades
- Ceiling mounted overhead projectors
- Marker boards and tack boards
- Ceiling repair
- Interior lights
- Interior and exterior painting
- New finishes
- Windows replacements or repairs and window shades
- Signage (campus-wide)

Project Schedule

The Proposed Project is expected to occur over a 5-year period, from approximately Summer 2025 to Summer 3030. Construction will occur in two phases. Phase 1 is expected to occur from Summer 2025 through Winter 2027. Phase 2 is expected to occur Winter 2027 through Summer 2030. Construction activities would take place between the hours of 7:00 am to 4:00 pm Mondays through Fridays. Construction activities would take place between the hours of 7:00 am to 4:00 pm Mondays through Fridays.

Construction Activities

Once the Proposed Project has been approved by the District's Board of Education, Proposed Project construction activities would begin in June 2025 after the school year has ended. The construction would begin after Division of the State Architect (DSA) approval of plans and specifications is obtained and the contract for construction is awarded.

Prior to construction activities, any existing asbestos and lead-based paint, or asbestos- and lead containing materials, would be abated in accordance with all applicable requirements, including South Coast Air Quality Management District (SCAQMD) Rule 1403 and disposed of properly. As recommended in the Hazardous Materials Building Survey prepared by Terraphase for the school, the following activities will be included as part of the pre-construction and construction activities:

Asbestos / Asbestos Containing Materials:

- The identified Asbestos Containing Materials (ACM) should not be disturbed. Prior to renovation activities which would disturb identified ACMs and Assumed ACMs, a licensed abatement removal contractor should remove the ACMs. The licensed abatement contractor must maintain current licenses as required by applicable state or local jurisdictions for the removal, transporting, disposal, or other regulated activities.
- Applicable laws and regulations should be followed, including those provisions requiring notification to regulatory agencies, building occupants, renovation contractors, and workers of the presence of asbestos.
- Asbestos abatement monitoring consulting services should be performed by a third-party environmental consultant, to include oversight of abatement contractor activities to be performed in accordance with the abatement specifications, daily air monitoring, clearances, verification of complete removal of hazardous materials, and preparation of a closeout report summarizing the abatement activities.

Lead / Lead-Containing Surfaces:

- The identified Lead-Containing Surfaces (LCS) should not be disturbed. All disturbances and removal activities should be performed by a licensed abatement contractor with certified lead personnel. Any painted LCSs in a non-intact condition should be stabilized and the substrate should be encapsulated. All lead-related removal activities should be performed in accordance with the DOSH Lead in Construction Standard, Title 8 California Code of Regulations (CCR) 1532.1.
- Proper LCS waste stream categorization is required. Prior to any renovation activities, a composite sample of the representative LCS material should be analyzed for total lead for comparison with the Total Threshold Limit Concentration in accordance with Environmental Protection Agency (EPA) reference method SW-846. If the concentration of total lead is greater than or equal to 1,000 mg/kg, the LCS waste material must be disposed of at a landfill which can receive such waste. If the concentration is less than 50 mg/kg, the sample may be disposed of as construction debris, if it is to remain in California. If the total lead result is greater than or equal to 50 mg/kg and less than 1,000 mg/kg, the sample must be further analyzed for soluble lead by the Waste Extraction Test for comparison with the Soluble Threshold Limit Concentration (STLC) as described in Title 22 CCR 66261.24a. Additionally, if the result is greater than or equal to 100 mg/kg, the sample must be further analyzed for leachable lead by the Toxicity Characteristic Leaching Procedure (TCLP) for comparison with the Resource Conservation and Recovery Act (RCRA) limits. Based on the results of the soluble and leachable analysis, the waste material may require disposal as RCRA-Hazardous waste or non-RCRA-(California) Hazardous waste.
- Lead abatement monitoring consulting services should be performed by a third-party environmental consultant, to include oversight of abatement contractor activities to be performed in accordance with the abatement specifications, daily air monitoring, clearances, verification of complete removal of hazardous materials, and preparation of a closeout report summarizing the abatement activities.

Universal Wastes

- Universal waste discussed in this report (Table 4), should be removed, and properly recycled or disposed of by the licensed abatement contractor prior to renovation activities. The contractor should provide proper manifesting for all hazardous materials removed and recycled to prove the disposal of all materials was completed in accordance with local, state, and federal requirements.
- The water-stained ceiling tiles found to be present in Buildings B, D, and E will need additional investigation to define the extent of water damage and if potential mold growth exists and develop recommendations for remediation as needed.
- Monitoring consulting services should be performed by a third-party environmental consultant, to ensure the appropriate removal of the hazardous materials prior to building demolition activities.
- 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.

Construction Equipment

The Proposed Project will utilize the following construction equipment during replacement and installation of the proposed upgrades:

- Loaders
- Pickup trucks
- Backhoe
- Water truck
- Asphalt paver
- Crane
- Excavators

Demolition and Excavation

Proposed demolition work for the Proposed Project will primarily occur within the existing buildings and rooftops and the existing turf field. The proposed demolition activities will include the removal of window HVAC units, flooring, ceiling tile, plumbing fixtures, ceiling fans, window coverings and treatments, light fixtures, conduits, and other mechanical and electrical equipment. Concrete slabs outside buildings will be removed in specific areas for the construction of ADA ramps or reconstruction of ADA walkways. Types of excavation will include concrete, asphalt, and earth excavations for installation of units, electrical wiring, plumbing, and ramps. Universal waste and other discarded materials such as HVAC units, piping, fixtures, vegetation, and other eligible materials will be transported for recycling or be properly disposed.

Fencing

Temporary fence enclosures with lockable gates would be added to staging areas and around all construction sites. Screens would be added to the perimeter fence to control dust. Signage would be added to the fence to designate the area as a construction site. A security guard would be present during non-work hours.

Staging Areas

Construction trailers and staging areas will be located within the school property. Hauling trucks, cranes, and other construction vehicles will be located in the staging areas. Temporary fence enclosures with lockable gates will be added to the staging areas.

1.6 REQUIRED PERMITS AND APPROVALS

A public agency, other than the Lead Agency, that has discretionary approval power over a project is referred to under the California Environmental Quality Act (CEQA) Guidelines as a “Responsible Agency.” Reviewing Agencies include those agencies that do not have discretionary powers but may review the Initial Study/Mitigated Negative Declaration (IS/MND) for adequacy and accuracy. Responsible Agencies have discretionary approval authority for a project. Potential Reviewing Agencies and Responsible Agencies include the following:

State

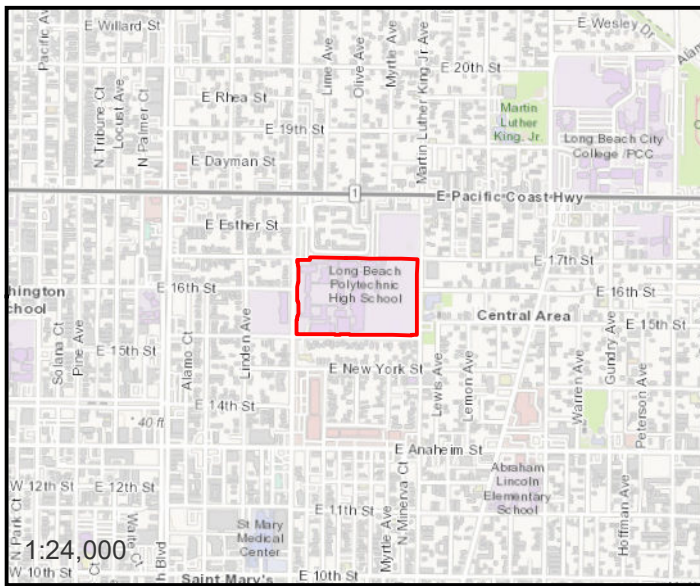
- State Clearinghouse
- California Department of Education
- California Department of Public Health
- Department of Toxic Substance Control (DTSC)
- Division of the State Architect (DSA)
- Division of Occupational Safety and Health
- Office of Public School Construction (OPSC)

Regional

- SCAQMD
- Native American Heritage Commission (NAHC)
- Southern California Edison (SCE)
- Los Angeles Regional Water Quality Control Board (LARWQCB)

Local

- City of Long Beach Public Works
- City of Long Beach Fire Department
- City of Long Beach Health Department
- City of Long Beach Utilities



Legend

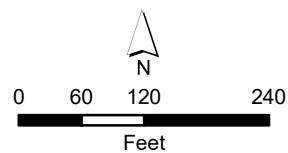


Figure 1
Polytechnic HS Modernization CEQA LBUSD
Project Location and Vicinity

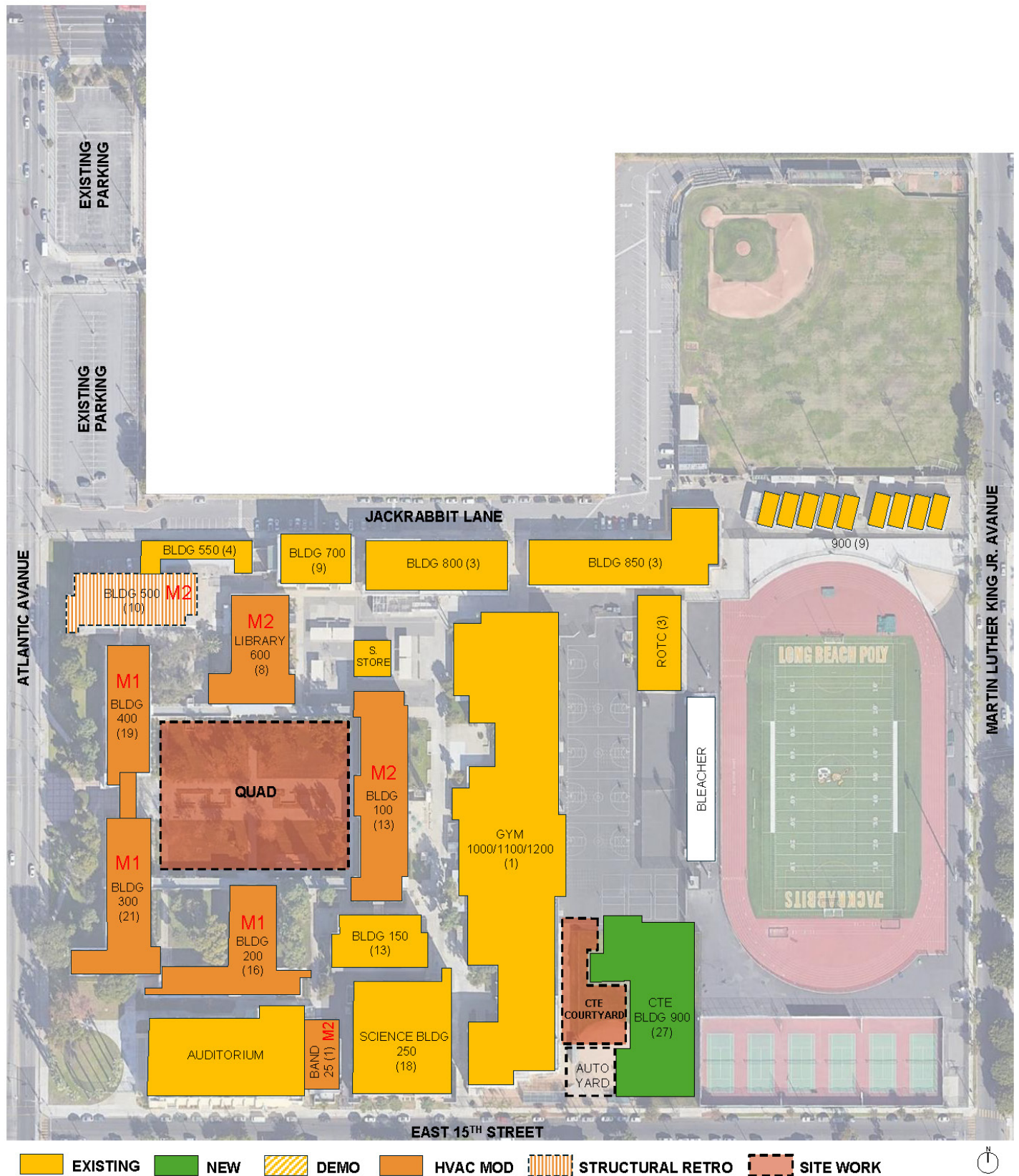


Figure 2
Polytechnic HS Modernization CEQA LBUSD
Site Plan

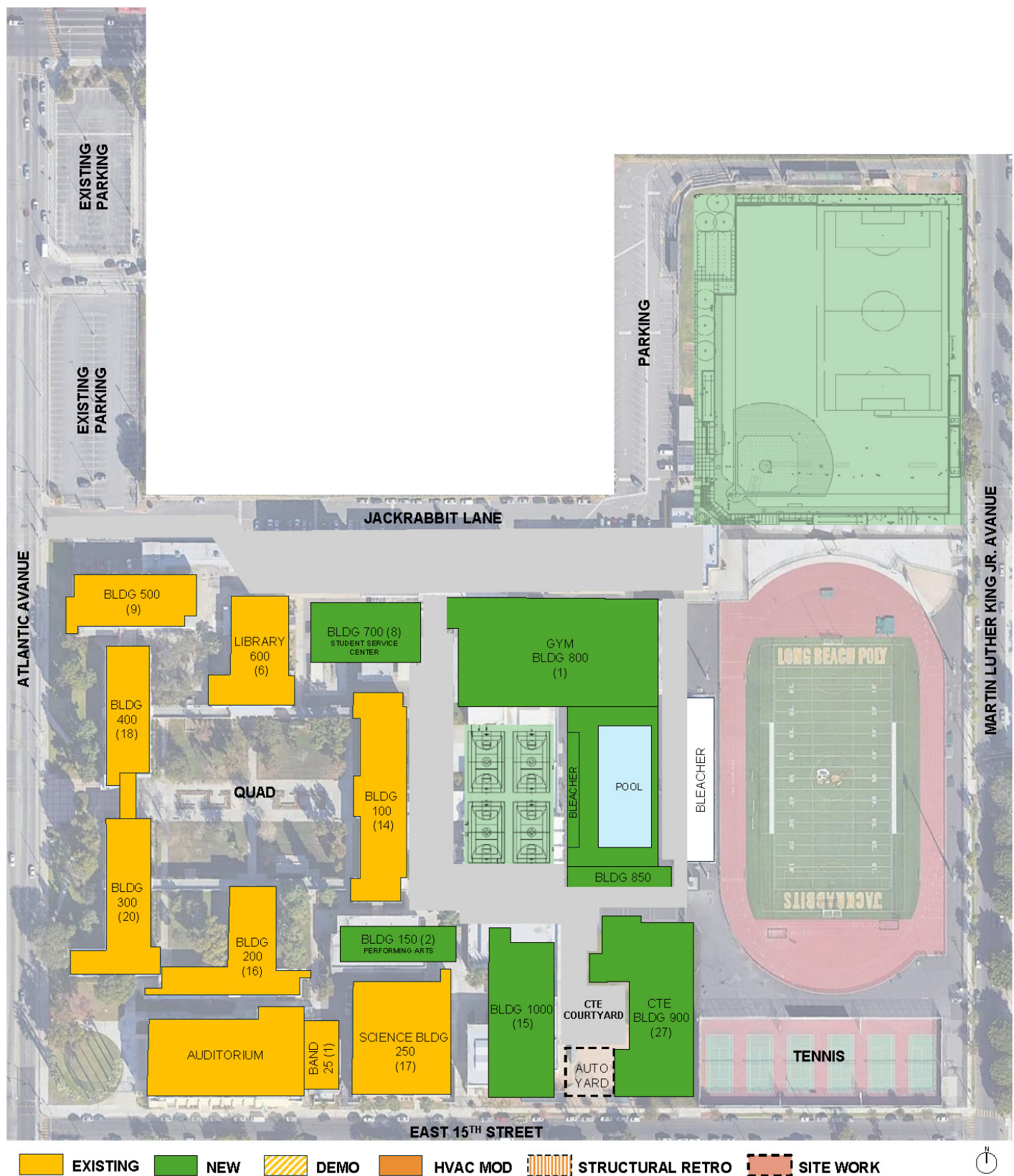


Figure 3
Polytechnic HS Modernization CEQA LBUSD
Proposed Site Plan

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 checked="" 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 checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing	<input type="checkbox"/> Public Services
<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation	<input checked="" type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Utilities /Service Systems	<input type="checkbox"/> Wildfire	<input checked="" 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 (EIR)** 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 type="checkbox"/>	<input checked="" 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.

