Initial Study

Millikan High School Aquatic Center Project

Prepared for

Long Beach Unified School District
Facilities Planning & Management
955 High Street
Oakland, California 94601

Prepared by

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November 2025

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Appendix A Millikan High School Aquatic Center MUSCO Lighting Assessment
Appendix B Phase II Intensive Historic Resources Impact Assessment Report

Acronyms and Abbreviations

µg/m^3	micrograms per cubic meter
AB	Assembly Bill
ACM	asbestos-containing material
ALUCP	Airport Land Use Compatibility Plan
AQMP	Air Quality Management Plan
BLM	Bureau of Land Management
BMP	best management practice
BP	before present
CAA	Clean Air Act (federal)
CAAA	1990 CAA Amendments
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
Cal/OSHA	California Division of Occupational Safety and Health
CAP	criteria air pollutant
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
City	City of Long Beach
CNPS	California Native Plant Society
CO	carbon monoxide

CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CWA	Clean Water Act (federal)
dBA	a-weighted decibel
District	Long Beach Unified School District
DOC	Department of Conservation
DSA	California Division of the State Architect
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FESA	Endangered Species Act (federal)
FGC	California Fish and Game Code
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
GHG	greenhouse gas
GLO	General Land Office
HCD	California Department of Housing and Community Development
HS	High School
HSC	California Health and Safety Code
HVAC	heating/ventilation/air conditioning
I	Institutional
IPaC	USFWS Information, Planning, and Conservation
IS	Initial Study
kWh/m^2	kilowatt hours per square meter

LBFD	Long Beach Fire Department
LBP	lead-based paint
lbs/day	pounds per day
LGB	Long Beach Airport
LID	Low Impact Development
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act of 1918 (federal)
mg/m^3	milligrams per cubic meter
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MRZ	mineral resources zone
$MTCO_2e$	million tons of carbon dioxide equivalents
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NO_2	nitrogen dioxide
NOx	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OPR	Governor's Office of Planning and Research
PA	public address
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PM	particulate matter
PM_{10}	coarse particulate matter 10 micrometers or less in diameter
$PM_{2.5}$	fine particulate matter 2.5 micrometers or less in diameter
ppm	parts per million
PPV	peak particle velocity

PRC	Public Resources Code
Proposed Project	proposed Millikan High School Aquatic Center Project
RAW	Removal Action Workplan
RCRA	Resource Conservation and Recovery Act
RPS	Renewables Portfolio Standard
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SOx	sulfur oxides
SVE	soil vapor extraction
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	trichloroethene
TCR	tribal cultural resource
TSCA	Toxic Substances Control Act of 1976
U.S.C.	U.S. Code
UCMP	University of California Museum of Paleontology
USFWS	U.S. Fish & Wildlife Service
UW	universal waste
VMT	vehicle miles traveled
VOC	volatile organic compound

1 Introduction

The proposed Millikan High School (HS) Aquatic Center Project (Proposed Project) is a project as defined under the California Environmental Quality Act of 1970 (CEQA[1]; Public Resources Code [PRC] § 21000, et seq., as amended[2]). This Initial Study (IS) was prepared for the Long Beach Unified School District (District) pursuant to CEQA and the implementing CEQA Guidelines (Title 14, Chapter 3 of the California Code of Regulations [CCRs]; collectively, CEQA Guidelines).[3]

1.	**Project Title:**	Millikan High School Aquatic Center Project
2.	**Lead Agency Name and Address:**	Long Beach Unified School District Facilities Development and Planning Branch 2425 Webster Avenue Long Beach, CA 90810
3.	**Contact Person and Email Address:**	Dana Grudem, Senior Program Manager dgrudem@lbschools.net
4.	**Project Location:**	2800 Snowden Ave Long Beach, CA 90815
5.	**Project Sponsor's/Applicant's Name and Address:**	Long Beach Unified School District 2425 Webster Avenue Long Beach, CA 90810
6.	**General Plan Land Use Designation:**	Institutional
7.	**Zoning:**	Institutional (I) (City of Long Beach Zoning Code)
8.	**Surrounding Land Uses and Setting:**	The surrounding area includes single-family residential neighborhoods to the east along Palo Verde Avenue and to the northwest along Snowden Avenue. Commercial and community-serving uses are located to the north along East Spring Street, with additional residential neighborhoods to the south and west along East Barbanell Street and Snowden Avenue, respectively.

[1] 2025 CEQA Statute & Guidelines

[2] PRC § 21000, et seq.

[3] Guidelines for Implementation of the California Environmental Quality Act

9.	**Description of Project:**	The Proposed Project consists of demolition of Building 700/3000 and adjacent portable buildings at Millikan HS and construction of a new Aquatic Center. The Aquatic Center would include a competition pool, an inclusive locker room building with showers and lockers, boys and girls locker rooms, offices, bleachers with seating for approximately 500 spectators, and related site improvements including shade structures, lighting, scoreboard, and security features. The facility would serve physical education classes, competitive swim and water polo programs, Special Olympics, students with special needs, and community swim programs.
10.	**Project Entitlements:**	District Board Approval
11.	**California Native American Consultation Requests**	Pursuant to PRC § 21080.3.1, the District contacted the Native American Heritage Commission (NAHC) for a Sacred Lands File search and distribution of consultation notices to traditionally and culturally affiliated tribes. A reply was received on August 26, 2025 reporting that the SLF search was positive. On September 26, 2025 LBUSD sent consultation letters to the appropriate contacts.
12.	**Date Initial Study Completed:**	October 29, 2025

1.1 Purpose of the Study

This IS examines the potential effects of the Proposed Project on the environment. The Proposed Project assessed within this IS, described in Section 2, includes provisions to address known environmental concerns. The project description, including these provisions, provides the baseline for which environmental impacts are analyzed in Section 3.

This IS was prepared in accordance with CEQA and the CEQA Guidelines, as amended, to determine if the Project could have a significant impact on the environment. The purpose of this IS, as described in the CEQA Guidelines Section 15063(c)(1)[4] is to provide the lead agency with information to use as the basis for deciding whether to prepare an EIR or MND or ND.

This IS is organized into the following sections:

Section 1. Introduction: Provides an overview of the Proposed Project, location, sponsor, when the IS was completed, environmental resources potentially affected by the Proposed Project, and the significance determination of the Proposed Project on the environment by the Lead Agency (the District).

[4] 2025 CEQA Guidelines

Section 2. Project Description: Includes a detailed description of the Proposed Project and background information.

Section 3. Environmental Checklist and Discussion: Contains the Environmental Checklist form and a discussion of environmental issues.

Section 4. Preparers

Section 5. References

1.2 Environmental Factors Potentially Affected

Impacts to the resources listed below were evaluated using the Environmental Checklist included below However, only the environmental factors that are checked could be potentially affected by the Proposed Project and involve impacts that require mitigation to reduce the impacts to less-than-significant levels. The resource areas that are unchecked were determined to have a less-than-significant impact or no impact, even without mitigation.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☒ Air Quality
- ☐ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☐ Geology and Soils
- ☒ Greenhouse Gas Emissions
- ☐ Hazards and Hazardous Materials
- ☐ Hydrology and Water Quality
- ☐ Land Use and Planning
- ☐ Mineral Resources
- ☒ Noise/Vibration
- ☐ Population and Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation and Circulation
- ☒ Tribal Cultural Resources
- ☐ Utilities and Service Systems
- ☐ Wildfire
- ☒ Mandatory Findings of Significance

1.3 Significance Determination

On the basis of the environmental evaluation presented in Section 3, as the representative for the Lead Agency:

☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project design and project-specific mitigation measures described in Section 3 have been agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION is recommended to be adopted.

☒ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Signature	Date
Dana Grudem, Senior Project Manager	Long Beach Unified School District
Printed Name	Lead Agency

2 Project Description

The District proposes to construct a new Aquatic Center at Millikan HS to replace outdated facilities and expand aquatic program capacity (Proposed Project). The Proposed Project would involve demolition of Building 700/3000 and adjacent portable buildings and construction of a new Aquatic Center that includes a competition pool, an inclusive locker room building with showers and lockers, boys and girls locker rooms, offices, bleachers with seating for approximately 500 spectators, and related site improvements including, but not limited to: shade structures, lighting, scoreboard, and security features. The Proposed Project site (Project site) is located at 2800 Snowden Avenue in the City of Long Beach (City), Los Angeles County, California. The new Aquatic Center would serve Millikan HS's physical education program, competitive swim and water polo teams, students with special needs, Special Olympics, and community swim programs. The Proposed Project is required to undergo an environmental review pursuant to CEQA.

As the Lead Agency charged with approving and executing the Proposed Project, the District is required to consider the Proposed Project's potential environmental consequences and determine if its benefits outweigh any significant effects.

2.1 Location and Existing Setting

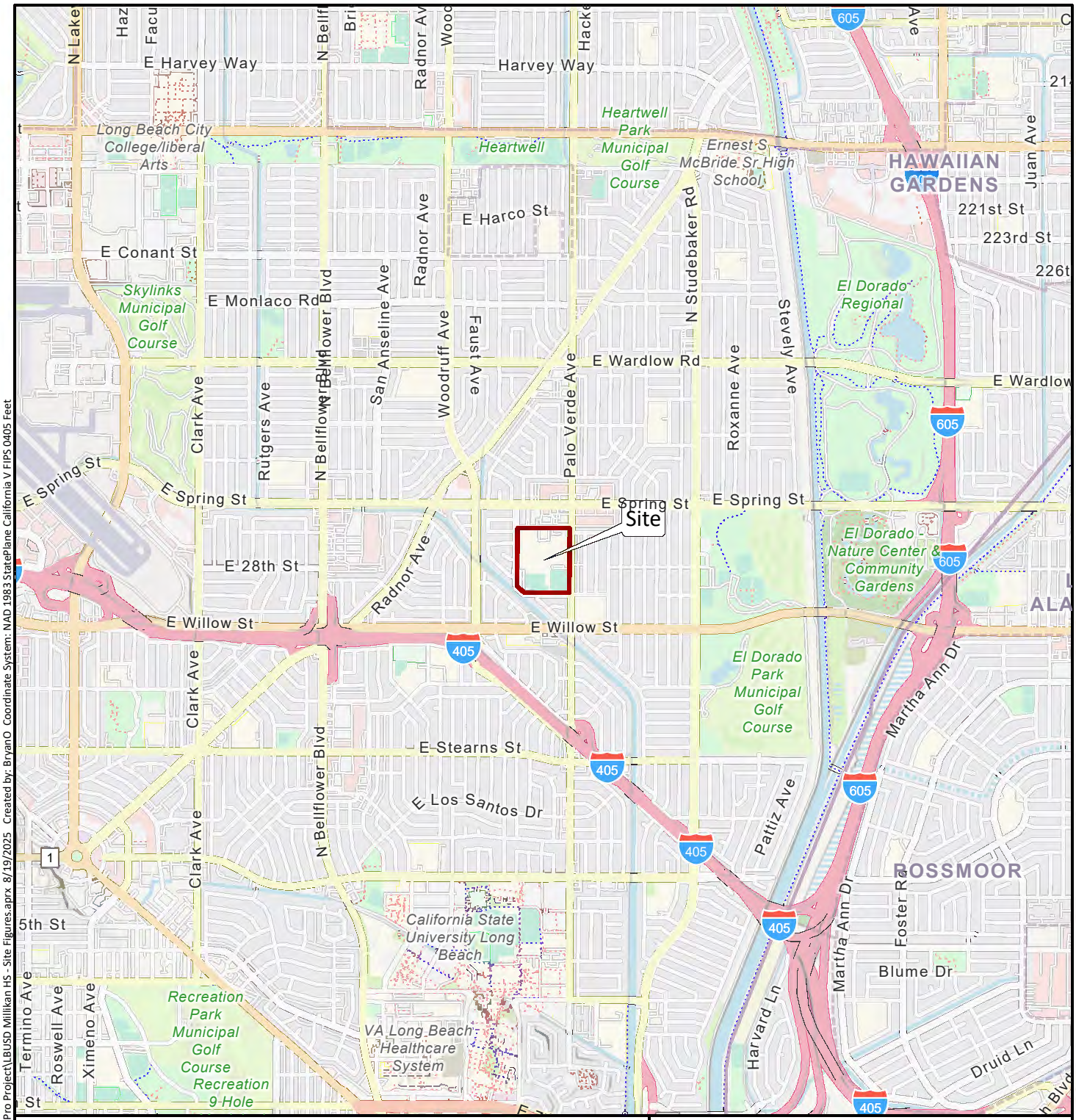
The Project site is located at 2800 Snowden Avenue in the City of Long Beach, Los Angeles County, California. The Millikan HS campus encompasses approximately 34.4 acres and includes 10 permanent buildings, 28 portable classrooms, one modular building, and associated athletic fields and facilities. The Project site includes the entire Millikan HS campus, parking areas, and athletic facilities, with the Aquatic Center improvements proposed within the existing developed campus footprint.

The Project site is bounded by East Belen Street to the north, Palo Verde Avenue to the east, East Barbanell Street to the south, and Snowden Avenue to the west. Surrounding land uses include residential neighborhoods to the east, west, and south, and commercial uses to the north along Spring Street. Regional access to the Project site is provided by Interstate 405, located approximately 0.5 miles south of the campus. **Figures 1** and **2** show the Project site in its regional and local contexts.

2.1.1 Existing Land Uses

Facilities

The District currently operates the Project site as Millikan HS, which serves grades 9 through 12 on a 34.4-acre campus. The campus includes 10 permanent buildings, 28 portable classrooms, one modular building, and associated athletic fields and facilities. Existing on-site facilities include classroom buildings, a gymnasium, administrative and support buildings, parking areas, and outdoor athletic facilities such as baseball and softball fields, football field and track, basketball courts, and tennis courts.



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1 inch = 3,000 feet

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Legend

Site Boundary

Base Map: Open Street Maps

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CLIENT:	LBUSD
PROJECT:	Millikan High School 2800 Snowden Ave. Long Beach, CA
PROJECT NUMBER:	S051.008.C002