4.1.2 Impact Analysis

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.

The Proposed Project site is an existing 26-acre school site located at 1600 Atlantic Avenue, Long Beach, California 90813. Single-family residences on all sides border the site. In addition, Roosevelt Elementary School is located on the southwest side of the site, and several commercial buildings are to the east side of the campus. Polytechnic High School was originally built in the 1930's with additions and buildings added in the 1950's through the 1980's. Poly High School consists of 401,436 square feet of permanent buildings and 9,600 square feet of portable buildings.

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

No Impact. The Proposed Project site is bound by East 15th Street to the North, Atlantic Avenue to the east, Martin Luther King Jr. Ave. to the south, and Jackrabbit Ln. to the west. Potential scenic vistas in the vicinity of the Proposed Project site include views of the Pacific Ocean to the southeast, south, and southwest and mountain views of the San Gabriel Mountains to the north and the Saddleback Mountains to the east; however, the surrounding area is heavily developed, and views of these scenic vistas are limited. The area surrounding the Proposed Project site has been developed since the early twentieth century, and Polytechnic High School has existed on the current site since 1895, the school has expanded since. Therefore, implementation of the Proposed Project would not result in an impact associated with scenic vistas.

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. The Proposed Project site is approximately 0.4 miles south of California State Highway 1. Although parts of California State Highway 1 are classified as eligible for state scenic highway designation, the portion of Highway 1 nearest the Proposed Project site is not designated or eligible for listing as a scenic highway. The Proposed Project site is not visible from the nearest section that is eligible or officially designated (California Department of Transportation [Caltrans 2024]). Therefore, implementation of the Proposed Project would not result in an impact associated with scenic resources within a scenic highway.

c) 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 site is an urbanized residential, commercial, and institutional area with no designated scenic vistas existing in the immediate vicinity. Implementation of the Proposed Project would not alter the surrounding views due to pre-existing facilities and because the site's surroundings already contain development. Additionally, the Proposed Project does not change the underlying zoning of the site. Therefore, implementation of the Proposed Project would result in a less than significant impact associated with visual character or quality of public views.

d) 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 site currently contains security lighting, parking lighting, indoor lighting, and adjacent street lighting. Lighting at the Proposed Project site is installed to minimize glare for pedestrians and drivers and to minimize spillover light. The District applies design standards that avoid any impacts that adversely affect day or nighttime views, such as window shades and glare shields. The Proposed Project would provide new indoor lighting and outdoor lighting however, it would be installed to minimize glare for pedestrians and drivers to minimize spillover light. Additionally, the Proposed Project would not alter the facade or exterior finish of existing buildings in a way which increases glare on the Proposed Project site. During construction, the Proposed Project site will include temporary construction lighting, and presence of vehicle transporting equipment. However, these activities would be temporary and not result in permanent, significant impacts. Therefore, implementation of the Proposed Project would result in a less than significant impact associated with new sources of light or glare.

4.2 AGRICULTURE & FORESTRY RESOURCES

2.	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
(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 (7 United States Code [U.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 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 use 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 currently a school, is zoned Institutional, and the project does not propose a change to the land use designation. 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 (Department of Conservation 2024a); therefore, implementation of the Proposed Project would not result in any impacts 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. No areas zoned for agricultural use are on or near the Proposed Project site. Additionally, the City of Long Beach does not include any properties subject to the Williamson Act (Department of Conservation 2024b). Therefore, implementation of the Proposed Project would not result in any impacts 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 Long Beach does not include any forest land or timberland. Ornamental trees exist on the Proposed Project site; however, Proposed Project activities would not result in any disturbance to the existing ornamental trees on-site. Therefore, implementation of the Proposed Project would not result in any impacts associated with forest land or timberland.

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

No Impact. The City of Long Beach does not include any forest land. Ornamental trees exist on the Proposed Project site; however, Proposed Project activities would not result in any disturbance to the existing ornamental trees on site. Additionally, implementation of the Proposed Project would not result in any change to land use on the Proposed Project site. Therefore, implementation of the Proposed Project would not result in any impacts 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 the conversion of Farmland, to nonagricultural use or the conversion of forest land to non-forest use?*

No Impact. The Proposed Project site and surrounding properties do not contain any Farmland Mapping and Monitoring Program Farmland, and the City of Long Beach does not include any forest land. Therefore, implementation of the Proposed Project would not result in any impact associated with conversion of Farmland to non-agricultural use or forest land to non-forest land.

4.3 AIR QUALITY

An Air Quality, Greenhouse Gas Emissions (GHG), and Energy Report was prepared for the Proposed Project and is included at Appendix A.

3.	AIR QUALITY. (Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	Violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation?	<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 substantial emissions (such as odors or dust) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.3.1 Environmental Setting

The Proposed Project site is located within the City of Long Beach in southwestern Los Angeles County. The Proposed Project site is located within the South Coast Air Basin (SCAB), and air quality regulation is administered by the 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. The combination of topography and inversion layers generally prevents dispersion of air pollutants in the SCAB.

The climate of the SCAB is influenced by the semi-permanent high-pressure zone of the eastern Pacific, which results in a mild climate tempered by cool sea breezes. Although the SCAB has a semiarid climate, the air near the surface is typically moist due to the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into the basin by offshore winds, the ocean effect is dominant. Periods of heavy fog are frequent, and low stratus clouds, often referred to as “high fog,” are a characteristic climate feature. Average temperatures for Long Beach Municipal Airport, which is the nearest monitoring station to the Proposed Project site (WRCC 2016), range from an average low of 45.3 degrees Fahrenheit (°F) in December to an average high of 83.9 °F in August. Rainfall averages approximately 12.01 inches a year, with almost all annual rainfall coming from the fringes of mid-latitude storms from late October to early April, with summers being almost completely dry.

Winds are an important parameter in characterizing the air quality environment of a project site because they determine the regional pattern of air pollution transport and control the rate of dispersion near a source. Daytime winds in the SCAB are usually light breezes from off the coast as air moves regionally onshore from the cool Pacific Ocean. These winds are usually the strongest in the dry summer months. Nighttime winds in the SCAB result mainly from the drainage of cool air off the mountains to the east, and they occur more often during the winter months and are usually lighter than the daytime winds. Between the periods of dominant airflow, periods of air stagnation may occur, both in the morning and evening hours. Whether such a period of stagnation occurs is one of the critical determinants of air quality conditions on any given day.

During the winter and fall months, surface high-pressure systems north of the SCAB, combined with other meteorological conditions, can result in very strong winds from the northeast called “Santa Ana winds.” These winds normally have durations of a few days before predominant meteorological conditions are reestablished. The highest wind speed typically occurs during the afternoon due to daytime thermal convection caused by surface heating. This convection brings about a downward transfer of momentum from stronger winds aloft. It is not uncommon to have sustained winds of 60 miles per hour with higher gusts during a Santa Ana wind.

Regulatory Setting

The Proposed Project site lies within the SCAB, 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 (O₃), 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 SCAB has been

designated by the federal Environmental Protection Agency (EPA) as a nonattainment area for O₃ and suspended particulates (PM_{2.5}). Currently, the SCAB is in attainment with the ambient air quality standards for CO, SO₂, PM₁₀ and NO₂. The SCAB is designated as partial nonattainment for lead, based on two source-specific monitors in Vernon and in the City of Industry that are both near battery recycling facilities.

The EPA has designated the SCAB as extreme nonattainment for the 8-hour average ozone standard. The 1997 8-hour ozone NAAQS was strengthened from 0.08 parts per million (ppm) to 0.075 ppm, effective May 27, 2008. The 1997 8-hour ozone standard was revoked in implementation rules for the 2008 ozone NAAQS, effective April 6, 2015. On October 1, 2015, the EPA again strengthened the 8-hour ozone NAAQS to 0.070 ppm, effective December 28, 2015, retaining the same form as the previous 1997 and 2008 standards. The 2008 ozone NAAQS is a primary focus of the 2016 Air Quality Management Plan (AQMP).

Additionally, the EPA has designated the SCAB 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. 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 nonattainment status was redesignated to attainment (maintenance) on July 26, 2013.

The 2012 AQMP provides measures to reduce PM_{2.5} emissions to within the federal standard by 2015. On January 25, 2013, the CARB approved the 2012 AQMP that was prepared per the federal Clean Air Act requirements to show attainment of the PM_{2.5} standard by the revised date of 2014. The 2012 AQMP builds upon the approaches taken in the 2007 AQMP utilized to reduce PM_{2.5} emissions in the SCAB. On December 14, 2012, the EPA revised the primary annual PM_{2.5} NAAQS from 15 micrograms per cubic meter (µg/m³) to 12 µg/m³. The 2016 AQMP includes implementation strategies to meet the revised PM_{2.5} standard.

The SCAB has been designated by CARB as a nonattainment area for O₃, NO₂, PM₁₀, PM_{2.5}, and lead. Currently, the SCAB 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 2007, 2012, and 2016 AQMPs provide measures to meet the state standards for O₃, NO₂, PM₁₀, and PM_{2.5}.

Table 1: Designations/Classifications for the Project Area

Pollutant	Averaging Time Standard	National Standards Attainment Date	California Standards
Ozone (O ₃)	1-Hour (1979) (0.12 ppm)	Nonattainment (Extreme) 2/26/2023	Nonattainment
	8-Hour (1997) (0.08 ppm)	Nonattainment (Extreme) 6/15/2024	
	8-Hour (2008) (0.075 ppm)	Nonattainment (Extreme) 7/20/2032	
	8-Hour (2015) (0.07 ppm)	Pending – Expect Nonattainment beyond 2032	Pending
Carbon Monoxide (CO)	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance) 6/11/2007 (attained)	Maintenance
Nitrogen Dioxide (NO ₂)	1-Hour (100 ppb)	Unclassifiable/Attainment Attained	Attainment
	Annual (0.053 ppm)	Attainment (Maintenance) 9/22/1998	
Sulfur Dioxide (SO ₂)	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 (2006) (35 µg/m ³)	Nonattainment 12/14/2014	Nonattainment
	Annual (2012) (12.0 µg/m ³)	Nonattainment 4/5/2015	
	Annual (1997) (15.0 µg/m ³)	Attainment (final determination pending) 4/5/2015 (attained 2013)	Attainment
Lead (Pb)	3-Months Rolling (0.15 µg/m ³)	Nonattainment (Partial) 12/31/2015	Nonattainment

Source: Vista, 2025.

4.3.2 Impact Analysis

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

Less Than Significant Impact. Implementation of the Proposed Project was determined to be consistent with the emissions budgeted for the Project site in the AQMP. Therefore, impacts would be less than significant. The following section discusses the Proposed Project’s consistency with the SCAQMD AQMP.

SCAQMD AQMP

The CEQA requires a discussion of any inconsistencies between a Proposed Project and applicable General Plans 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 or cause or contribute to new violations or delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.
- (2) Whether the project will exceed the assumptions in the AQMP, or increments based on the year of project buildout 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 report, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance discussed in Section 9.1 of Appendix A or local thresholds of significance discussed in Section 9.2 of Appendix A. The ongoing operation of the Proposed Project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance discussed in Section 9.1 of Appendix A. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, a less than significant long-term impact would occur, and no mitigation would be required.

Therefore, the Proposed Project would be consistent with 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 2022 AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the Proposed Project are based on the same forecasts as the AQMP. The 2022 AQMP was developed through use of planning forecasts provided in the Connect SoCal and 2019 FTIP. The Connect SoCal is a major planning document for the regional transportation and land use network within Southern California. The Connect SoCal is a long-range plan that is required by federal and state requirements placed on Southern California Association of Governments (SCAG) and is updated every 4 years. The 2019 Federal Transportation Improvement Program (FTIP) provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the

purpose of consistency with applicable regional plans under CEQA. For this Project, the City of Long Beach General Plan's Land Use Plan defines the assumptions that are represented in AQMP.

The Project site is currently designated as Institutional the General Plan and is zoned I. The Proposed Project consists of the development of a new gymnasium and aquatics center on the existing school campus. The Proposed Project is an allowed use within the current land use designation and zoning. As such, the Proposed Project is not anticipated to exceed the AQMP assumptions for the Project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the Proposed Project will not result in an inconsistency with the SCAQMD AQMP.

Therefore, a less than significant impact will occur in relation to implementation of the AQMP.

b) Would the project violate any air quality standard or result in a cumulatively considerable net increase in an existing or projected air quality violation?

Less Than Significant Impact. Implementation of the Proposed Project could have the potential to result in air quality impacts during project construction and operation. Construction phase air quality impacts would include emissions from construction exhaust and travel, demolition and earth moving activities, architectural coatings, and asphalt paving. Operational air quality impacts would include emissions from project generated vehicle traffic and from on-site sources. These emissions may have the potential to violate air quality standards or result in a cumulatively considerable net increase in an existing air quality violation. The following section discusses the Proposed Project's potential to violate an air quality standard or result in a cumulatively considerable air quality violation.