Site Location

FIGURE 1

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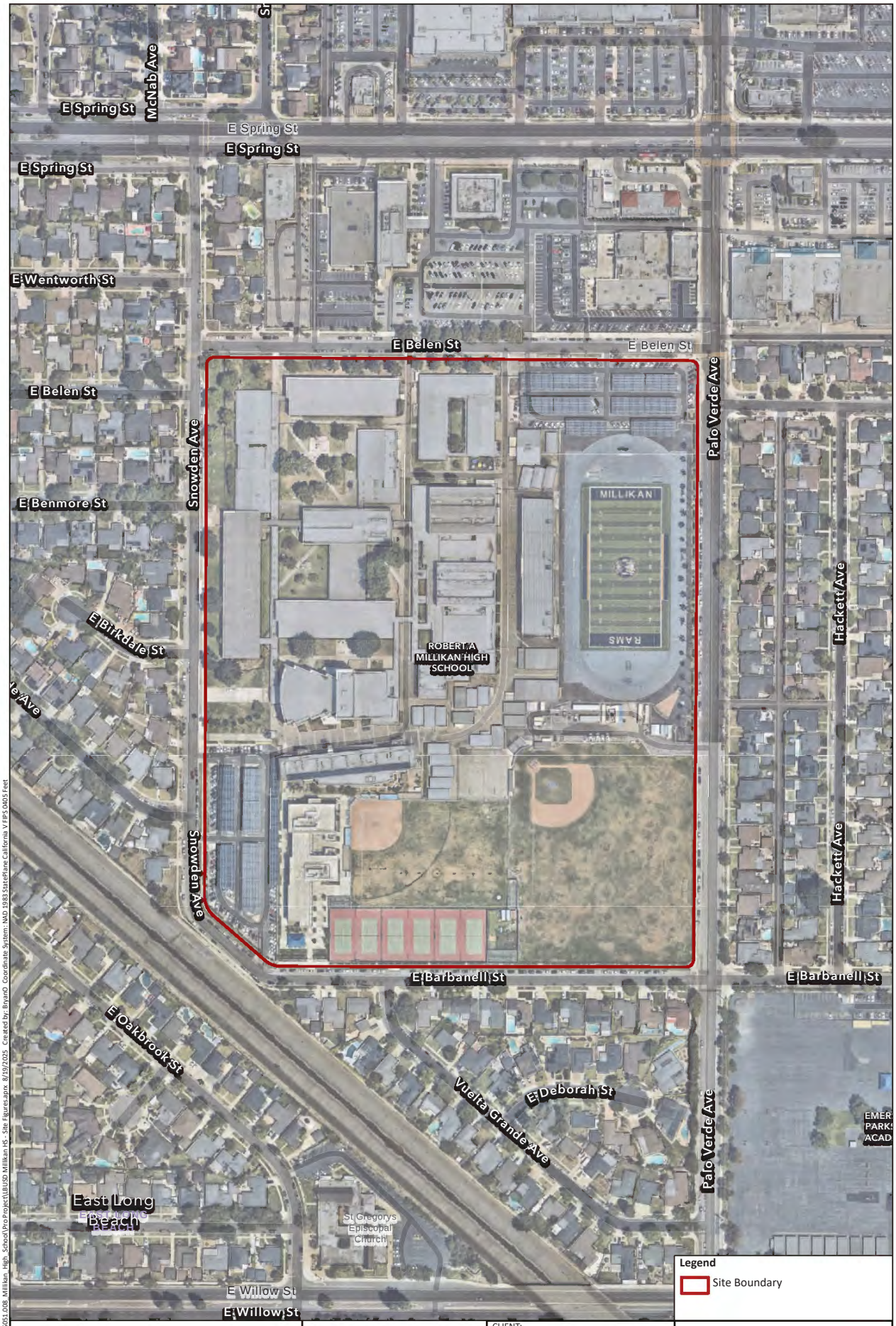

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1 inch = 200 feet

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CLIENT:	LBUSD
PROJECT:	Millikan HS 2800 Snowden Ave, Long Beach, CA
PROJECT NUMBER:	S051.008.C002

Project Site

FIGURE 2

The area proposed for redevelopment as part of the Proposed Project currently contains Building 700/3000 and adjacent portable buildings, which would be demolished to accommodate the new facility. The remainder of the campus would remain in use for educational and athletic purposes. **Figure 2** shows the existing site facilities from an aerial view.

Access and Parking

Access to Millikan HS is provided from Snowden Avenue, with additional perimeter access from adjacent streets including East Belen Street to the north, Palo Verde Avenue to the east, and East Barbanell Street to the south. On-site parking areas are located along the northeastern and southwestern portions of the campus and are accessible from East Belen Street and Snowden Avenue, respectively.

The campus does not have a designated pickup and drop-off area; however, curbside access and on-street parking are available along the surrounding roadway network. Parking lots and circulation routes would continue to operate as under existing conditions, and the Proposed Project would not substantially alter vehicle access or parking supply on the campus.

Operations

The District serves approximately 63,557 students in transitional kindergarten through grade 12 and operates 84 schools (15 high schools, 21 middle schools and K-8,46 elementary schools, 1 K-12 school, and 1 early learning school)[5]. Millikan HS begins at 8:25 a.m. Monday through Friday. Classes are dismissed at 1:45 p.m. on Wednesday and at 3:30 p.m. on Monday, Tuesday, Thursday, and Friday[6].

The total enrollment at Millikan HS is approximately 3,369 students[7]. The HS offers several specialized Small Learning Communities, including PEACE (Personal Success through Empowerment, Academic Achievement, Conflict Resolution, and Ethics), QUEST (Quality Education in Science and Technology), COMPASS (Community of Musicians, Performers, Artists, and Social Scientists), SEGA (Science, Engineering, and Green Academy), and the MBA (Millikan Business Academy)[8]. These academies provide thematic pathways that expand educational opportunities for students while preparing them for college, careers, and civic engagement.

In addition to its academic programs, Millikan HS regularly hosts Special Olympics events and supports community swim programs that serve students with special needs and local residents. The Proposed Project would expand Millikan HS's ability to provide modern facilities for physical education, competitive athletics, inclusive programs, and community partnerships (LBUSD Bond Program Fact Sheet).

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[5] LBUSD - List of Schools

[6] Millikan High School Bell Schedule

[7] Ed Data - Millikan High

[8] Millikan High School - Pathways

2.1.2 Surrounding Land Uses

The Project site is in a residential community with primarily single-family neighborhoods and nearby commercial uses. It is surrounded by the land uses described below.

- North: East Belen Street, commercial buildings and single-family residences.
- East: Palo Verde Avenue, single-family residences.
- South: East Barbanell Street, single-family residences.
- West: Snowden Avenue, single-family residences, with the Los Cerritos Channel adjacent to the southwestern corner of the campus.

2.2 Existing Zoning and General Plan

A parcel search on the City of Long Beach Zoning Map indicates that the parcel, which includes the Project site, is zoned Institutional (I). The I zone is intended to accommodate public and private schools, colleges, hospitals, government facilities, and other community-serving uses[9]. Surrounding parcels to the north, south, east, and west are generally zoned for single-family residential (R-1-N and R-1-S) uses, with commercial zoning designations along major corridors such as Spring Street and Palo Verde Avenue[10].

"Permitted Primary Use" is a use allowed by right, subject to compliance with the regulations of the respective zoning district in which the use is located, including applicable site development standards. As a public-school facility, the District may exempt the Project site from local zoning under its authority pursuant to California Government Code § 53094[11]. The current use of the Project site as a high school would remain under the Proposed Project; thus, no rezoning would be required.

2.3 District Action Requested

The Initial Study (IS) evaluates the potential environmental effects associated with the Proposed Project and provides the basis for preparation of an Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA). The EIR will present a comprehensive analysis of the Project's potentially significant environmental impacts, feasible mitigation measures, and alternatives. Upon completion of the environmental review process, the Long Beach Unified School District (District) Board of Education, acting as the CEQA Lead Agency, will consider certification of the EIR prior to taking action to approve the Proposed Project. Certification of the EIR by the Board of Education will include adoption of a Mitigation Monitoring and Reporting Program (MMRP) to ensure implementation of all feasible mitigation measures identified in the EIR.