Construction Emissions

The construction activities for the Proposed Project are anticipated to include the demolition and reconstruction of structures and aquatic center on campus. The California Emissions Estimator Model® (CalEEMod model) has been utilized to calculate the construction-related regional emissions from the Proposed Project and the input parameters utilized in this analysis have been detailed in Section 8.1. The maximum daily construction emissions by season are shown below in Table 2 and the CalEEMod printouts are shown in Appendix A.

Table 2: Designations/Classifications for the Project Area

Season and Year of Construction	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
Daily Summer Max						
2025	3.39	31.7	31.4	0.07	6.71	3.94
2026	1.63	12.2	22.7	0.04	2.66	0.91
2027	1.57	11.6	22.0	0.04	2.60	0.87
2028	1.50	11.1	21.5	0.04	2.57	0.84
2029	59.9	0.88	2.56	<0.01	0.37	0.10
Daily Winter Max						
2025	3.30	31.2	30.0	0.07	4.21	2.25
2026	1.62	12.4	21.5	0.04	2.66	0.91
2027	1.56	11.8	20.8	0.04	2.60	0.87

Season and Year of Construction	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
2028	1.49	11.2	20.3	0.04	2.57	0.84
2029	59.9	6.51	10.6	0.01	0.44	0.27
Maximum Daily Construction Emissions	59.9	31.7	31.4	0.07	6.71	3.94
SCQAMD Regional Thresholds	75	100	550	150	150	55
SCAQMD Local Thresholds	--	96	1,071	--	9	6
Exceeds Thresholds?	No	No	No	No	No	No

Source: CalEEMod Version 2022.1.

Table 2 shows that none of the analyzed criteria pollutants would exceed either the regional or local emissions thresholds during construction of the Proposed Project. Therefore, a less than significant regional and local air quality impact would occur from construction of the Proposed Project.

Operational Emissions

The on-going operation of the Proposed Project would result in a long-term increase in air quality emissions. This increase would be due to emissions from on-site area sources, energy usage, and pool heater boiler emissions created from the on-going use of the Proposed Project. The operations-related regional criteria air quality impacts created by the Proposed Project have been analyzed through use of the CalEEMod model and the input parameters utilized in this analysis are detailed in Section 8.1 of Appendix A. The worst-case summer or winter VOC, NOx, CO, SO₂, PM10, and PM2.5 daily emissions created from the Proposed Project's long-term operations have been calculated and are summarized below in Table 3 and the CalEEMod emissions printouts are shown in Appendix A.

Table 3: Designations/Classifications for the Project Area

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
Area Sources ¹	9.88	0.12	13.8	<0.01	0.02	0.02
Energy Usage ²	0.10	1.77	1.49	0.01	0.13	0.13
Pool Heater Boiler ³	0.09	<0.01	1.54	0.01	0.12	0.12
Total Emissions	10.1	1.89	16.8	0.02	0.27	0.27
SCQAMD Regional Operational Thresholds	55	55	550	150	150	55
SCAQMD Local Thresholds	--	96	1,071	--	3	1
Exceeds Thresholds?	No	No	No	No	No	No

Notes:

¹ Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

² Energy usage consists of emissions from natural gas usage (does not include the pool heater boiler).

³ Pool heater boiler based on a 2.0 MBTU per hour boiler operating 8 hours per day.

Source: Calculated from CalEEMod Version 2022.1.

The data provided in Table 3 shows that none of the analyzed criteria pollutants would exceed either the regional or local emissions thresholds during operation of the Proposed Project. Therefore, less than significant regional and local air quality impacts would occur from operation of the Proposed Project.

Friant Ranch Case

The operations-related regional criteria air quality impacts In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as "Friant Ranch"), the California Supreme Court held that when an EIR

concluded that when a project would have significant impacts to air quality impacts, an EIR should “make a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.” In order to determine compliance with this Case, the Court developed a multi-part test that includes the following:

1. The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

This Air Quality, GHG Emissions, and Energy Report details the specific health risks created from each criteria pollutant in Section 4.1 and specifically in Table C of Appendix A. In addition, the specific health risks created from diesel particulate matter are detailed above in Section 2.2 of Appendix A. As such, this analysis meets the Part 1 requirements of the Friant Ranch Case.

2. The analysis shall identify the magnitude of the health risks created from the Project. The Ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states “The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project’s impact on the days of nonattainment per year.”

The Friant Ranch Case found that an EIR’s air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (<https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf>) (Brief), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the state, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. The SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the Proposed Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on “speculation” (i.e., without knowing the future tenant(s). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk, it does not necessarily mean anyone will contract cancer as a result of the Project. The Brief also cites the author of the CARB methodology, which reported that a PM2.5 methodology is not suited for small projects and may yield unreliable results. Similarly, SCAQMD staff do not currently know of a way to accurately quantify ozone-related health impacts caused by NOx or Volatile Organic Compounds (VOC) emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

On the other hand, for extremely large regional projects (unlike the Proposed Project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NOx and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. As shown above in Table 2, project-related construction activities would generate a maximum of 59.9 pounds per day of VOC and 31.7 pounds per day of NOx and as shown above in Table

3, operation of the Proposed Project would generate 10.1 pounds per day of VOC and 1.89 pounds per day NOx. The Proposed Project would not generate anywhere near these levels of 6,620 pounds per day of NOx or 89,190 pounds per day of VOC emissions. Therefore, the Proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

Notwithstanding, this analysis does evaluate the Proposed Project's localized impact to air quality for emissions of CO, NOx, PM10, and PM2.5 by comparing the Proposed Project's on-site emissions to the SCAQMD's applicable Significance Thresholds (LST) thresholds. As evaluated in this analysis, the Proposed Project would not result in emissions that exceeded the SCAQMD's LSTs. Therefore, the Proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NOx, PM10, and PM2.5.

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

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

Less Than Significant Impact. The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the Proposed Project, which may expose sensitive receptors to substantial concentrations have been calculated for both construction and operations, which are discussed separately below. The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions.

The nearest sensitive receptors to the Project site are patrons and staff at a hotel that is located as near as 10 feet from the area to be disturbed on the north side of the Project site. There are also multi-family homes located as near as 60 feet to the north of the area to be disturbed. In addition, there is a church located on the east side of Martin Luther King Jr. Avenue that is as near as 90 feet east of the area to be disturbed, there are multi-family homes located on the south side of 15th Street that are as near as 65 feet south of the area to be disturbed, and there are multi-family homes located on the west side of Atlantic Avenue that are as near as 140 feet west of the area to be disturbed.

Construction-Related Sensitive Receptor Impacts

Construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from on-site construction equipment, which are described below.

Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the Proposed Project have been analyzed and found that the construction of the Proposed Project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance; therefore, construction of the Proposed Project would create a less than significant construction-related impact to local air quality and no mitigation would be required.

Toxic Air Contaminants Impacts from Construction

Construction activities associated with the Proposed Project are anticipated to generate toxic air contaminant (TAC) emissions from diesel particulate matter (DPM) associated with the operation of trucks and off-road equipment and from possible asbestos in the structures to be demolished.

Diesel Particulate Matter Emissions

The greatest potential for TAC emissions would be related to DPM emissions associated with heavy equipment operations during construction of the Proposed Project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of “individual cancer risk”. “Individual Cancer Risk” is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. It should be noted that the most current cancer risk assessment methodology recommends analyzing a 30-year exposure period for the nearby sensitive receptors.

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., 30 or 70 years) substantial source of TAC 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 the idling of equipment to no more than 5 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, Tier 1 or 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 the years 2014 and 2023. Therefore, due to the limitations in off-road construction equipment DPM emissions from implementation of Section 2448, a less than significant short-term TAC impacts would occur during construction of the Proposed Project from DPM emissions.

Asbestos Emissions

It is possible that the existing on-site structures to be demolished contain asbestos. According to SCAQMD Rule 1403 requirements, prior to the start of demolition activities, the existing structures located on-site shall be thoroughly surveyed for the presence of asbestos by a person that is certified by California Division of Occupational Safety and Health (Cal/OSHA) for asbestos surveys. Rule 1403 requires that the SCAQMD be notified a minimum of 10 days before any demolition activities begin with specific details of all asbestos to be removed, start and completion dates of demolition, work practices and engineering controls to be used to contain the asbestos emissions, estimates on the amount of asbestos to be removed, the name of the waste disposal site where the asbestos will be taken, and names and addresses of all contractors and transporters that will be involved in the asbestos removal process. Therefore, through adherence to the asbestos removal requirements, detailed in SCAQMD Rule 1403, a less than significant asbestos impact would occur during construction of the Proposed Project.

As such, construction of the Proposed Project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the Proposed Project may expose sensitive receptors to substantial pollutant concentrations from the potential local air quality impacts from on-site operations and from possible TAC impacts.

Local Criteria Pollutant Impacts from On-site Operations

The local air quality impacts from the operation of the Proposed Project would occur from on-site sources such as architectural coatings, landscaping equipment, and on-site usage of natural gas appliances. The analysis found that the operation of the Proposed Project would not exceed the local NO_x, CO, PM₁₀ and PM_{2.5} thresholds of significance; therefore, the on-going operations of the Proposed Project would result in a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required.

Operations-Related TAC Impacts

PM)from diesel exhaust is the predominant TAC in most areas and according to The California Almanac of Emissions and Air Quality 2013 Edition, prepared by CARB, about 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program. Due to the nominal number of diesel truck trips that are anticipated to be generated by the Proposed Project, a less than significant TAC impact would occur during the on-going operations of the Proposed Project and no mitigation would be required.

Therefore, the operation of the Proposed Project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

d) Would the project result in substantial emissions (such as odors or dust) affecting a substantial number of people?

Less than Significant Impact. The Proposed Project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in an ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population.

The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and emissions from diesel equipment. Standard construction requirements that limit the time of day when construction may occur as well as SCAQMD Rule 1108 that limits VOC content in asphalt and Rule 1113 that limits the VOC content in paints and solvents would minimize odor impacts from construction. As such, the objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the Project site's boundaries. Through compliance with the applicable regulations that reduce odors and due to the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

Operations-Related Odor Impacts

The Proposed Project would consist of the demolition and reconstruction of structures and aquatic center on campus. Potential sources that may emit odors during the on-going operations of the Proposed Project would primarily occur from the trash storage areas and use and storage of pool chemicals. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. As detailed in the Project design, all of pool chemicals would be stored in a structure, specifically designed for the storage of pool chemicals and the pool chemicals will primarily be applied through mechanical systems that limit the chemical exposure to air.

Due to the distance of the nearest receptors from the Project site and through compliance with SCAQMD's Rule 402, City trash storage regulations and pool chemical regulations, a less than significant impact related to odors would occur during the on-going operations of the Proposed Project.

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 type="checkbox"/>	<input checked="" 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"/>

4.	BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 type="checkbox"/>	<input checked="" type="checkbox"/>
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.4.1 Environmental Setting

Biological resources include habitats 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. The Proposed Project site is completely developed with school facilities and is located in an urbanized area in the City. The Project site does not contain any watercourse, greenbelt, or open space for wildlife movement and no native vegetation is present; as such, candidate and special status species are not expected to occur. Additionally, no riparian habitat or other sensitive natural community or wetlands exist on the Project site. Implementation of the Proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species, or native wildlife nursery sites.

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?

No Impact. The Project site is located in an urbanized area and is completely developed with school facilities. Landscaping on the Project site is limited to ornamental and street trees, and does not include any native vegetation; therefore, candidate and special status species are not expected to occur. However, nesting birds that are protected under the Migratory Bird Treaty Act (MBTA) may have the potential to occur within the Project site. Construction the Proposed Project would comply with the MBTA, which requires that nesting bird surveys be conducted prior to the start of vegetation clearance activities should they occur during nesting season: February 15 through September 15. In compliance with the MBTA requirements, should vegetation clearance occur during the nesting bird season, a qualified

biologist would conduct a nest survey within 1 week of the start of these activities to ensure no active nests were lost. If an active nest is located, then the nest should be flagged and construction within an appropriate distance of the nest should be postponed until the biologist has confirmed that the nest is no longer active. Compliance with the MBTA would ensure no impact on protected species.

(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. The Project site is located in an urbanized area and is completely developed with school facilities. The Project site is not located within an area designated by the County of Los Angeles as being a Significant Ecological Area. The Project site does not contain any riparian habitat, wetlands, or other natural community (USFWS 2024a). Therefore, no impacts to sensitive habitats would occur with implementation of the Proposed Project.

(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. The Project Site is not located on or in the vicinity of a federally protected wetland (USFWS 2024b). The nearest body of water is the Los Angeles River, located approximately 1 mile east of the Project site. No impacts on wetlands 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?

No Impact. Implementation of the Proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species, or native wildlife nurseries. The Project site is currently urbanized and developed. The Project site does not contain any watercourse, greenbelt, or open space for wildlife movement. The Proposed Project may require removal of landscape trees from the Project site, which could potentially impact nesting bird species. However, as discussed above, the Proposed Project would comply with the MBTA during construction. Compliance with the MBTA would have no impact regarding wildlife corridors 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. The Proposed Project would not conflict with any local policies or ordinances protecting biological resources. The City of Long Beach Department of Public Works regulates the installation of trees along sidewalks and removal of trees and other vegetation in public areas. The Proposed Project may result in the removal of some existing on-site trees. The preservation of these trees is dependent on the location of their roots, and an arborist can be hired to assist with the process of preservation. None of these plant species are protected by local policies or ordinances protecting biological resources. The Proposed Project would be landscaped in accordance with the tree planting specifications of the City. As such, no impact on local policies protecting biological resources 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?*

No Impact. The Project site is not within the area of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Proposed Project would not conflict with any approved plans. No impact would occur.

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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.5.1 Environmental Setting

Cultural resources include archaeological and paleontological artifacts such as human remains, geologic features, historical buildings and structures, and Native American remains and artifacts. CEQA defines cultural resources as:

- Resources listed in, or determined to be eligible by, the State Historical Resources Commission for listing in the California Register of Historical Resources (Public Resources Code [PRC] 5024.0, Title 14 CCR, Section 4850 et seq.)
- Resources included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified in a historical resource survey meeting the requirements of section 5024.1(g) of the PRC will be presumed to be historically or culturally significant. Public Agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant; and
- Any object, building structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (CRHR) (PRC 5024.1, Title 14 CCR, Section 4852).

Impacts to cultural resources include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

The Secretary of the Interior's Standards for Rehabilitation (Standards) are codified at 36 Code of Federal Regulations (CFR) Section 67.7. In most circumstances, the Standards are relevant in assessing whether a substantial adverse change under CEQA would occur. Section 15064.5b(3) of the CEQA Guidelines states in part that "...a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historic resource," and therefore may be considered categorically exempt.

The Proposed Project was reviewed for its historical significance and for compliance with the Secretary of the Interior's Standards by PCR Services in 2017 in the *District-Wide Historical Resources Assessment for Long Beach Unified School District*.

As part of the District-Wide Cultural Resources Assessment, PCR Services recommended that Polytechnic High School is eligible for the National Register of Historic Places (NRHP) under Criterion C and the CRHR Criterion 3 (LBUSD 2017a); therefore, a Phase II Intensive Historic Assessment Report was prepared by Kleinfelder for the school in June 2024 (Appendix B).

Chambers Group requested a records search from the California Historical Resources Information System (CHRIS) South-Central Coastal Information Center (SCCIC) at California State University, Fullerton on August 17, 2023. A half-mile study area was requested to provide additional context to the Project site and surrounding area, and more information on which to base this review. Resources consulted during the records search conducted by the SCCIC included the NRHP, California Historical Landmarks (CHL), California Points of Historical Interest (CPHI), Caltrans Historic Highway Bridge Inventory, the CRHR Inventory, local registries of historic properties, and a review of available Sanborn Fire Insurance maps as well as historic photographs, maps, and aerial imagery. The task also included a search for potential prehistoric and/or historic burials (human remains) evident in previous site records and/or historical maps. In addition, Chambers Group submitted a request to the Native American Heritage Commission (NAHC) for a review of the Sacred Land Files (SLF) for the Project site and surrounding vicinity.

Additionally, on August 17, 2023, Chambers Group requested a paleontological records search from the Natural History Museum of Los Angeles County (NHMLA). This information was requested with the intent to provide further context related to the paleontological setting of the area based on known fossil locations identified within the Project site and surrounding study area. The paleontological records provide insight into which associated geological formations are more likely to contain fossils, as well as the associated depths and placement of the documented fossil localities relative to the geological formations mapped in the area.

In addition to the records search review, Chambers Group archaeologists completed background research to determine if any additional historic properties, landmarks, bridges, or other potentially significant or listed properties are located within the Project site or half-mile study area. This background research included, but was not limited to, the NRHP, California State Historic Property Data Files, CHL, CPHI, Office of Historic Preservation Archaeological Determinations of Eligibility, historic aerial imagery accessed via NETR Online, Historic U.S. Geological Survey topographic maps, Built Environment Resource Directory

(BERD), and Caltrans State and Local Bridge Surveys. Additionally, Chambers Group archaeologists reviewed the City of Long Beach Historical Landmarks inventory, local historical newspaper clippings via Newspapers.com, ProQuest Historical Newspapers.com, and the California Digital Newspaper Collection.

A Cultural Resources Survey Results Letter Report for the Proposed Project is included as Appendix D.

4.5.2 Impact Analysis

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

Less Than Significant Impact. According to the CEQA Guidelines regarding historical resources, a substantial adverse change in the significance of a historical resource amounts to a significant impact on the environment (Guidelines § 15064.5(b)). Accordingly, a substantial adverse change means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings resulting in the significance of the resource being materially impaired. The significance of a historical resource is materially impaired when a project:

- (A) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
- (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Polytechnic High School was determined to be eligible for listing in the NRHP and CRHR under Criterion 3 (LBUSD 2017a).

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 significance of an historical resource is materially impaired when a project:

- A. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
- B. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a County Register of historical resources pursuant to section 5020.1(k) of the

Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

- C. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Kleinfelder's principal architectural historian reviewed available Project plans and completed a site visit in January 2024 to assess the potential impacts of the Project on Long Beach Polytechnic High School. The following are the results of the Phase II Assessment.

Construction of CTE Building

The construction of CTE Building will not result in the modification or destruction of the character defining features of Long Beach Polytechnic High School. The Secretary of the Interior's Standards for the Treatment of Historic Properties stipulates that new construction needs to be built in a manner that protects the integrity of the historic building(s) and the property's setting. It further stipulates that the massing, size, scale, and architectural features of new construction on the site of a historic building must be compatible with those of the historic building. When visible and in close proximity to historic buildings, the new construction must be subordinate to these buildings. New construction should also be distinct from the old and must not attempt to replicate historic buildings elsewhere on site to avoid creating a false sense of historic development. The new construction will be on the eastern portion of the campus and will not disrupt the relationship between the contributing buildings with each other or the landscaping of the courtyard the buildings share. The historic core of the campus will remain intact, preserving essential elements of the setting. The massing, size and scale of the new buildings, while larger, appear compatible with the historic portion of the campus, particularly since they will be localized outside of the historic core of the campus. The buildings are also designed to be distinct enough to not create a false sense of history while also complimenting the historic elements of the campus.

This component of the Project will not result in a significant impact and a substantial adverse change to the historic integrity of Long Beach Polytechnic High School.

HVAC Modernization

Modernization upgrades include providing HVAC, utilities upgrades, interior and exterior upgrades, technology upgrades, campus wide fire alarm upgrades, security cameras, ADA upgrades to parking and path of travel, flat work, and seismic upgrades as needed. Of those buildings that will be modified during this phase of the Project, 100, 300, 400, and 600 are contributing elements to the historical resource.

Based on available Project plans, the modernization efforts will not result in the modification or destruction of character defining features of Long Beach Polytechnic High School in such a way that will diminish the resource's ability to convey its historical significance. Modifications to the landscaping appear to retain the character defining features and will leave the landscaping fundamentally similar to its historic configuration. None of the interior modifications appear to compromise interior character defining features including Works Progress Administration (WPA) artwork. HVAC modifications generally retain the integrity of the character defining features and will not result in significant modification or loss of character defining features.

This component of the Project will not result in a significant impact and a substantial adverse change to the historic integrity of Long Beach Polytechnic High School.

Poly Transformation

The demolition of buildings 150, 550, 700, 750, 800, 850, 950, and the Gymnasium will not result in the modification or destruction of character-defining features of Long Beach Polytechnic High School. None of the buildings being demolished are contributing elements to the historical significance of the resource. None of the character defining features of the resource, including the contributing landscaping, will be fundamentally altered in such a way that the resource will no longer be able to convey its historical significance.

The construction of the new buildings on campus not result in the modification or destruction of character defining features of Long Beach Polytechnic High School. The Secretary of the Interior's Standards for the Treatment of Historic Properties stipulates that new construction needs to be built in a manner that protects the integrity of the historic building(s) and the property's setting. It further stipulates that the massing, size, scale, and architectural features of new construction on the site of a historic building must be compatible with those of the historic building. When visible and in close proximity to historic buildings, the new construction must be subordinate to these buildings. New construction should also be distinct from the old and must not attempt to replicate historic buildings elsewhere on site to avoid creating a false sense of historic development. Based on the available Project plans, The new construction will be on the eastern portion of the campus and will not disrupt the relationship between the contributing buildings (100, 200, 300, 400, 600, and the Auditorium) with each other or the landscaping of the courtyard the buildings share. The historic core of the campus will remain intact, preserving essential elements of the setting. The massing, size and scale of the new buildings, while larger, appear compatible with the historic portion of the campus, particularly since they will be localized outside of the historic core of the campus. The buildings are also designed to be distinct enough to not create a false sense of history while also complimenting the historic elements of the campus.

This component of the Project will not result in a significant impact and a substantial adverse change to the historic integrity of Long Beach Polytechnic High School.

Based on a review of available Project plans and the scope of the Proposed Project, the Project will not result in the significant modification or destruction of the character-defining features of Long Beach Polytechnic High School. Therefore, based on the current Project design, the Project will not result in a substantial adverse change that would impair the historic significance of Long Beach Polytechnic High School. This impact is considered 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. The results of the records search request were received on September 12, 2023. The CHRIS records search indicates that 17 previous cultural resource investigations have been recorded within a half-mile radius of the Project site. Of these, one investigation includes the Proposed Project site (LA-12808). The CHRIS records search also identified 43 previously recorded cultural resources located within a half-mile radius of the Proposed Project site. None of these resources were mapped within the Proposed Project site.

Based on background research and SCCIC records search results, none of these previously recorded cultural resources are documented within the Proposed Project site.

Chambers Group conducted a field Survey on November 22, 2023. The Survey was conducted by Cultural Resource Specialist Kellie Kandybowicz. The Survey resulted in no new cultural resources observed or recorded within the Proposed Project site.

Although background research and Survey have been completed with no new resources identified, as noted above, the soil surface visibility was almost entirely impeded by the existing development. Based on the limited ground surface visibility, the historic nature of the Poly High School structures, and the existence of previously recorded prehistoric and historic resources within the half-mile study area around the Proposed Project site, new resources still have the potential to be discovered in or near the Project site. Due to the demonstrated sensitivity of the area, we recommend the following mitigation measures be implemented:

MM CUL-1: LBUSD shall retain the services of a qualified cultural resources consultant and require that all initial ground disturbing work be monitored by a cultural resources monitor. This includes all initial construction activities that will potentially expose or encounter intact subsurface sediments underlying the Project site. The cultural resources consultant shall provide a Qualified Archaeologist, meeting the Secretary of the Interior Standards (U.S. Department of the Interior, 2008), and require that all initial ground-disturbing work be monitored by cultural resources monitor (monitor) proficient in artifact and feature identification in monitoring contexts. The Consultant (Qualified Archaeologist and/or monitor) shall be present at the Project construction phase kickoff meeting.

MM CUL-2 Prior to commencing construction activities and thus prior to any ground disturbance in the Proposed Project site, the Consultant shall conduct initial Worker Environmental Awareness Program (WEAP) training to all construction personnel, including supervisors, present at the outset of the Project construction work phase, for which the lead contractor and all subcontractors shall make their personnel available. This WEAP training will educate construction personnel on how to work with monitors to identify and minimize impacts to cultural resources and maintain environmental compliance and be performed periodically for new personnel coming on to the Project as needed.

MM CUL-3 The contractor shall provide the Consultant with a schedule of initial potential ground disturbing activities. A minimum of 48-hours' notice will be provided to the archaeological consultant of commencement of any initial ground disturbing activities that have potential to expose or encounter intact subsurface sediments underlying the Project site. These activities may include grading, trenching, and mass excavation.

As detailed in the schedule provided, a monitor shall be present on-site at the commencement of ground-disturbing activities related to the Project. The Consultant shall observe initial ground disturbing activities and, as they proceed, adjust the monitoring approach as needed to provide adequate observation and oversight. All monitors will have stop-work authority to allow for recordation and evaluation of finds during construction. The monitor will maintain a daily record of observations as an ongoing reference resource and provide a resource for final reporting upon completion of the Project.

The Consultant, the lead contractor, and subcontractors shall maintain a line of communication regarding schedule and activity such that the Consultant is aware of all ground-disturbing activities in advance, in order to provide appropriate oversight.

MM-CUL-4 If cultural resources are discovered, construction shall be halted within 50 feet of any cultural artifacts or features and within 100 feet of any potential human remains and shall not resume until the Qualified Archaeologist can determine the significance of the find and/or the find has been fully investigated, appropriately documented, and cleared.

MM CUL-5 At the completion of all ground disturbing activities, the Consultant shall prepare a Cultural Resources Monitoring Report summarizing all monitoring efforts and observations as performed, and any and all prehistoric or historic archaeological finds, as well as providing follow-up reports of any finds to the SCCIC, as required.

Implementation of MM CUL -1 through MM CUL-5 would reduce impacts to archaeological resources to a level less than significant.

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

Less Than Significant Impact. Historic and modern maps were reviewed, and no known cemeteries or areas in which humans remains are located were found within the Proposed Project area. The Proposed Project site is located in an urbanized area, previously disturbed by past activities. In the event that human remains are discovered during ground-disturbing activities, then the Proposed Project would be subject to California Health and Safety Code 7050.5, CEQA Section 15064.5, and California Public Resources Code Section 5097.98. If human remains are found during ground disturbing activities, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Los Angeles County Medical Examiner-Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the Los Angeles County Medical Examiner-Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the Medical Examiner-Coroner shall notify the NAHC, which shall notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with existing laws would reduce the impact to less than significant.

4.6 ENERGY

This section describes the potential energy resources impacts from implementation of the Proposed Project.

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"/>

4.6.1 Environmental Setting

The Proposed Project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity and natural gas, and petroleum-based fuel supplies and distribution systems. A general definition of each of these energy resources is provided below.

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands. In 2022, Los Angeles County consumed 68,485 gigawatt-hours per year of electricity (Vista 2025).

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an issue. Natural gas satisfies almost one-third of the state's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet. In 2022, Los Angeles County consumed 2,820 million Therms of natural gas (Vista 2025).

Petroleum-based fuels currently account for a majority of the California's transportation energy sources and primarily consist of diesel and gasoline types of fuels. However, the state has been working on developing strategies to reduce petroleum use. Over the last decade California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, petroleum-based fuel consumption in California has declined.

In 2022, 3,070 million gallons of gasoline and 295 million gallons of diesel were sold in Los Angeles County (Vista 2025).

4.6.2 Impact Analysis

- 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 following section calculates the potential energy consumption associated with the construction and operations of the Proposed Project and provides a determination if any energy utilized by the Proposed Project is wasteful, inefficient, or unnecessary consumption of energy resources.

Construction Energy

The Proposed Project would consume energy resources during construction in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project Site, construction workers travel to and from the Project Site, as well as delivery and haul truck trips (e.g. hauling of demolition material to off-site reuse and disposal facilities);
2. Electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction the Proposed Project would consume electricity from the demolition and reconstruction of structures and aquatic center on campus. Electricity would be supplied to the Project site by SCE and would be obtained from the existing electrical lines in the vicinity of the Project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during Project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the Proposed Project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during Project construction would not be wasteful, inefficient, or unnecessary.

Since SCE already provides power to the Project site, it is anticipated that only nominal improvements would be required to SCE distribution lines and equipment with development of the Proposed Project. Compliance with the City's guidelines and requirements would ensure that the Proposed Project fulfills its

responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the Project. Construction of the Proposed Project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Natural Gas

Construction of the Proposed Project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities, thus there would be no demand generated by construction. Since Long Beach Gas & Oil already provides natural gas to the Project site, construction-related activities would be limited to installation of new natural gas connections within the Project site. Development of the Proposed Project would not require extensive infrastructure improvements to serve the Project site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, the Proposed Project would notify and coordinate with Long Beach Gas & Oil to identify the locations and depth of all existing gas lines and avoid disruption of gas service; therefore, construction-related impacts to natural gas supply and infrastructure would be less than significant.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the Project site and on-road automobiles transporting workers to and from the Project site and on-road trucks transporting equipment and supplies to the Project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions shown above in Section 8.2 of Appendix A, which found that construction of the Proposed Project would consume 76,652 gallons of gasoline and 191,781 gallons of diesel fuel. This equates to 0.0025 percent of the gasoline and 0.065 percent of the diesel used annually in Los Angeles County. As such, the construction-related petroleum use would be nominal, when compared to current county-wide petroleum usage rates.

Construction activities associated with the Proposed Project would be required to adhere to all state and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. Development of the Proposed Project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the Proposed Project. Since it is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete, it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business.