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[9] Long Beach Municipal Code - Zoning

[10] City of Long Beach Zoning and Land Use Map

[11] Government Code Section 53094

2.4 Project Description

2.4.1 Proposed Project

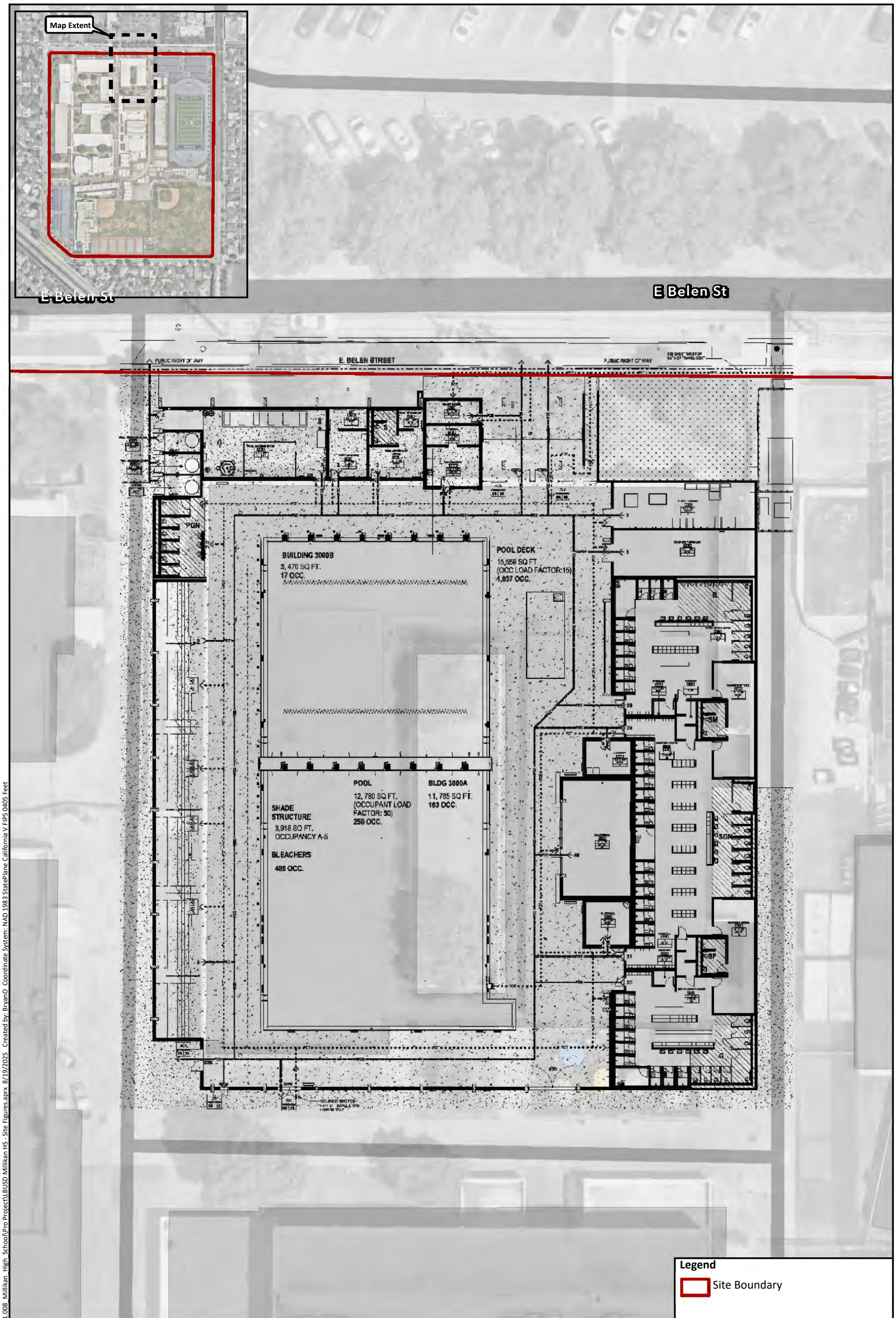
Millikan HS is located at 2800 Snowden Avenue in the City of Long Beach, Los Angeles County, California, on a campus of approximately 34.4 acres. The Proposed Project consists of the demolition of Building 700/3000 and adjacent portable buildings and construction of a new Aquatic Center within the existing developed campus footprint (**Figure 3**).

The Aquatic Center would feature a Myrtha modular competition pool measuring approximately 51.5 meters by 22.9 meters, equipped with a 1.5-meter-wide movable bulkhead to accommodate multiple program uses. The pool would be surrounded by a 30-foot-wide pool deck. A new single-story support building would include:

- An inclusive locker room facility (gender-neutral) with more than 15 changing stalls, 15 shower stalls, and approximately 236 lockers;
- A boys locker room with ten changing stalls, ten shower stalls and approximately 84 lockers;
- A girls locker room with ten changing stalls, ten shower stalls and approximately 84 lockers;
- A coach/administrative office area with four workspaces;
- Restrooms;
- A washer/dryer room;
- Secure chemical storage rooms;
- A mechanical room sized to accommodate a regenerative media filtration system;
- Electrical rooms;
- A pool attendant’s office with restroom and shower
- Support buildings for the pool; and
- Equipment storage enclosures/rooms.

Ancillary site improvements would include bleachers with capacity for 500 spectators, shade structures over spectator seating, a 500-square-foot snack bar/ticket booth, Sports LED stadium lighting, an electronic LED scoreboard with integrated sound system, perimeter security walls, outdoor showers, and surveillance cameras.

The Proposed Project would support physical education classes of 54 to 100 students, competitive swim and water polo programs, Special Olympics events, students with special needs, and community swim programs. Construction would also include site preparation, grading, utility connections (storm drain, sewer, water, electrical), circulation improvements, and landscaping. The design of the new aquatic facilities will consider contextual compatibility with the surrounding campus in terms of materials, scale, and massing.



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1 inch = 30 feet

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CLIENT:	LBUSD
PROJECT:	Millikan HS 2800 Snowden Ave, Long Beach, CA
PROJECT NUMBER:	S051.008.C002

Site Plan

FIGURE 3

File: N:\GIS\Pri\S051 LBUSD\S051.008_Millikan_High_School\Pro Project\LBUSD Millikan HS - Site Figures.aprx 8/19/2025 Created by: BryanO Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet

Access, Circulation, and Parking

The existing access and circulation pattern at Millikan HS would remain unchanged under the Proposed Project. Vehicular access to the campus would continue to be provided primarily from Snowden Avenue, with perimeter access from E. Belen Street, Palo Verde Avenue, and E. Barbanell Street. Parking lots on the northeast and southwest sides of the campus would not be reconfigured as part of the Proposed Project. The northwestern parking lot would provide parking for events at the Aquatic Center.

Bicycle and pedestrian access to the campus would also remain unchanged, with students and visitors continuing to use existing sidewalks and designated crosswalks adjacent to the school.

Emergency vehicle access would be maintained through existing gated entrances along Snowden Avenue and other perimeter gates that provide access to the athletic fields. Construction staging and contractor access would be confined to designated areas within the campus, and emergency access would remain available throughout construction.

Perimeter and Security

The Proposed Project would incorporate perimeter and security improvements as part of the Aquatic Center design. A solid perimeter wall would be constructed around the Aquatic Center to provide privacy and restrict unauthorized access. Security enhancements would include installation of surveillance cameras, controlled access points, and site lighting. These measures are intended to ensure the safety of students, staff, and visitors while maintaining appropriate separation between the Aquatic Center and surrounding campus uses.

Stormwater

Stormwater improvements would comply with the City of Long Beach Low Impact Development (LID) standards, the State Construction General Permit (Order WQ 2022-0057-DWQ NPDES NO. CAS000002), and applicable National Pollutant Discharge Elimination System (NPDES) requirements. The site design incorporates a treatment train of Best Management Practices (BMPs) sized for the water quality design storm.

Runoff from the Aquatic Center building roof, pool deck, and surrounding hardscape would be directed to bioretention planters and landscaped swales to provide infiltration and pollutant removal through engineered soil media and vegetation. Pretreatment measures, including curb cuts, catch basin inserts (BMP-4), and a hydrodynamic separator, would capture trash, sediment, and gross pollutants before flows enter the bioretention areas.

Where infiltration capacity is limited, overflow would be routed to underground dry wells and storm drain connections designed to safely convey excess flows to the municipal storm drain system. These systems include inspection ports and cleanouts to facilitate long-term maintenance.

In addition, pool water management systems would isolate chlorinated pool water from the stormwater drainage network, with dedicated discharge pathways that prevent accidental releases to the storm drain.

Together, these BMPs would reduce runoff volumes, promote infiltration, improve water quality through filtration and sedimentation, and ensure compliance with both City of Long Beach LID requirements and the District's NPDES stormwater obligations.

Lighting

A comprehensive lighting system would support evening and early morning use of the Aquatic Center. Sports LED stadium lights would be mounted on poles strategically located around the pool deck and spectator seating, providing uniform illumination designed in accordance with standards set by the Illuminating Engineering Society of North America. Fixtures would be full cutoff and shielded, minimizing glare and spillover into adjacent properties (refer to **Appendix A**).

Additional pedestrian-scale LED fixtures would be installed along circulation pathways, building entrances, locker room areas, and the snack bar/ticket booth. These fixtures are designed to enhance safety and visibility while maintaining energy efficiency.

The lighting system is designed with programmable controls, allowing dimming, zoning, and time-based scheduling consistent with Title 24 requirements. Emergency egress lighting would be integrated into the support building to comply with California Building Code (CBC) and California Division of the State Architect (DSA) standards. Electrical conduits for lighting would be routed underground to reduce clutter and enhance site aesthetics.

The LED scoreboard would include integrated lighting and a sound system designed to meet City of Long Beach noise and illumination performance standards. Photometric analysis conducted for the design ensures that lighting levels are sufficient to accommodate California Interscholastic Federation regulations for swim and water polo events, community programming, and instructional use, while avoiding excessive skyglow or off-site light trespass.

2.4.2 Student Relocation

Construction of the Proposed Project would occur entirely within the Millikan HS campus, limited to the area currently occupied by Building 700/3000 and adjacent portable buildings. The construction zone would be secured with perimeter fencing to restrict access and ensure student and staff safety.

During construction, students would continue to attend classes on campus, and all instructional activities would be accommodated within existing facilities outside the construction area. The District would phase construction activities as necessary to minimize disruption to academic and athletic programs.

Consistent with other aquatic center projects completed by the District, no off-site relocation of students or installation of temporary portable classrooms would be required. Regular campus operations, including classroom instruction and extracurricular activities, would continue without interruption, with construction activities isolated from educational spaces.

2.4.3 Construction

Construction of the Proposed Project would occur over an estimated 18 to 24 months, beginning with the demolition of Building 700/3000 and adjacent portable buildings. Work would be phased to include demolition, site preparation, grading, utility installation, building and pool construction, and final finishes/landscaping. Demolition would include removal of Building 700/3000 and adjacent portable classrooms, utility connections, pavement, and associated hardscape. Work would be scheduled to occur during normal construction hours, generally 7:00 a.m. to 7:00 p.m. Monday through Friday, consistent with the City of Long Beach Noise Ordinance. No nighttime or weekend construction is anticipated.

All construction activities would be confined to the Millikan HS campus. The construction area would be secured with perimeter fencing to restrict access and ensure the safety of students, staff, and visitors. Construction staging and material laydown would occur within designated areas of the campus near the project footprint. Haul routes for construction vehicles would use Snowden Avenue and arterial roadways such as Palo Verde Avenue and Spring Street to minimize disruption to surrounding residential neighborhoods.

Construction activities would include demolition, site grading, utility connections, building construction, pool installation, and installation of site improvements including lighting, perimeter walls, and landscaping. Standard construction equipment such as excavators, backhoes, loaders, cranes, haul trucks, pavers, and concrete mixers would be used. Construction would generate a temporary increase in truck trips for soil export, demolition debris removal, and delivery of building materials.

Site Preparation and Grading

Grading would include excavation for the pool, underground utilities, and bioretention facilities. Excavated materials unsuitable for reuse would be exported, while imported engineered fill would be compacted to meet geotechnical recommendations (90–95% relative compaction). All grading and excavation activities would comply with California Division of Occupational Safety and Health (Cal/OSHA) trench safety standards for excavations greater than 5 feet.

Utility Installation

New utility connections for sewer, storm drain, domestic water, fire service, natural gas, telecommunications, and power would be extended underground from existing campus connections. Utility tie-ins would be field verified by potholing and coordinated with the City of Long Beach.

Construction Best Management Practices

Construction activities would be subject to the NPDES Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002) and would implement a Stormwater Pollution Prevention Plan (SWPPP). BMPs would include:

- Perimeter silt fencing, fiber rolls, and inlet protection;
- Stabilized construction entrances and designated haul routes;

- Covered stockpiles and dust suppression by water trucks;
- Concrete washout areas; and
- Spill prevention and hazardous materials containment.

Noise, Dust, and Traffic Controls

Contractors would be required to comply with the City of Long Beach noise ordinance, which restricts higher-intensity construction activities to permitted daytime hours. Construction traffic would be staged within fenced laydown areas on campus, with contractor parking confined to designated zones. Emergency vehicle access would always remain available through perimeter gates. The Proposed Project will comply with all applicable South Coast Air Quality Management District (SCAQMD) rules, including Rule 403 (Fugitive Dust). Accordingly, the following BMPs will be implemented during construction:

- Dust suppression: All demolition and construction areas will be watered periodically to minimize fugitive dust.
- Track-out control: All visible mud or dirt tracked onto adjacent public roads will be removed using wet power vacuum sweepers as needed; dry sweeping will be prohibited.
- Vehicle speed limits: Vehicle speeds on unpaved areas will be limited to 15 miles per hour.
- Surface stabilization: Building pads will be paved, seeded, or stabilized as soon as possible after grading.
- Truck management: Haul trucks transporting soil, sand, or other loose materials will be covered or will maintain adequate freeboard to prevent spillage.
- Completion of paving: All roadways, driveways, and sidewalks will be completed or stabilized as soon as feasible to minimize exposed surfaces.

Worker and Campus Safety

The contractor would provide fencing, signage, and security measures to separate construction zones from active campus operations. Regular safety coordination meetings would be conducted with District staff. Emergency access to the campus and surrounding streets would be maintained at all times.

2.5 Comparison with Land Use Policy

2.5.1 General Plan Consistency

Because the existing HS use would remain, the Proposed Project is consistent with the City of Long Beach General Plan Land Use Element, which designates the Project site as Institutional (I). The Aquatic Center represents an enhancement of an existing educational and community-serving facility, consistent with the General Plan designation.

2.5.2 Airport Influence Area

The Project site is outside of an airport influence area as designated by the Long Beach Airport Land Use Compatibility Plan. The nearest airport, Long Beach Airport, is located approximately 2.5 miles northwest of the Project site.

2.5.3 Zoning and Development Code Consistency

The Project site is zoned as I under the City of Long Beach Zoning Regulations. No change in zoning would be required to implement the Proposed Project. As a public-school facility, the District may also exercise its authority under California Government Code § 53094 to exempt school facilities from local zoning ordinances.

2.6 Regulatory Requirements, Permits, and Approvals

The Proposed Project may include agency review and approvals from the following entities:

- **California Department of Education (CDE)** – Review for compliance with school site safety, circulation, and environmental health requirements under Title 5 of the California Code of Regulations.
- **Division of the State Architect (DSA)** – Review and approval of building design and construction plans for structural, fire/life safety, accessibility, and energy compliance pursuant to Title 24 of the California Code of Regulations.
- **California Regional Water Quality Control Board, Los Angeles Region (RWQCB)** – Review and issuance of coverage under the Construction General Permit (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) for stormwater discharges associated with construction activities; potential review of pool drainage under the Municipal Separate Storm Sewer System (MS4) Permit.
- **South Coast Air Quality Management District (SCAQMD)** – Review of construction emissions under CEQA and enforcement of applicable air quality regulations, including Rule 403 (Fugitive Dust Control) and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities).
- **City of Long Beach Department of Public Works** – Review of utility connections, sidewalk/curb improvements, right-of-way encroachments, and grading/drainage coordination within city-owned infrastructure.
- **City of Long Beach Department of Development Services** – Coordination regarding consistency with the City of Long Beach General Plan, zoning, and local development standards (advisory role only, since school districts are exempt from local land use permitting under Government Code §53094).
- **California State Water Resources Control Board (SWRCB)** – Enrollment and compliance reporting under the Stormwater Multiple Application and Report Tracking System (SMARTS) for Construction General Permit coverage.