Operational Energy

The on-going operation of the Proposed Project would require the use of energy resources for multiple purposes including, but not limited to pool heating, HVAC, refrigeration, lighting, appliances, and

electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment and vehicle trips.

Operations-Related Electricity

Operation of the Proposed Project would result in consumption of electricity at the Project site. As detailed in Section 8.2 of Appendix A, the Proposed Project would consume 1,965,272 kilowatt-hours per year of electricity. This equates to 0.0029 percent of the electricity consumed annually in Los Angeles County. As such, the operations-related electricity use would be nominal, when compared to current electricity usage rates in the County.

It should be noted that, the Proposed Project would comply with all federal, state, and City requirements related to the consumption of electricity, that includes CCR Title 24, Part 6 Building Energy Efficiency Standards and CCR Title 24, Part 11: California Green Building Standards. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the new structures, including enhanced insulation, use of energy efficient lighting and appliances, water and space heating systems, as well as requiring a variety of other energy-efficiency measures to be incorporated into the Proposed Project; therefore, it is anticipated the Proposed Project will be designed and built to minimize electricity use and that existing and planned electricity capacity and electricity supplies would be sufficient to support the Proposed Project's electricity demand. Thus, the Proposed Project would not result in the wasteful or inefficient use of electricity and no mitigation measures would be required.

Operations-Related Natural Gas

Operation of the Proposed Project would result in increased consumption of natural gas at the Project site. As detailed above in Section 8.3 of Appendix A, the Proposed Project would consume 124,354 Therms per year of natural gas. This equates to 0.0044 percent of the natural gas consumed annually in Los Angeles County. As such, the operations-related natural gas use would be nominal, when compared to current natural gas usage rates in the County.

It should be noted that the Proposed Project would comply with all federal, state, and City requirements related to the consumption of natural gas, that includes CCR Title 24, Part 6 Building Energy Efficiency Standards and CCR Title 24, Part 11: California Green Building Standards. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the Proposed Project, including enhanced insulation as well as use of efficient natural gas appliances and HVAC units; therefore, it is anticipated the Proposed Project will be designed and built to minimize natural gas use and that existing and planned natural gas capacity and natural gas supplies would be sufficient to support the Proposed Project's natural gas demand. Thus, impacts with regard to natural gas supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

In conclusion, the Proposed Project would comply with regulatory compliance measures outlined by the State and City related to air quality (see section 4.0 of Appendix A), energy (see section 5.0 of Appendix A), and GHGs (see section 6.0 of Appendix A). Additionally, the Proposed Project would be constructed in accordance with all applicable City Building and Fire Codes; therefore, the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. Impacts would be less than significant.

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 not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The City has adopted the following plans that address energy efficiency and conservation: (1) Municipal Code Section 21.45.400 (Green building standards for public and private development), 2009; (2) Sustainable City Action Plan (SCAP), February 2, 2010; and (3) Long Beach Climate Action Plan (LB CAP), August 2022.

The Proposed Project will be required to be designed to meet the state's most current Title 24 Part 6 and Part 11 building energy efficiency standards. The Long Beach climate action plan (CAP) provides City-wide sustainability goals to conserve electricity and natural gas. The Long Beach CAP also provides City-wide energy conservation measures. As such, the Proposed Project would be designed to meet all applicable state building energy efficiency standards as well as to meet the City's energy efficiency standards; therefore, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

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 checked="" type="checkbox"/>	<input type="checkbox"/>
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7.	GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 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 masses 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 only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards. The Seismic Hazards Mapping Act, passed in 1990, addresses non-surface fault rupture earthquake hazards, including liquefaction and seismically induced landslides.

4.7.2 Impact Analysis

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 in the seismically active region of Southern California and has the potential to be subjected to ground shaking hazards associated with earthquake events on active faults throughout the region; however, the Project Site is not located within an Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo Earthquake Fault Zone is the Newport-Inglewood Fault Zone, located approximately 2 miles northeast of the Project Site (CGS 2023). The Proposed Project would be required to comply with all applicable building codes and other applicable federal, state, and local codes related to seismic criteria. The Proposed Project would not directly result in risk of loss, injury, or death involving the rupture of a known earthquake fault. No impact would occur.

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. As discussed in Section VI(a)(i) above, the Newport-Inglewood Fault is located approximately 2 miles northeast of the Project Site. Due to the proximity of this fault, seismic ground shaking effects at the Project site may occur during a strong earthquake along the fault. The Proposed Project construction activities would adhere to the latest version of the California Building Code, the Uniform Building Code, and all other applicable federal, state and local codes relative to seismic criteria. The Proposed Project would not directly or indirectly cause potential substantial adverse effects involving strong seismic ground shaking. A less than significant impact would occur.

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 can occur when soils lose cohesion and their ability to support structures when subjected to strong ground motion. The northeast corner of the Project site is located in an area identified as a generalized liquefaction susceptibility zone on the State of California Seismic Hazard Zones Map and the potential for liquefaction is considered moderate to high. As discussed in Section VI(a)(ii) above, the Proposed Project would be designed and constructed in accordance with the recommendations from the final geotechnical investigation and the latest version of the California Building Code, the Uniform Building Code, and all other applicable federal, state and local codes. Impacts would 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, and the relatively flat site does not facilitate landslide potential; therefore, implementation of the Proposed Project would not result in an impact associated with seismically induced landslides. Any deviations in elevations would be stabilized by retaining walls and would reduce any potential for land movement within the Project site. This impact is less than significant.

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

Less than Significant Impact. Construction activities associated with the Proposed Project would expose soil for a limited time, allowing for possible erosion. The Proposed Project would be required to implement Best Management Practices (BMP) as part of an erosion control plan and a Storm Water Pollution Prevention Plan (SWPPP) for construction activities. Conformance with applicable erosion control regulations and the required construction BMP during construction activities would reduce impacts to a level of 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. The Project site and surrounding areas are relatively flat with no dramatic sloping; however, the northeastern corner of the Proposed Project site is located in a liquefaction hazard zone. Geotechnical measures will be incorporated into the Project design as required by the Seismic Hazards Mapping Act and in accordance with the updated California Building Code. Compliance with the existing regulations would ensure that impacts from unstable soils 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 Proposed Project site has been previously graded and developed. The United States Department of Agriculture (USDA) classifies the landform underlying the Proposed Project site as urban land with areas classified as loam to fine sandy loam (USDA NRCS 2024). The native materials are capped locally by artificial fill where previously existing natural grades have been modified as part of urbanization. Due to a lack of clay content in soils underlying the Proposed Project site and previous grading and development on site, it is unlikely that the Proposed Project site contains expansive soils. Therefore, implementation of the Proposed Project would result in a less than significant impact associated with expansive soils.

- 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 Proposed Project site relies on existing sewer infrastructure to accommodate wastewater disposal requirements; therefore, implementation of the Proposed Project would not result in an impact associated with soils incapable of supporting septic systems.

- f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant Impact with Mitigation Incorporated. On August 20, 2023, Chambers Group received the results of the paleontological records search from the NHMLA. The results show that no fossil localities lie directly within the Project site, however, there are fossil localities documented nearby from the same sedimentary deposit that underlays the Project site, either at the surface or at depth (Chambers 2023). The records search covered only the records of the NHMLA. Based on the available information, the paleontological sensitivity could be considered low to moderate in the overall area considering the fossil localities recorded within the study area surrounding the Project site and the existence of similar fossil-bearing geologic units mapped underlying the Project site. Although considered low to moderate potential, mitigation measures MM CUL-1 through MM CUL-5 are included to reduce potential impacts. These mitigation measures are intended to reduce impacts associated with unanticipated finds and resources recovery; therefore, with implementation of MM CUL-1 through MM CUL-5, impacts to paleontological resources would be reduced to less than significant.

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. GHG emission modeling was performed through use of the CalEEMod Version 2016.3.2. See above under Section 4.3.1. Also, see 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. The Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The Proposed Project is anticipated to generate GHG emissions from area sources, energy usage, waste disposal, water usage, pool heater boiler, and construction equipment. Since the Proposed Project consists of the demolition and reconstruction of structures and aquatic center on campus that would not result in an increase in student enrollment nor would it result in new use on campus, the Proposed Project is not anticipated to generate any new vehicle trips to the campus and no new mobile source emissions would be created from the Proposed Project.

The Long Beach CAP (City of Long Beach 2022) is the applicable plan for the project area for reducing GHG emissions. According to the Long Beach CAP, if a project can show that the applicable GHG reduction measures in the Long Beach CAP would be implemented as part of the Proposed Project, the project would be considered consistent with the Long Beach CAP and would result in a less than significant impact. As such, this analysis has quantified GHG emission for informational purposes only and determination of significance will be based on consistency with the applicable measures in the Long Beach CAP. The Proposed Project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed in Section 8.1 of Appendix A. A summary of the results is shown below in Table 4 and the CalEEMod model run is provided in Appendix A.

Table 4: Project Related Greenhouse Gas Annual Emissions

Category	Greenhouse Gas Emissions (Metric Tons per Year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Area Sources ¹	6.43	<0.01	<0.01	6.45
Energy Usage ²	582	0.06	<0.01	585
Water and Wastewater ³	14.3	0.37	0.01	26.1
Solid Waste ⁴	43.0	4.30	0.00	150
Refrigeration ⁵	--	--	--	0.21
Pool Heater Boiler ⁶	312	0.01	<0.01	313
Construction ⁷	84.8	<0.01	<0.01	86.2
Total GHG Emissions	1,042	4.74	0.01	1,167

Notes:

¹ Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.

² Energy usage consists of GHG emissions from electricity and natural gas usage.

³ Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

⁴ Waste includes the CO₂ and CH₄ emissions created from the solid waste placed in landfills.

⁵ Refrigeration includes leakage of refrigerants used in HVAC units and vending machines.

⁶ Pool heater boiler based on a 2.0 MBTU per hour boiler operating 8 hours per day

⁷ Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.

Source: CalEEMod Version 2022.1.

The data provided in Table 4 shows that the Proposed Project would create 1,167 MTCO₂e per year. As detailed in Section 4.3.2 and Section 10.8 of Appendix A, the Proposed Project would be implementing the applicable measures in the Long Beach CAP; therefore, a less than significant generation of GHG emissions would occur from development of the Proposed Project. Impacts would be less than significant.

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 Proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The applicable plan for the Proposed Project would be the Long Beach CAP (City of Long Beach, 2022). The Proposed Project's consistency with the Priority Mitigation Actions in the Climate Action and Adaptation Plan (CAAP) is shown in Table 5.

Table 5: Consistency with the City of Long Beach Climate Action Plan

Priority Mitigation Actions	Project Consistency
BE-1: Provide access to renewably generated electricity	Not Applicable. This policy is only applicable to Southern California Edison, which is the electrical provider for the City.
BE-2: Increase use of solar power	Consistent. The proposed structures will be designed to meet current Title 24 building standards that currently require the roofs to be designed to support future solar PV installations.
BE-3: Promote community solar and microgrids	Not Applicable. The policy is only applicable to the City to implement.
BE-4: Develop a residential and commercial energy assessment and benchmarking program	Not Applicable. The policy is only applicable to the City to implement.
BE-5: Provide access to energy efficiency financing, rebates, and incentives for building owners	Not Applicable. The policy is only applicable to the City to implement.
BE-6: Perform municipal energy audits	Not Applicable. This policy is only applicable to the City to implement.
BE-7: Update building codes to incentive electric new residential and commercial buildings	Not Applicable. The policy is only applicable to the City to implement.
BE-8: Implement short-term measures to reduce emissions related to oil and gas extraction	Not Applicable. No oil and gas extraction are part of the proposed project.
T-1: Increase the frequency, speed, connectivity, and safety of transit options.	Not Applicable. This action is applicable to Long Beach Transit.
T-2: Expand and improve pedestrian infrastructure citywide	Consistent. The proposed project will improve the onsite walkway system throughout the project site.
T-3: Increase bikeway infrastructure citywide	Not Applicable. The policy is only applicable to the City to implement. It should be noted that the project will increase the onsite bicycle parking spaces as well as improve the onsite bike paths.
T-4: Implement the Port of Long Beach Clean Trucks Program	Not Applicable. This action is applicable to the Port of Long Beach.
T-5: Develop an Electric Vehicle Infrastructure Master Plan	Not Applicable. This action is only applicable to the City to implement. The proposed project will include EV charging spaces as required by the Title 24 building standards.

Priority Mitigation Actions	Project Consistency
T-6: Increase employment and residential development along primary transit corridors	Consistent. The proposed project would provide employment and education opportunities in close proximity to the Long Beach Transit Atlantic & 16 th Street Bus stop.
T-7: Update the Transportation Demand Management Ordinance	Not Applicable. This action is only applicable to the City to implement.
T-8: Increase density and mixing of land uses	Not Applicable. The proposed project consists of a school improvement project.
T-9: Integrate SB 743 planning with CAAP process	Not Applicable. This action is only applicable to the City to implement.
W-1: Ensure compliance with state law requirements for multi-family and commercial property recycling programs	Consistent. The proposed project would provide designated recycling and trash bins.
W-2: Develop an organic waste collection program for City-serviced accounts	Not Applicable. This action is only applicable to the City to implement.
W-3: Partner with private waste haulers to expand organic waste collection community-wide	Consistent. The proposed project would provide designated organic waste bins.
W-4: Identify organic waste management options	Not Applicable. This policy is only applicable to the City to implement.

Source: City of Long Beach, LB CAP found at: <https://www.longbeach.gov/lbcd/planning/caap/>

As shown in Table 5, with implementation of statewide regulatory requirements including the CalGreen building standards, the Proposed Project would be consistent with all applicable policies of the Long Beach CAP; therefore, implementation of the Proposed Project would not conflict with any applicable plan that reduces GHG emissions. This impact is less than significant.

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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(h)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.9.1 Environmental Setting

The Proposed Project and Proposed Project site were analyzed to determine the potential for hazards or hazardous materials to occur on site. Background research included an evaluation of the Geotracker and EnviroStor websites, operated by the State Water Resources Control Board (SWRCB) and the DTSC.

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 potential impacts from the route transport, use, or disposal of hazardous materials are outlined below for both the construction and operation phases.

Construction

The Proposed Project activities include demolition, excavation and grading, utilities, surface paving operations, and landscaping. Construction would involve the use of hazardous materials that are typical for construction, including substances like paints, cleaners, fuel for construction equipment, etc.; however, the transport, use, and disposal of construction-related hazardous materials would occur in conformance with all applicable regulations governing such activities. During the construction of the Proposed Project, the temporary storage and use of potentially hazardous petroleum hydrocarbon fuels and lubricants at the Project site would occur. Other potentially hazardous materials may also be used. The delivery of hazardous materials to the Project site would be made by carriers following 49 CFR Part 173. In addition, the transportation of hazardous materials would be subject to 49 CFR Part 172, which contains the hazardous materials communication requirements, including shipping papers, marking, labeling, and placarding, in addition to emergency response requirements, training, and security plan. By following proper handling, health and safety practices, hazards communication, and emergency response procedures, any impact that would create a significant hazard to the public or the environment through the routine transport or use of hazardous materials at the Project site would be less than significant.