- **California Office of Historic Preservation (OHP)** – Consultation as part of CEQA review for demolition of a structure determined eligible for the California Register of Historical Resources.
- **Native American Tribes** – Consultation pursuant to Assembly Bill 52 (AB 52) and Public Resources Code §21080.3.1 et seq. regarding potential impacts to tribal cultural resources.
- **California Department of Toxic Substances Control (DTSC)** – Potential review under the School Site Cleanup Program or confirmation of environmental due diligence consistent with Education Code §17210 et seq., if soil disturbance exceeds thresholds or hazardous materials are encountered.

3 Environmental Checklist

Pursuant to 14 CCR § 15063[12], an IS should provide the lead agency with sufficient information to determine whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND), or MND for a proposed project. The CEQA Guidelines state that an IS may identify environmental impacts by using a checklist, matrix, or other method, provided that conclusions are briefly explained and supported by relevant evidence. If it is determined that a particular physical impact to the environment could occur, then the checklist must indicate whether the impact is "Potentially Significant" and requires further analysis within the EIR or "Less Than Significant" and no further analysis in the EIR is required. Findings of "No Impact" for issues that can be demonstrated not to apply to a proposed project do not require further discussion in the EIR.

This IS was prepared to assess the potential environmental impacts of the Proposed Project in accordance with CEQA to provide California permitting agencies with sufficient information to determine whether to prepare an NOE, ND, MND, or EIR for the Proposed Project.

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3.1 Aesthetics

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

3.1.1 Regulatory Setting

CEQA provides thresholds for evaluating aesthetic impacts, including scenic vistas, scenic resources, visual character, and light/glare. California Streets and Highways Code Section 260 et seq.[13] establishes the State Scenic Highway System to protect scenic resources along designated routes.

The California Energy Code (Title 24, Part 6)[14] establishes statewide requirements for outdoor lighting, including shielding, maximum power allowances, and automatic control measures to limit light trespass and reduce energy use.

3.1.2 Environmental Setting

The Project site is located within the existing Millikan High School campus at 2800 Snowden Avenue in the City of Long Beach. The approximately 34.4-acre campus occupies a developed parcel within an established urban neighborhood characterized by institutional, residential, and commercial uses. The

[13] California Streets and Highways Code Section 260

[14] 2022 Building Energy Efficiency Standards, Title 24, Part 6

surrounding land uses include single-family residences to the east, west, and south, and commercial developments to the north along East Belen Street.

The Project site currently supports Building 700/3000, multiple portable classrooms, paved pedestrian walkways, and perimeter fencing typical of public-school facilities. The site is visually consistent with the surrounding campus setting, which includes one- to two-story classroom buildings, athletic fields, and hardscaped parking and pedestrian circulation areas.

Topographically, the Project site and surrounding area are flat and fully urbanized, with minimal topographic relief. The Project site is not located within or adjacent to a designated scenic vista, state scenic highway, or other officially designated scenic resource, as defined by the California Department of Transportation (Caltrans) State Scenic Highway Program (Caltrans 2025). The nearest eligible state scenic highway, State Route 1 (Pacific Coast Highway), is located more than 2 miles south of the campus and is not visible from the Project site.

3.1.3 Impact Discussion

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

As described in Section 3.1.2, the Project site is located within a fully developed portion of the Millikan High School campus in an urbanized area of Long Beach and the closest (eligible) scenic highway is over 2 miles from the Project site. The site and surrounding area are flat and contain no natural landforms or open spaces that provide scenic views. The Project would not substantially alter the visual character of any public viewing areas or block views of recognized scenic resources. Therefore, the Project would not have a substantial adverse effect on a scenic vista, and no impact would occur. No further analysis is required.

Impact Designation: No Impact.

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

The Project site is not adjacent to a State-designated or eligible scenic highway, and no officially designated scenic corridors occur within the vicinity of the campus (Caltrans 2025). The surrounding environment is fully urbanized and does not contain notable natural landscape features such as prominent ridgelines, coastal views, or other scenic resources visible from public vantage points. No impact would occur to scenic natural resources or historic buildings within a state scenic highway. No further analysis is required.

Impact Designation: No Impact.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Proposed Project is in an

urbanized area, would the Proposed Project conflict with applicable zoning and other regulations governing scenic quality?

The Proposed Project is located within a fully urbanized portion of the City of Long Beach and is currently developed with school facilities and associated hardscape. The Proposed Project would replace the existing Building 700/3000 and adjacent portable buildings with a new Aquatic Center designed to serve the high school and community programs. The new facilities would be consistent with the overall architectural style, height, and massing of existing campus buildings and would not introduce visual elements that are incompatible with the surrounding residential or commercial uses. The Proposed Project is not located within or adjacent to a designated scenic corridor or vista, and no scenic resources are visible from the site.

During construction, temporary visual changes such as the presence of equipment, construction fencing, and staging areas would be visible from adjacent streets and properties. These effects would be short-term and typical of construction activity in an urban school environment. Upon completion, the new Aquatic Center would improve the visual quality of the site through modernized design, updated landscaping, and coordinated materials consistent with the Institutional land use designation and the City's zoning standards.

Because the Proposed Project would occur in a developed urban setting, would not affect any scenic resources, and would be compatible with the existing visual character of the campus and surrounding area, the Project would not substantially degrade the existing visual character or quality of public views. Therefore, impacts related to visual character and scenic quality would be less than significant, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

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

The proposed Aquatic Center would introduce new outdoor lighting for the pool, surrounding deck, and an LED scoreboard. The project design incorporates applicable building, electrical, and lighting design standards (e.g. shielding, cutoff fixtures, aiming controls) to ensure that light spill, glare, and skyward emission remain within acceptable levels. A detailed lighting design prepared by Musco Sports Lighting, LLC (**Appendix A**) demonstrates that illumination levels would be contained within the facility and would not result in substantial off-site light spill or glare.

According to the Musco report, the lighting system includes four 60-foot poles with twelve fully shielded TLC-LED-1200 fixtures. During active use, the system would provide an average maintained illumination of approximately 56 foot-candles (fc) across the pool and 35 fc across the deck. A reduced "egress mode," used after hours for safety lighting, would average 12 fc with only four fixtures operating. The modeling shows that light spill beyond the facility boundary would average only 0.015 fc at 3 feet above ground and reach a maximum of 0.14 fc at 5 feet—levels comparable to natural moonlight and well below commonly recognized thresholds for light trespass.

The fixtures are precision-aimed, fully shielded, and downward-directed to eliminate upward and outward light. As a result, illumination is confined to the athletic and spectator areas, with no measurable glare or skyglow visible from nearby roadways, commercial properties, or residences.

Based on the Musco lighting results presented in **Appendix A**, the project's lighting design would not create a new source of substantial light or glare that would adversely affect day- or nighttime views in the surrounding area. Therefore, a less-than-significant impact would occur, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 (DOC) 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 (CAL FIRE) regarding the state's inventory of forest land, including the Forest Range Assessment Project and Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB). Would the Proposed Project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC § 12220(g)), timberland (as defined by PRC § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Environmental Setting

The Project site is located in the City of Long Beach in a fully urbanized environment. The site itself is developed with permanent school buildings, portable classrooms, paved parking areas, and associated landscaping.

According to the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP), the Project site and its surroundings are designated as Urban and Built-Up Land (DOC 2025). No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance occurs on or adjacent to the site. City of Long Beach zoning (City of Long Beach 2025a) does not designate any lands within or near the Project site for agricultural production.