Operation

The Proposed Project includes operations and maintenance activities that would result in the periodic transport of hazardous materials to and from the Project site. Typical hazardous materials may potentially include chlorine, perlite, and muriatic acid for swimming pools and various potentially hazardous

materials used for aquatic center and gymnasium maintenance. No other routine storage or use of hazardous materials is planned. The delivery of hazardous materials to, or disposal from, the Project site would be made by carriers following 49 CFR Part 173. In addition, the transportation of hazardous materials would be subject to 49 CFR Part 172 which contains the hazardous materials communication requirements including shipping papers, marking, labeling, and placarding, in addition to emergency response requirements, training, and security plan. By following proper handling, health and safety practices, hazards communication, and emergency response procedures, impacts that would create a significant hazard to the public or the environment through the routine transport or use of hazardous materials at the Project site 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. Construction activities associated with the Proposed Project would require compliance with federal and State law that regulate construction activities which might involve interaction with asbestos-containing materials (ACMs) or lead-containing surfaces (LCS). Regulations require that, prior to demolition, alteration, or renovation, (1) proper notification is given to the SCAQMD (who regulates airborne pollutants) and the local California OSHA office; (2) LBUSD will certify that ACMs have been removed or mitigated by a licensed asbestos abatement contractor certified by the State of California Contractors Licensing Board; and (3) LBUSD will institute an operations and maintenance (O&M) program so that ACMs that are not damaged or LBP that will remain in place are properly managed to prevent exposure to hazardous materials. These permitting requirements automatically apply to all development associated with the Proposed Project and are considered standard conditions for approval of the Proposed Project.

School staff and contractors that may be on-site during construction work will be informed of the type of ACMs that they may encounter and the location of the ACM. The appropriate employers/contractors will implement specific work practices to protect workers, school staff, and students from airborne asbestos exposure. Control measures will be implemented that will address workers, staff, and student safety during the proposed upgrades. Recommendations include abatement procedures, proper training when working with or near ACM, and sampling and reporting procedures.

Additionally, the Proposed Project would require the use of heavy equipment during demolition and construction of the Proposed Project. There is a potential for the release of fuels and/or lubricants during both demolition and construction. Hazardous materials associated with swimming pool maintenance, such as chlorine and other chemicals for filtration and water quality, and other potentially hazardous materials for facility maintenance could be subject to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The contractor would, however, would implement containment measures, as required in the Construction General Permit. Proper handling, health and safety practices, hazard communication, and emergency response training would be provided to all construction and facility personnel responsible for using any hazardous materials. Therefore, the Proposed Project would have a less than significant impact with regard to creating 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.

Compliance with these regulations and implementation of the recommended safety measures would reduce potential impacts during construction and operation to a level below 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. Demolition, construction, and operation of the Proposed Project would occur within the boundaries of the existing campus. Polytechnic HS is within 0.25 miles of Theodore Roosevelt Elementary School. The Proposed Project involves the use of hazardous materials in accordance with all regulations involving storage, use, and disposal. The Proposed Project would involve the use of heavy equipment during demolition and construction that would emit emissions associated with internal combustion engines (i.e., diesel and gasoline). Once operational, the Project would involve the use of chemicals associated with maintenance operations which would be subject to federal, state, and local health and safety requirements. As discussed above in Section 4.9.1 Impact (a), adherence to all local, county, state, and federal policies and regulations would reduce impacts to a level less than significant. 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 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?*

No Impact. The Proposed Project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65862.5 (SWRCB 2024; DTSC 2024); therefore, implementation of the Proposed Project would not result in an impact associated with known hazardous materials sites.

- 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?*

No Impact. The Proposed Project site is located approximately 3 miles southwest of Long Beach Municipal Airport. The Proposed Project site is not located within the Airport Influence Area or a Runway Protection Zone for the Long Beach Municipal (LACALUC 2003). Therefore, 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?*

No Impact. The Proposed Project would be designed to provide unobstructed access. Permitting requirements require the DSA to perform an Access Compliance review and a Fire and Life Safety review prior to approval of the Proposed Project drawings and specification documents. Emergency access would be ensured, and the Proposed Project would not interfere with adopted emergency response or evacuation plans. Therefore, no impacts would occur.

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

No Impact. The Proposed Project site is identified as a Non-Very High Fire Hazard Safety Zone (CALFIRE 2007). The Project site is located in an urbanized area of the City that does not include wildlands or high fire hazard terrain or vegetation. The Proposed Project would not expose persons or structures to the risk of wildland fires during construction or operation. The Proposed Project is not located within a Very High

Fire Severity Zone and its operations would be residential in nature and would not increase the risk of wildland fire. In addition, no roads would be permanently closed because of the construction or operation of the Proposed Project, and no structures would be developed that could impair or physically interfere with an adopted emergency response or evacuation plan. Therefore, no impacts would 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 type="checkbox"/>	<input checked="" type="checkbox"/>
(d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.10.1 Environmental Setting

Hydrology is the study of the movement, distribution, and quality of water throughout the Earth, and thus addresses both the hydrologic cycle and water resources. Water quality is the physical, chemical, and biological characteristics of water, characterized through the methods of hydrometry. The primary bases for such characterization are parameters which relate to drinking water, safety of human contact, and the health of ecosystems.

A seiche is a standing wave in an enclosed or partially enclosed body of water. A tsunami is a series of waves created when a body of water, such as an ocean, is rapidly displaced. A mudflow or mudslide is the most rapid (up to 80 kilometers per hour) and fluid type of downhill mass wasting.

4.10.2 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 includes the installation of a new aquatic facility and gymnasium and upgrades to campus identified in Section 1.5, above. Construction would include demolition, renovation/interior remodeling, and new construction of buildings over approximately five phases. LBUSD would comply with all applicable requirements regulating drainage improvements and grading as they relate to construction of on-site improvements that affect off-site drainage. Implementation of all applicable water quality requirements, including preparation of a SWPPP, as well as obtaining coverage under the California Statewide Construction General Stormwater Permit would ensure that impacts to hydrology and water quality, during construction and operation would be less than significant. Installation of the proposed aquatic center, gymnasium, and classroom buildings would result in similar permeability to existing campus conditions. With implementation of BMPs, impacts to surface and/or ground water quality would remain 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 currently developed with impervious surfaces and the Proposed Project would replace the existing uses with similar uses. The Proposed Project includes the installation of a new aquatic facility and gymnasium, and various campus upgrades identified in Section 1.5, above. The Proposed Project site is located in an urbanized area currently containing an operational school. The Proposed Project would not include the alteration of a stream or river. Water usage associated with the Proposed Project would be provided by the Long Beach Water Department which receives water from imports as well as groundwater from the central basin. The proposed aquatic center would require more water than the current campus use. Pool filters would recycle water, but pool levels would be lost daily due to evaporation. Additionally, showers and toilets would slightly increase water usage. However, the amount of water used by the Proposed Project in the long-term would result in a minor increase over the existing water use of the campus as a whole. The pool building would be designed using Title 24 regulations. In addition, the Project goal will be to achieve 30-50% potable water use reduction for fixtures, toilets, and irrigation water, as well as meeting federal and California State Requirements. In addition, for the pool filtration system, the District will utilize filtration technology that is more water and energy efficient than the traditional sand filtration devices. This would ensure water use is greatly minimized. The Proposed Project would not physically interfere with any groundwater supplies. Impacts are therefore less than significant.

- 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 site is in an urbanized location and is currently developed. Ground-disturbing activities would result with implementation of the Proposed Project; however, 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 erosions 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.

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

Less Than Significant Impact. The Proposed Project would not create or contribute significant runoff from the Proposed Project site. The Proposed Project site is in an urbanized location, and the site is currently developed. Runoff from the Proposed Project site following construction would be similar to the pre-project runoff volumes; therefore, the Proposed Project is not expected to create or contribute surface runoff volume that would exceed the capacity of the existing stormwater drainage systems. Implementation of the Proposed Project would result in a less than significant impact associated with stormwater drainage systems.

iv) impede or redirect flood flows?

No Impact. The Proposed Project is not located within a Federal Emergency Management Agency (FEMA) identified 100-year flood hazard area (FEMA 2024); therefore, implementation of the Proposed Project would not result in an impact associated with flood flows.

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

No Impact. Seiches or mudflows are not hazards in the Proposed Project area. Tsunamis have the potential to impact the coastal area; however, the Proposed Project site is located approximately 1.6 miles inland and is not located in an inundation or tsunami hazard area (City of Long Beach 1988). Additionally, no lakes are located within the immediate vicinity of the Proposed Project area. Therefore, implementation of the Proposed Project would not result in an impact associated with inundation by seiche, tsunami, or mudflow.

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

Less Than Significant Impact. As discussed above, the Proposed Project would comply with the SWPPP and implement appropriate BMPs. The identification and implementation of BMPs identified in the SWPPP would reduce any impacts associated with water quality to less than significant. Additionally, the Proposed Project would not use groundwater for construction or operation of the Proposed Project. Impacts associated with water quality and groundwater plans are 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 Environmental Setting

Cities and counties “plan” in order to identify important community issues (such as new growth, housing needs, and environmental protection), project future demand for services (such as sewer, water, roads, etc.), anticipate potential problems (such as overloaded sewer facilities or crowded roads), and establish goals and policies for directing and managing growth. Local governments use a variety of tools in the planning process including the general plan, specific plans, zoning, and the subdivision ordinance.

The Proposed Project site is located within an area designated by the City of Long Beach General Plan as Institutional, which allows educational land uses. The zoning for the Proposed Project site is Institutional, which also allows public and private educational land use by right (without a Conditional Use Permit). Land use designations adjacent to the Proposed Project site include Moderate and High Density Residential. In the November 2017 Draft General Plan Update, designations for zoning and land use will be referred to as ‘Placetype’ designations which will illustrate major physical planning concepts for the City (City of Long Beach 2017).

4.11.2 Impact Analysis

a) Would the project physically divide an established community?

No Impact. The Proposed Project would be located on a site that has been in use as a public school since the early 20th Century. The Proposed Project would continue the long-standing presence of an educational institution at the Proposed Project site. The Proposed Project would not change the land uses currently existing at the site or create an incompatible use. The continued use of the site as a school campus would not result in a new barrier in the community that would divide the established surrounding community; therefore, implementation of the Proposed Project would not result in an impact associated with the physical division of a community.

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. As described above, the Proposed Project site is located within an area designated by the General Plan as Institutional, which allows educational land uses. The zoning for the Proposed Project site is Institutional, which also allows public and private educational land use by right (without a Conditional Use Permit [CUP]). The Proposed Project would not result in a change to the existing land use or zoning

designations. Therefore, implementation of the Proposed Project would not result in an impact associated with an applicable land use plan, policy, or regulation.

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 aggregates. California is the largest consumer of sand and gravel in the nation; but it is also a major provider, producing approximately one billion dollars' worth of mineral resources annually.

The California Geological Survey (CGS) provides objective geologic expertise and information about California's diverse non-fuel mineral resources. Maps, reports, and other data products developed by the CGS 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. The State of California Division of Mines and Geology classified the Proposed Project site as a Mineral Resource Zone 4 (MRZ-4). MRZ-4 zones are defined as areas where available information is inadequate for assignment to any other MRZ (CDMG 1982); however, Proposed Project activities would occur on previously disturbed soils and would not result in loss of a known mineral resource. Therefore, implementation of the Proposed Project would not result in an impact associated with mineral resources.

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. No existing or historic mineral resource sites are in or around the Proposed Project site; therefore, implementation of the Proposed Project would not result in an impact associated with a mineral resource recovery site.

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.13.1 Environmental Setting

The Proposed Project is located in the City. The primary noise sources in the Project vicinity are from the operation of vehicles on the nearby roads; however, traffic noise at the Proposed Project site is minimal and the proposed activities will not involve roadway widening or construction that would exacerbate existing traffic noise.

A Noise Impact Analysis was prepared for the Project and is included as Appendix D.

City of Long Beach Noise Standards

For construction activities within the City of Long Beach, Section 8.80.202 of the Municipal Code exempts construction noise from the City's exterior and interior noise standards between 7:00 a.m. and 7:00 p.m. on weekdays and between 9:00 a.m. and 6:00 p.m. on Saturdays.

Since some construction activities could result in noise levels that could cause harm to the nearby residents, a noise threshold utilizing the OSHA agency limits of noise exposure is used. The use of a significance threshold using an OSHA standard is considered conservative. The OSHA standard is limiting noise exposure of workers to 90 decibels (dB) or less over eight continuous hours. Typical construction activities result in a range of noise levels from operating various pieces of equipment. Typical equipment operating cycles may be used at a full power setting followed by a lower setting. Therefore, noise levels fluctuate during construction activities. For the purpose of this noise impact analysis, noise levels that could expose residents or workers to more than 90 dB for over eight continuous hours are considered a significant noise impact.

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 not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the campus in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The following

section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the Proposed Project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the Proposed Project are anticipated to include demolition of the existing gymnasium and outdoor paved area, site preparation and grading that includes deep soil cement mixing on approximately 2.5 acres, building construction of a new gymnasium and aquatics facility, paving of the pool deck and flat work, and application of architectural coatings. Noise impacts from construction activities associated with the Proposed Project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

Section 8.80.202 of the City's Noise Ordinance restricts construction activities from occurring between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between 6:00 p.m. and 9:00 a.m. on Saturdays, or anytime on Sundays or federal holidays. Through adherence to the construction-related noise requirements provided in the City's Noise Ordinance, construction-related noise levels would not exceed any noise standards established in the General Plan or Noise Ordinance; however, the General Plan Noise Element details that the federal standards may be used when local criteria are not established. As such, the noise level standard of 90 dBA at the nearby homes and daycare facility have been utilized in this analysis.

The nearest sensitive receptors to the Project site are patrons and staff at a hotel that is located as near as 10 feet from the area to be disturbed on the north side of the Proposed Project site. There are also multi-family homes located as near as 60 feet to the north of the area to be disturbed. In addition, there is a church located on the east side of Martin Luther King Jr Avenue that is as near as 90 feet east of the area to be disturbed, there are multi-family homes located on the south side of 15th Street that are as near as 65 feet south of the area to be disturbed, and there are multi-family homes located on the west side of Atlantic Avenue that are as near as 140 feet west of the area to be disturbed.

Construction noise levels to the nearby sensitive receptors have been calculated through use of the Roadway Construction Noise Model (RCNM) and the parameters and assumptions detailed in Section 6.1 of Appendix D. The results are shown below in Table 6 and the RCNM printouts are provided in Appendix D.