Similarly, the Project site is not zoned for agricultural use or timberland production. The City of Long Beach zoning map identifies the site as an institutional/educational use (City of Long Beach 2025a), consistent with its long-standing operation as a high school. The site does not support forest land, timberland, or Timberland Production and no forest resources occur within the surrounding urban area.

3.2.2 Impact Discussion

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

The Proposed Project is on the existing Millikan HS campus and located within a completely urbanized environment. The Proposed Project would replace an existing historic-era classroom building and portable schoolrooms with an Aquatic Center. The Project site has no agricultural or farm use on it, nor is there agricultural or farm use in its immediate proximity, no farmland conversion would occur and no further analysis is required.

Impact Designation: No Impact.

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

The Project site is zoned Institutional, which is a designation for existing school sites (City of Long Beach 2025a). The Proposed Project would not conflict with agricultural zoning or a Williamson Act contract as it is not zoned for agricultural use. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

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

Development of the Proposed Project would not conflict with existing zoning for forest land, timberland, or Timberland Production as no forest or timberland is present on the Project site. Forest land is defined as "land that can support 10-percent native tree cover of any species, including hardwoods, under

natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits" (PRC § 12220(g)).[15] Timberland is defined as "land…which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees" (PRC § 4526).[16] The Project site is zoned as I (Institutional). Upgrading a portion of the existing Millikan HS with the Aquatic Center would not impact forest land. No further analysis is required.

Impact Designation: No Impact.

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

On-site vegetation is limited to scattered ornamental trees and shrubs. Construction of the Proposed Project would not result in the loss or conversion of forest land and development would not cause a loss of forest land. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

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

Maps from the California Important Farmland Finder (DOC 2025) indicate that there is no important farmland or forest land on or within the surrounding vicinity of the Project site.[17] No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

[15] PRC § 12220(g), Definition of Forest Land

[16] PRC § 4526, Definition of Timberland

[17] DOC, California Important Farmland Finder

3.3 Air Quality

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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 Proposed Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☒	☐	☐	☐

3.3.1 Regulatory Setting

Federal and State

Air quality in the area is a function of the criteria air pollutants (CAPs) emitted locally, the existing regional ambient air quality, and the meteorological and topographic factors that influence the intrusion of pollutants into the area from sources outside the immediate vicinity. The Project site's air quality is based on the CAPs meeting the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). The 1977 federal Clean Air Act (CAA) required the U.S. Environmental Protection Agency (EPA) to identify NAAQS to protect public health and welfare. NAAQS have been established for the six "criteria" air pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM), and lead. PM is designated into two size classes, coarse (10 micrometers or less in diameter [PM_{10}]) and fine (2.5 micrometers or less in diameter [$PM_{2.5}$]). The smaller size of $PM_{2.5}$ allows particle to enter the cardiovascular system and cause more serious health problems. For this reason, the NAAQS sets a more stringent standard on $PM_{2.5}$ in ambient air quality. Pursuant to the 1990 CAA Amendments (CAAA), the EPA has classified air basins (or

portions thereof) as either “attainment” or “nonattainment” for each CAP, based on whether the NAAQS have been achieved.

California has adopted ambient standards that are more stringent than the federal standards for the CAPs. Under the California Clean Air Act, patterned after the federal CAA, areas have been designated as attainment or nonattainment with respect to CAAQS.

Local

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) regulates air emissions in the South Coast Air Basin, including Long Beach. SCAQMD’s Air Quality Management Plan (AQMP) sets forth strategies to achieve NAAQS and CAAQS. SCAQMD Rule 403 requires fugitive dust control during construction, and Rule 402 prohibits nuisance emissions that could cause injury or discomfort. The City of Long Beach implements SCAQMD requirements through its project review and permitting processes.

3.3.2 Environmental Setting

The primary factors that determine air quality are the locations of air pollutant sources and the amounts of pollutants emitted. Meteorological and topographical conditions, however, are equally important. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants.

Two types of air pollutants affect air quality in Long Beach: CAPs and Toxic Air Contaminants. Heavy commute patterns have resulted in poor regional air quality levels and nonattainment for ozone, $PM_{2.5}$, and PM_{10} under both federal and state standards for the South Coast Air Basin. Current emissions are typical for a large high school campus and include vehicle exhaust from staff, students, and visitors; natural gas combustion for heating; and maintenance equipment. Interstate 405 is located approximately 0.4 miles south of the Project site, State Highway 605 is located approximately 1.5 miles east of the Project site, and the Long Beach Airport is approximately 1.45 miles to the west. The region’s attainment status for the NAAQS is listed in **Table 1**. SCAQMD is an area in nonattainment for ozone, $PM_{2.5}$, and PM_{10}.

Table 1. Regional Attainment Status for CAAQS and NAAQS

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O_3)	8 Hour	0.070 ppm	Nonattainment	0.070 ppm Primary same as secondary	Nonattainment
	1 Hour	0.09 ppm (180 µg/m^3)	Nonattainment	N/A	N/A
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment
	1 Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment

Table 1. Regional Attainment Status for CAAQS and NAAQS

Nitrogen Dioxide (NO_2)	1 Hour	0.18 ppm (339 µg/m^3)	Attainment	0.100 ppm	Unclassified
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Attainment
Sulfur Dioxide (SO_2)	24 Hour	0.04 ppm (105 µg/m^3)	Attainment	0.014	Attainment
	1 Hour	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	Attainment
Coarse Particulate Matter 10 Micrometers or Less in Diameter (PM_{10})	Annual	20 µg/m^3	Nonattainment	N/A	N/A
	24 Hour	50 µg/m^3	Nonattainment	150 µg/m^3	Nonattainment
Fine Particulate Matter 2.5 Micrometers or Less in Diameter ($PM_{2.5}$)	Annual	12 µg/m^3	Nonattainment	12 µg/m^3	Unclassified
	24 Hour	N/A	N/A	35 µg/m^3	Nonattainment
Lead	30-day Average	1.5 µg/m^3	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	0.15 µg/m^3	Attainment

Source: EPA 2025

Note:; µg/m^3= micrograms per cubic meter; mg/m^3= milligrams per cubic meter; N/A = not applicable; ppm = parts per million;

The SCAQMD (2023) published CEQA thresholds of significance for projects, shown in **Table 2**. These thresholds are for nitrogen oxides [NOx]), PM_{10}, and $PM_{2.5}$, and apply to both construction and operation impacts. If the daily average or annual emissions of operation-related CAPs or precursors exceeds any of these thresholds, the Proposed Project would result in a cumulatively significant impact.[18]

Table 2. SCAQMD Air Quality Significance Thresholds

Pollutant	**Construction Related Emissions**	**Operations Emissions**
	Average Daily Emissions (lbs/day)	**Average Daily Emissions (lbs/day)**
Nitrogen Oxides (NOx)	100	55

[18] SCAQMD's 2023 CEQA Air Quality Significance Thresholds

Table 2. SCAQMD Air Quality Significance Thresholds

Volatile Organic Compound (VOC)	75	55
Particulate Matter-Coarse (PM_{10})	150	150
Particulate Matter-Fine ($PM_{2.5}$)	55	55
Sulfur Oxides (SOx)	150	150
Lead	3	3
Carbon Monoxide (CO)	550	550

Source:[18]

Note: lbs/day = pounds per day

Additionally, the SCAQMD's Air Quality Significance thresholds reference SCAQMD's Rule 402, which prohibits discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.[18]

Sensitive Receptors

Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors.

Several sensitive receptors in the vicinity of the Project site, including Millikan HS itself and the residences lining the streets around the school, the closest being approximately 100-150 feet from the Project site. The Suncoast Senior Living at Long Beach senior retirement community is located approximately 1,000 feet southwest of the HS, and there are a group of medical centers and hospitals located approximately 4.3 miles to the west.