Table 6: Construction Noise Levels at the Nearby Sensitive Receptors

Construction Phase	Construction Noise Level (dBA Leq) at:				
	Hotel to North ¹	Multi-Family Homes to North ²	Church to East ³	Multi-Family Homes to South ⁴	Multi-Family Homes to West ⁵
Demolition	73	77	72	78	71
Site Preparation	73	77	72	77	71
Grading	74	78	73	79	73
Building Construction	74	78	73	78	72
Paving	68	72	67	73	66
Painting	60	64	59	65	58
FTA Construction Noise Threshold⁶	100	90	100	90	90
Exceed Thresholds?	No	No	No	No	No

¹ The hotel to the north is located as near as 235 feet from the center of the north parking lot.

² The multi-family homes to the north are located as near as 85 feet from center of Jackrabbit Road improvements. 5 dB of shielding was added to account for the existing 6 foot high cmu wall located on the north property line.

³ The church to the east is located as near as 265 feet from center of the north section of Jackrabbit Road improvements.

⁴ The multi-family homes to the south are located as near as 140 feet from the center of the CTE Classrooms improvements.

⁵ The multi-family homes to the west are located as near as 290 feet from the west section of Jackrabbit Road improvements.

⁶ The FTA Construction noise thresholds are detailed above in Table B.

Source: RCNM, Federal Highway Administration, 2006

Table 6 shows that the greatest noise impacts would occur during the grading phase, with noise levels as high as 79 dBA Leq at the nearest multi-family homes to the north. All calculated construction noise levels shown in Table 6 are within the Federal Transit Administration (FTA) daytime construction noise standard of 90 dBA for residential uses and 100 dBA for commercial uses. Therefore, through adherence to allowable construction times provided in Section 8.80.202 of the Municipal Code, the construction activities for the Proposed Project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Operational-Related Noise

The Proposed Project consists of the demolition and reconstruction of structures and aquatic center on campus that would not result in an increase in student enrollment, nor would it result in a new use on campus. As such, no off-site roadway noise impacts are anticipated to be created from operation of the Proposed Project. In addition, even though the Proposed Project includes demolition and replacement of the onsite roadway (Jackrabbit Lane) and the north parking lots, the locations and level of use on the on-site roadways and parking lots will not change, and no new onsite vehicle noise impacts are anticipated to be created from operation of the Proposed Project.

Potential new on-site sources that may be created from operation of the Proposed Project include the new outdoor aquatic center and new HVAC units on the rooftops of the new structures. It is anticipated that all of the new structures would be constructed to meet the most current Title 24 building efficiency and insulation standards that require the roof and walls to have enhanced insulation, which results in enhanced noise reduction. As such, the interior activities that would occur in the new structures are not anticipated to be audible outside of the structures. Section 8.80.160 of the Municipal Code limits on-site noise sources at the property lines of the nearby homes to 50 dBA between 7 a.m. and 10 p.m. and 45 dBA between 10 p.m. and 7 a.m.

In order to determine the noise impacts from the operation of pool activities and rooftop mechanical equipment, reference noise measurements for similar operations were taken of each source and are shown in Table 7 and the reference noise measurement printouts are provided in Appendix D. In order to account for the noise reduction provided by the proposed and existing structures on all sides of the new aquatic center and the parapet walls that will shield all new rooftop HVAC units, the noise barrier attenuation algorithm from the Technical Noise Supplement to the Traffic Noise Analysis Protocol (TeNS), prepared by Caltrans, September 2013, was utilized and the noise barrier reduction calculation spreadsheets are also provided in Appendix D.

Table 7: Operational Noise Levels at the Nearby Sensitive Receptors

Noise Source	Calculated Noise Levels (dBA Leq) at ¹ :				
	Hotel to North	Multi-Family Homes to North	Church to East	Multi-Family Homes to South	Multi-Family Homes to West
Pool Activities ²	25	31	25	31	27
Rooftop Equipment ³	21	26	20	30	23
Combined Noise Level	27	32	26	33	28
City Noise Standards (day/night)	50/45	50/45	50/45	50/45	50/45
Exceed Standards (day/night)?	No/No	No/No	No/No	No/No	No/No

Notes:

¹ The reference noise measurements printouts and barrier noise reduction calculations are provided in Appendix D.

² The pool activities were based on a noise measurement of 71.8 dBA Leq at 30 feet from Long Beach Community College Liberal Arts Campus pool hosting a swim meet.

³ The rooftop equipment was based on a noise measurement of 65.1 dBA Leq at 6 feet from an operational rooftop HVAC unit.

Source: Noise calculation methodology from Caltrans, 2013 (see Appendix D).

Table 7 shows that the Proposed Project's worst-case (i.e., during a swim meet) operational noise from the simultaneous operation of all new noise sources on the Project site would create a noise level as high as 33 dBA Leq at the multi-family homes to the south. The calculated operational noise levels shown in Table 7 would all be within both the City's daytime noise standards of 50 dBA between 7 a.m. and 10 p.m. and the City's nighttime noise standard of 45 dBA between 10 p.m. and 7 a.m. Therefore, the operational activities for the Proposed Project would not create a substantial long-term increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

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

Less Than Significant Impact With Mitigation Incorporated. The Proposed Project would not expose people to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the Proposed Project.

Construction-Related Vibration Impacts

The construction activities for the Proposed Project are anticipated to include demolition and reconstruction of structures and aquatic center on campus. Vibration impacts from construction activities associated with the Proposed Project would typically be created from the operation of heavy off-road

equipment. The nearest off-site vibration sensitive receptor is the hotel that is located as near as 10 feet from the area to be disturbed on the north side of the Project site.

Section 8.80.200(G) of the City's Municipal Code limits vibration impacts to the nearby single-family homes to 0.001 g's in the frequency range of 0 to 30 hertz and 0.003 g's in the frequency range of 30 to 100 hertz. The acceleration of gravity (g), which is 32.2 feet per second can be converted into peak particle velocity (PPV) by multiplying 0.001 g's by 32.2 and then converting to inch per second, which results in a threshold of 0.386 inch per second PPV.

A list of known vibration producing construction equipment is provided above in Table F of Appendix D. From the equipment listed in Table F, it is anticipated that the type of equipment that would create the highest vibration during demolition and grading activities would be from a large bulldozer that creates a vibration level of 0.089 inch per second PPV at 25 feet and during paving activities would be from a vibratory roller that creates a vibration level of 0.21 inch per second PPV at 25 feet.

Based on typical vibration propagation rates, the vibration levels at the nearest offsite structure (10 feet away) would be 0.14 inch per second PPV for the large bulldozer and 0.58 inch per second PPV for the vibratory roller. The vibration level created from the large bulldozer would be below the 0.386 inch per second PPV threshold detailed above; however, the vibratory roller would exceed the City's vibration threshold. Mitigation measure MM NOI-1 would require that the paving contractor either operate vibratory rollers in static mode or limit the amplitude level of vibratory rollers to the lowest setting when operating within 20 feet of any off-site structure. According to Pavement Interactive, the vibration level created from the lowest amplitude setting is half of the vibration level created from the highest amplitude setting. As such, implementation of MM NOI-1, would reduce the vibration level at the nearest off-site structure to 0.29 inch per second PPV from a vibratory roller operating 10 feet away, which is below the City's 0.386 inch per second PPV threshold. Therefore, with implementation of MM NOI-1, a less than significant vibration impact is anticipated from construction of the Proposed Project.

MM NOI-1: The District shall require that the paving contractor either operate vibratory rollers in static mode or limit the amplitude level of vibratory rollers to the lowest setting when operating within 20 feet of any offsite structure.

Operations-Related Vibration Impacts

The Proposed Project would consist of the development and operation of a demolition and reconstruction of structures and aquatic center on campus. The on-going operation of the Proposed Project would not include the operation of any known vibration sources; therefore, a less than significant vibration impact is anticipated from the operation of the Proposed Project.

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

Population refers to the occupants of housing projects, population indirectly associated with workers or proposed nonresidential projects, or changes in the amount and distribution of population and employment permitted by adoption or revision to a land use plan. Important areas include changes in the number, characteristics, geographical distribution, and timing of new residents directly or indirectly resulting from a project and the degree to which project-related changes are consistent with city, regional or other adopted population growth policies. Other issues are the degree to which project-related population is already present in the area under analysis (i.e., already residing or working in the area) or whether they represent immigrants.

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 non-residential 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; displaced housing units causing the construction of replacement housing somewhere else; or displaced 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. Construction and operation of the Proposed Project would not increase the capacity of the existing school; thus, no increase in enrollment would occur with implementation of the Proposed Project. The Project does not include any residential or commercial land uses that would induce population growth, and therefore, would not result in a direct population increase from construction of new homes or businesses. Additionally, the Proposed Project would not require the extension or the increase in capacity of existing off-site infrastructure. Therefore, the Proposed Project would not induce substantial

population growth in the area, either directly or indirectly. No impacts on population growth would occur as a result of the Proposed Project.

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

No Impact. No residential uses are present on the Project site; therefore, the development of the Proposed Project would not result in the displacement of existing housing, and no persons would be displaced. The Project site is designated for institutional use and is currently developed with school facilities. No impacts on population and housing would occur, resulting in no need for construction of replacement housing.

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. The Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities. Fire protection services would be provided by the City of Long Beach Fire Department. Fire Station No. 3 is located approximately 0.3 miles southwest of Polytechnic High School and would serve as the primary responder to the Proposed Project site (Google Earth 2024). 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, an increase in the demand for fire services resulting from the Proposed Project is not anticipated. The Proposed Project site is located in an urbanized area that is void of any wildlands that may create significant fire risks to the Proposed Project site. In addition, to ensure conformance with State Fire Codes, the Proposed Project would not result in street closures that would result in inadequate access to the Proposed Project site. Therefore, implementation of the Proposed Project would not result in an impact associated with fire protection.

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 Proposed Project would not result in adverse physical impacts associated with the provision of new or physically altered facilities to maintain acceptable service ratios for police protection. The District maintains its own safety department to provide security for the schools within its jurisdiction. The District's School Safety and Emergency Preparedness Department would provide on-campus security for the Proposed Project. The City of Long Beach Police Department would be the secondary provider of law enforcement services to the Proposed Project and would supplement the District's School Safety and Emergency Preparedness Department as needed. The police substation nearest to the Proposed Project site is located at 400 West Broadway, approximately 1 mile south of the Proposed Project site (Google Earth 2018). The Proposed Project would not rely primarily on the City of Long Beach Police Department police protection services and would not induce population growth resulting in the need for additional police services. Therefore, implementation of the Proposed Project would not result in an impact associated with police protection.

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. Implementation of the Proposed Project involves facility repairs and upgrades, classroom technology upgrades, utility upgrades and installation of HVAC, accessibility upgrades, and construction of an aquatic facility at Polytechnic High School. The work would be mostly concentrated in the interior of the buildings and would consist of seismic retrofits, upgrades, and renovations. During construction, portions of the buildings would not be available for school use. The potential limitation of use will be short-term, and following construction the Proposed Project site would return to its fully functioning existing uses. Therefore, implementation of the Proposed Project would result in a less than significant impact associated with schools.

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 Proposed 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 (Seaside Park) is located approximately 0.1 mile west of the Proposed Project site. The Proposed

Project would not induce population growth and therefore will not create new residents. Therefore, implementation of the Proposed Project would not result in an 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. Implementation of the Proposed Project is not anticipated to impact any other public facilities as it would not induce population growth directly or indirectly.

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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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?*

No Impact. Implementation of the Proposed Project would not increase the use of existing neighborhood and regional parks or any other recreational facilities. The closest park (Seaside Park) is located approximately 0.1 mile west of the Proposed Project site. Physical impacts on existing recreational facilities are usually associated with population growth. The Proposed Project would neither directly increase the local population nor would it indirectly induce population growth in the future; therefore,

implementation of the Proposed Project would not result in an impact associated with the deterioration of 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?

No Impact. The Proposed Project site is located at Polytechnic High School, which provides students with on-campus recreational facilities. Implementation of the Proposed Project would not require the construction or expansion of off-site recreational facilities. The Proposed Project is intended to repair and upgrade school facilities for an existing student population and would not burden any facility beyond capacity by generating additional recreational users. Therefore, implementation of the Proposed Project would not result in an 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 plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian paths?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b)	For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

4.17.1 Environmental Setting

This section describes the existing conditions of the multi-modal transportation network serving the Project study area.

Roadway Configuration

This section describes the configuration of the existing roadways surrounding the Project site. Immediate access to the Project site is provided by Atlantic Avenue, Martin Luther King Jr. Avenue, E. 15th Street, E. Esther Street, Pacific Coast Highway, and Jackrabbit Lane. Pacific Coast Highway serves in connecting the Proposed Project to the regional transportation system. Transit and pedestrian traffic are intended to be prioritized on Atlantic Avenue. The streets serving the Project site are described below.

Atlantic Avenue: Atlantic Avenue is a local street that provides a north-south connection and access to Pacific Coast Highway, E. 15th Street, and Jackrabbit Street. There are two lanes in each direction plus left-turn pocket lanes and on-street parallel parking on both sides. Sidewalks are present on both sides with crosswalks at intersections.

Pacific Coast Highway: Pacific Coast Highway provides east-west connectivity through the area on the northern boundary of the Project site. In the Project vicinity, there are three eastbound travel lanes and two westbound travel lanes, plus left-turn pocket lanes and parallel on-street parking on the north side of the street (parking is prohibited along the south side of the street for the block adjacent to the school). There are two signalized intersections in the vicinity of the Project site (at Atlantic Avenue and Martin Luther King Jr. Avenue, both with dedicated left turn lanes on all approaches). Pacific Coast Highway has a posted speed limit of 35 miles per hour (mph) with a 25-mph speed limit in the vicinity of the school when children are present. Long Beach Transit runs along Pacific Coast Highway within the Project site vicinity. Sidewalks are present on both sides.

Martin Luther King Jr Avenue: Martin Luther King Jr. Avenue is a north-south connector through the area on the eastern boundary of the Project site. The main driveway that serves the school is on Martin Luther King Jr. Avenue. In the Project vicinity, there is one lane per direction with dedicated left turn lanes at Pacific Coast Highway and on-street parallel parking on both sides. There are two signalized intersections in the vicinity of the Project site (at Pacific Coast Highway and E. 17th Street). The other two intersections (E. 16th Street and E. 15th Street) are controlled two-way stops. Sidewalks are provided on both sides.

Jackrabbit Lane: Jackrabbit Lane is the private street that serves as the main roadway through the Project site. It is two-way with one lane in each direction and connects with parking on the school grounds. There is parallel parking on the north side of the road and perpendicular parking on the south side of the road. There is a sidewalk on the south side of the street. Jackrabbit Lane connects to a parking lot within the school grounds and to the exit to Martin Luther King Jr. Avenue.

E. Esther Street: E. Esther Street is a local street that provides east-west connectivity through the community adjacent to the western boundary of the Project site. It has one lane in each direction and is a two-way stop controlled at the intersection with Atlantic Avenue. The street has sidewalks on both sides and crosswalks on the western and eastern legs of the intersection with Atlantic Avenue. There is parallel parking on both sides. To the east of the intersection with Atlantic Avenue, E. Esther Street connects two staff parking lots and the housing development north of the Project site.

E. 15th Street: E. 15th Street is a local street that provides east-west connectivity through the community along the southern end of the Project site, terminating at Martin Luther King Jr. Avenue. E. 15th Street has one lane in each direction with sidewalks on both sides and crosswalks at intersections. Parallel parking is allowed on both sides.

Multimodal Facilities

Pedestrian Facilities

Roadways in the Project vicinity generally have sidewalks on both sides of the street. Most streets in the surrounding area have a landscaped buffer with trees and/or grass between the sidewalk and roadway, with the exception of Atlantic Avenue and Pacific Coast Highway.

The crosswalks surrounding the school are either yellow ladder-style (at the intersection of Pacific Coast Highway with Atlantic Avenue and the intersections of Martin Luther King Jr. Avenue with E. 15th Street and E. 16th Street), white ladder-style (at the intersection of Pacific Coast Highway with Martin Luther King Jr Avenue), or simple yellow lines (at the remaining intersections). The intersection of Atlantic Avenue and E. 15th Street has a yellow ladder-style crosswalk on the east leg only and simply yellow lines on the

other legs. Crosswalks are lacking on Atlantic Avenue at the intersection with E. Esther Street and on the north leg of the intersection with Jackrabbit Lane.

Bicycle Facilities

There are no bicycle facilities in the immediate vicinity of the Project site. The nearest is a Class III bicycle route with sharrows on E. New York Street that turns northward at Lewis Avenue and continues onto E. 15th Street at McBride Skatepark.

Transit Routes

The project site is served by the following bus lines within a 0.5-mile radius. A map of bus lines and stops that serve the Project site within a 0.5-mile radius is shown in Exhibit 5.

- **Los Angeles Metro:** Routes 60 and 232
- **Long Beach Transit:** Routes 41, 45, 46, 51, 172, 173, 174, 181, 182, 191, and 192
- **Torrance Transit:** Lines 3 and Rapid 3

In addition to the above bus lines, the Los Angeles Metro A Line provides a rail service near the Project site along Long Beach Boulevard. The Pacific Coast Highway and Anaheim Street stations are each approximately half a mile from the Project site via the existing sidewalk network.

4.17.2 Impact Analysis

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

Less than Significant Impact. The following section includes an analysis of the City's circulation system.

Project Trip Generation

The Proposed Project would not raise the maximum student capacity; therefore, no net new trips are expected to be generated by the Proposed Project.

Construction Trip Generation

Construction trip estimates for the Proposed Project were provided by the City. In order to calculate the construction trip generation, per the City of Long Beach Transportation Impact Assessment (TIA) Guidelines, Section 3.4.1, a passenger car equivalent (PCE) has been applied to these estimates, whereby all heavy-duty trucks are considered equivalent to 2.0 passenger cars. During the peak construction period, the project is expected to generate 244 adjusted daily trips.

The construction contractor would coordinate with the City during construction to develop a traffic management plan for any temporary lane closures and would limit construction in these locations to outside peak travel hours. The traffic management plan would contain project-specific measures for noticing, signage, policy guidance, and the limitation of lane closures to off-peak hours. Implementation of the traffic management plan would ensure that construction impacts would be less than significant. The Proposed Project would not change any off-site roadways, bicycle lanes, or pedestrian paths. The Proposed Project activities would 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 would not be a significant and permanent increase in traffic after the completion of the Proposed Project. In addition, as part of District Construction BMPs, the District would require its contractors to submit a worksite traffic control plan to the City of Long Beach for review prior to construction. The plan would show the location of any haul routes, construction hours, protective devices, warning signs, and access to abutting properties. The Proposed Project would not change the current local traffic levels. Impacts would be less than significant.

b) For a land use project, would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1)?

Less Than Significant Impact. In 2013, the State Legislature adopted Senate Bill (SB) 743, a measure requiring all California cities to change long-standing methods for analyzing transportation-related impacts of projects. The City of Long Beach has approved guidelines for analyzing the traffic and circulation impacts under SB 743 in June 2020 (City of Long Beach 2020).

The Proposed Project would not raise the maximum student capacity; therefore, no net new trips are expected to be generated by the Proposed Project. Therefore, VMT impacts are less than significant.

c) Would the project 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 transportation structures. There would be no change to the existing off-site roadways and the Project would not involve any incompatible uses. Implementation of the Project would not result in an impact.

d) Would the project result in inadequate emergency access?

No Impact. The Proposed Project would occur entirely within the existing campus and does not include changes to off-site roadways or emergency access routes. As part of District Construction BMPs, the District will require its contractors to submit a worksite traffic control plan to the City for review prior to construction. The plan will show the location of any haul routes, construction hours, protective devices, warning signs, and access to abutting properties. After construction, all lanes in the vicinity of the Proposed Project would remain open for emergency use; therefore, implementation of the Proposed Project would not result in an impact associated with emergency access.

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 Environmental Setting

Based on the list of tribes that had previously requested consultation with the District, the District sent out Assembly Bill (AB) 52 letters to Torres Martinez Desert Cahuilla Indians, the Gabrieleño/Tongva San Gabriel Band of Mission Indians, and the Gabrieleño Band of Mission Indians-Kizh Nation on September 17, 2024. The Gabrieleño Band of Mission Indians-Kizh Nation responded and requested the following mitigation measures be incorporated into the Project.

4.18.2 Impact Analysis

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

- 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?*

Based on information provided by the Gabrieleño Band of Mission Indians – Kizh Nation, the District recognizes that potential subsurface tribal cultural resources may be present near or within the Project site. Due to the amount of excavation and grading involved in the Proposed Project, the following mitigation measures will be implemented to reduce impacts to less than significant.

MM TCR-1: Retain a Native American Monitor/Consultant.

- A. The Project Applicant shall be required to retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
- B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the early commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
- C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.
- D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

MM TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funery/Non-Ceremonial).

- A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural, and/or historic purposes.

MM TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

- A. Native American human remains are defined in PCR 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 Public Resources Code Section 5097.98, are also to be treated according to this statute.
- B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed
- C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
- E. Any discovered human remains/burial goods shall be kept confidential to prevent further disturbance.

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 type="checkbox"/>	<input checked="" type="checkbox"/>

19.	UTILITIES/SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(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 type="checkbox"/>	<input checked="" type="checkbox"/>
(d)	Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e)	Negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f)	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. Implementation of the Proposed Project would not directly result in an increase in student or staff population; therefore, post construction, the generation of wastewater, water usage, and other electricity and gas usage on the Project site would not differ substantially from existing conditions. More water would be required for the pool; however, the additional water required for the pool would be infrequent (i.e. times of filling the pool). No new facilities would be required to provide the water needed for the pool. Therefore, implementation of the Proposed Project would result in less than significant impacts associated with water and/or wastewater facilities, or other utility facilities, and no significant changes are anticipated from the previous analysis.

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?

No Impact. The Proposed Project involves the construction of an aquatic facility, which will include an approximately 51.5-meter-long by 25-yard-wide swimming pool. The new swimming pool would require more water use at the site than existing uses. Pool filters would recycle water; however, water levels in

the pool would be lost daily due to evaporation. In addition, the new showers and toilets would slightly increase water usage. However, the amount of water used by the Proposed Project in the long-term would likely be similar to the existing water use of other campuses with aquatic facilities. First, the Project is not anticipated to increase enrollment; therefore, the same number of students use the fixtures regardless of the total number, and that the overall long-term use of water may only be minimally increased; in addition, the pool building would be designed using Title 24 regulations. All fixtures, faucets, shower heads and toilets would meet federal and California State Requirements including California Green Building Standards Code. Lastly, the pool filtration system is a regenerative media filtration system, utilizing technology that significantly reduces water use (20K gallons annually compared to sand's 500K to 1M gallons, resulting in 97% annual water saving) and is more energy efficient (21% annual electrical saving) than the traditional sand filtration devices. This would ensure water use is greatly minimized.

Overall, while the Proposed Project would result in a long-term use of water supplies, above current use, but it is a nominal increase compared to the overall water consumption of such an urban area, and a minor increase over the existing water use of the campus. The Project is considered to have sufficient water supplies available and is not expected to significantly contribute to any water shortages during normal, dry, and multiple dry years. 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?

No Impact. Newly constructed buildings would replace existing facilities with similar uses. Additionally, new structures would be designed to improve water efficiency. As such, a net increase in the generation of wastewater is not anticipated during project operation. Users of the Proposed Project and on-site staff would generate wastewater via showers and toilets. The Proposed Project would continue to serve the existing students; therefore, the Project would not result in a net increase to the amount of wastewater generated in the community. Overall, the limited amount of wastewater generated by the operation of the Proposed Project through sporting events and athletic practices would be less than significant.

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 Sanitation Districts of Los Angeles County (LACSD) and private waste management collectors and disposal facilities manage solid waste in the County. The LACSD operates a comprehensive solid waste management system that includes three active sanitary landfills, three closed landfills, two materials recovery/transfer stations, three gas-to-energy facilities, a clean-fuel facility, two full-service recycle centers, multiple landfill recycling programs, and, in conjunction with the County's Department of Public Works, an extensive program of household hazardous waste and electronic waste collection round-ups.

The active landfills and the materials recovery/transfer stations receive approximately 19,000 tons of nonhazardous solid waste per day, of which approximately 15,500 tons per day is disposed, with the remainder being reused or recycled. This disposal represents approximately 40 percent of the total solid waste disposed of by the residents and businesses of the County. The remaining 60 percent is disposed of at privately owned landfills. In general, solid waste is hauled directly to Class III landfills, transfer stations, resource recovery centers, and refuse-to-energy facilities.

The Proposed Project will not involve an increase in student or staff population and would not result in an operational increase in waste generation; however, construction of the Proposed Project would result in the generation of solid waste including scrap lumber, concrete, residual waste, packaging material, plastics, and vegetation. To ensure optimal diversion of solid waste resources by a project, the District requires its contractors to recycle or salvage nonhazardous waste materials generated during demolition and/or construction, to foster material recovery and re-use, and to minimize disposal in landfills. Furthermore, impacts from construction activities will be short-term and intermittent and will be mitigated by BMPs and compliance with existing State solid waste reduction statutes. With the incorporation of these requirements into the Proposed Project, implementation of the Proposed Project would result in a less than significant impact associated with sufficient landfill capacity.

e) Would the project negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals?

Less Than Significant Impact. As noted above in Section 4.19.1 Impact (d), the Proposed Project will not involve an increase in student or staff population and would not result in an operational increase in waste generation; however, construction of the Proposed Project would result in the generation of solid waste including scrap lumber, concrete, residual waste, packaging material, plastics, and vegetation. As operation of the Proposed Project would not result in an increase in solid waste generation beyond the existing condition, implementation of the Proposed Project would result in a less than significant impact associated with solid waste reduction goals.

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

Less than Significant Impact. During construction and operation of the Proposed Project, the District would comply with all city, county, and state solid waste diversion, reduction, and recycling mandates, including compliance with the county-wide Integrated Waste Management Plan (IWMP). Therefore, implementation of the Proposed Project would result in a less than significant impact associated with waste regulations.

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)	Impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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
(d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

4.20.1 Environmental Setting

The Proposed Project site is identified as a Non-Very High Fire Hazard Safety Zone (CALFIRE 2007). The Project site is located in an urbanized area of the City of Long Beach that does not include wildlands or high fire hazard terrain or vegetation.

4.20.2 Impact Analysis

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

No Impact. As discussed in Section 4.9.1 Impact (g), the Proposed Project site is not located in Very High Fire Hazard Safety Zone (VHFHSZ). The Proposed Project site is located in a built-out, urbanized community that is not considered at high risk for wildfire. All Proposed Project activities will occur within the existing school boundary, and operation of the Proposed Project would continue to operate as an existing school. No impact would occur.

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?

No Impact. The school campus is located within an established and built-out urban community that is at low risk for wildfire. The school campus is relatively flat and not located within a VHFHSZ. Additionally, Proposed Project activities would all occur within the existing school campus and would not include the installation or maintenance of associated infrastructure (such as road, fuel breaks, emergency water sources, or other utilities) that may exacerbate a fire risk. No impact would occur.

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?

No Impact. As discussed above in Section 4.20.1 Impact (b), the school campus is not located within a VHFHSZ. Additionally, Proposed Project activities would all occur within the existing school campus and would not include the installation or maintenance of associated infrastructure (such as road, fuel breaks, emergency water sources, or other utilities) that may exacerbate a fire risk. No impact would occur.

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?

No Impact. The school campus is not located within a VHFHSZ. Additionally, the school campus is relatively flat and not at risk of post-fire-induced landslide. No impact would occur.

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 Impact. As discussed in Section 4.4 Biological Resources, the Project site is located in an urbanized setting within a fully developed and operational school. Vegetation is limited to ornamental landscaping. No native vegetation is present on the Project site; as such, candidate and special status species are not expected to occur. Additionally, no riparian habitat or other sensitive natural community or wetlands exist on the project site. Implementation of the Proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species, or native wildlife nursery sites. Therefore, impacts would be less than significant.

As discussed in Section 4.5 Cultural Resources, implementation of the Proposed Project is not anticipated to impact any historic resources. However, due to the sensitivity of the area, the mitigation measures outlined in Section 4.5 shall be implemented to mitigated impacts associated with the soil disturbance. Impacts therefore would be less than significant with mitigation incorporated (MM CUL-1 through MM CUL-5).

- 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. Jordan High School proposes additional renovations as part of LBUSD’s District Wide improvements (LBUSD 2024). Future projects that may coincide with the construction of the Proposed Project, which is proposed to begin June 2025 and be completed in July 2029, include the following:

- Jordan High School Gym and Aquatic Center (Construction began 2024)
- Washington Middle School Transformation (Construction began 2024)

The projects identified above required their own standalone environmental analysis to determine the individual and cumulative impacts. Other projects occurring in the vicinity of the Project site within the City of Long Beach could have the potential to cumulatively increase impacts to air quality, GHG emissions, and noise. However, as discussed above in Section 4.3 Air Quality, Section 4.8 Greenhouse Gas Emissions, and Section 4.13 Noise, the proposed construction and operations would not result in exceeding local thresholds. Furthermore, the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant. 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 on human beings are generally associated with air quality, noise, traffic safety, geology/soils, and hazards/hazardous materials. As noted in the sections above, the Proposed Project would not result in significant impacts to any of these impact categories.

SECTION 5.0 – REFERENCES

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