3.3.3 Impact Discussion

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

The SCAQMD's Air Quality Management Plan (AQMP 2022) is based on growth projections and regional emissions estimates prepared by the Southern California Association of Governments (SCAG). Although the Proposed Project would not increase student enrollment, it would introduce new and more energy-intensive facilities, including a large, heated pool, mechanical filtration and ventilation systems, and evening athletic operations with lighting and spectator use. These elements could increase the project's operational energy and mobile source emissions beyond those assumed for existing conditions and for regional forecasts used in the AQMP.

Additionally, construction activities—particularly demolition of existing buildings, excavation for the pool, and grading—would generate short-term emissions of nitrogen oxides (NO_x), particulate matter (PM_{10} and $PM_{2.5}$), and volatile organic compounds (VOCs) that could exceed SCAQMD thresholds. These emissions may not have been fully represented in regional inventories, and further detailed modeling is required to determine whether the project would be consistent with the AQMP.

Accordingly, because the Proposed Project could result in emissions that exceed regional thresholds or conflict with the assumptions of the AQMP, this impact is considered potentially significant and will be evaluated further in an EIR.

Impact Designation: Potentially Significant Impact

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

The South Coast Air Basin is currently in nonattainment for ozone, PM_{10}, and $PM_{2.5}$ (SCAQMD 2022) Construction of the Proposed Project would generate short-term emissions from demolition, excavation, and operation of heavy-duty equipment. While previous LBUSD projects such as the Lakewood High School Aquatic Center demonstrated emissions below SCAQMD thresholds, that facility did not include demolition of large buildings or excavation to the same depth required for the proposed competition pool. These activities could substantially increase both exhaust and fugitive dust emissions.

Preliminary screening indicates that peak daily emissions of NO_x, PM_{10}, and $PM_{2.5}$ could exceed SCAQMD regional significance thresholds, particularly during demolition and grading phases. Because these pollutants contribute to regional nonattainment conditions, any exceedance would be cumulatively considerable.

Operational emissions associated with pool heating, lighting, filtration, and additional vehicular trips for competitive and community events could also incrementally increase criteria pollutant emissions relative to existing conditions.

Given these factors, the Proposed Project could result in a cumulatively considerable net increase of criteria pollutants, and this impact is therefore considered potentially significant pending detailed quantitative modeling in the EIR.

Impact Designation: Potentially Significant Impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Sensitive receptors near the Project site include single-family residences along Palo Verde Avenue (approximately 100–150 feet east of the proposed Aquatic Center footprint), residences along Snowden Avenue to the west, and the Millikan High School student body itself. Construction activities such as demolition, excavation, and material hauling would generate diesel exhaust and fugitive dust in close proximity to these receptors.

Although implementation of SCAQMD Rule 403 (fugitive dust control) and CARB idling restrictions would reduce emissions, the potential for localized exceedances of SCAQMD Localized Significance Thresholds (LSTs) and short-term exposure to diesel particulate matter (DPM) from off-road equipment cannot be ruled out without detailed dispersion modeling.

Operationally, the project's increased energy use and event traffic may generate localized pollutant concentrations near residential areas, particularly during evening or weekend events.

Therefore, the Proposed Project could expose nearby sensitive receptors to substantial pollutant concentrations, representing a potentially significant impact that requires further quantitative analysis in an EIR.

Impact Designation: Potentially Significant Impact.

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

During construction, use of paving materials, asphalt, and coatings could produce temporary odors perceptible to nearby residences. While such odors are expected to be intermittent, their potential frequency and intensity warrant further evaluation. During operation, the storage and use of pool chemicals such as chlorine and acids could generate odors or vapor releases if not properly contained or ventilated.

Although the facility would comply with state and local hazardous materials regulations, the potential for odors affecting nearby residences during both construction and operation cannot be dismissed without detailed evaluation of storage systems, ventilation design, and event frequency.

As such, the potential for odor emissions to affect a substantial number of people is considered potentially significant and will be evaluated further in the EIR.

Impact Designation: Potentially Significant Impact.

3.4 Biological Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the U.S. Fish & Wildlife Service (USFWS)?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the federal Clean Water Act (CWA; including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.4.1 Regulatory Setting

Federal

Federal Endangered Species Act

Under FESA, the Secretary of the Interior and the Secretary of Commerce have the joint authority to list a species as threatened or endangered (16 U.S.C. § 1533c)[19]. The purposes of FESA are to provide a means to conserve the ecosystems that endangered and threatened species depend on and to provide a program for conservation and recovery of the species with the intent of removing the species from a listed, protected status. Regulatory protection is given to any species listed as endangered or threatened.

The USFWS and the National Marine Fisheries Service are the federal agencies that enforce FESA. Pursuant to the requirements of FESA, it is unlawful for any person to take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [16 U.S.C. § 1532 (19)])[20] any such species within the U.S. or territorial sea or violate any regulation pertaining to such species or to any threatened species of fish or wildlife (16 U.S.C. § 1538);[21] endangered species (50 Code of Federal Regulations [CFR] § 17.21 (c));[22] or threatened species (50 CFR § 17.31 (a)).[23]

Migratory Bird Treaty Act

Migratory birds are protected under the federal MBTA. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR §§ 10.1-10.22,[24] including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR §§ 21.4-21.183).[25] The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. As such, project-related disturbances must be reduced or eliminated during the nesting season.

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[19] 116 U.S.C § 1533c, Lists,

[20] 16 U.S.C. § 1532(19), Definition of "Take"

[21] 16 U.S.C. § 1538, Prohibited acts

[22] 50 CFR § 17.21(c), Prohibitions

[23] 50 CFR § 17.31(a), Prohibitions

[24] USFWS, Wildlife and Fisheries

[25] 50 CFR §§ 21.4-21.183, Part 21-Migratory Bird Permits

State

California Department of Fish and Wildlife

California FGC §§ 3503 and 3503.5[26] provide protection of birds and their nests by prohibiting the take of birds, their nests, or their eggs. California FGC § 1600 et seq.,[27] requires notification to CDFW for proposed projects that may: divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; use material from a streambed; or result in the disposal or deposition of debris, waste, or other material where it may pass into any river, stream, or lake.

The CDFW also is the lead agency under CESA (FGC §§ 2050–2115.5)[28] with similar provisions to FESA as referenced earlier. Should the take of a State-listed species through direct take be anticipated or likely to occur, then a consultation with CDFW is required. CDFW may issue an incidental take permit (FGC § 2081[29]) to authorize such a potential limited take and the permit would identify any mandatory avoidance measures which the CDFW believes would reduce the likelihood of such a take; the permit must be adhered to by the applicant if potential take or adverse impact cannot be avoided. The issuance of such an incidental take permit must be requested by the applicant and CDFW is now required to post all such take permits online for public viewing. Should a species be listed under both FESA and CESA, then a consistency determination (FGC § 2080.1[30]) is also required. Applicable fees may also be collected under CESA.

CEQA Guidelines

Several federal and State statutes protect rare, threatened, and endangered species. Article 20, § 15380 of the CEQA Guidelines[31] provides that a species not listed on the federal or state lists of protected species may be considered rare, threatened, or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions of endangered, rare, or threatened provided in FESA and CESA. This section of the CEQA Guidelines gives public agencies the ability to protect a species from any potential impacts of proposed projects until the respective government agency has the opportunity to designate (list) a species as protected, if warranted.

The California Native Plant Society (CNPS) maintains an extensive list of plant species that it considers to be rare, threatened, or endangered, but have no designated status or protection under FESA or CESA. Impacts to CNPS-listed species (e.g., CNPS list 1B and 2) are considered during CEQA environmental review.

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[26] GC §§ 3503 and 3503.5, Taking or destroying nests or eggs; Taking, possessing, or destroying birds-of-prey or their eggs

[27] FGC § 1600 et seq., Chapter 6. Fish and Wildlife Protection and Conservation

[28] FGC §§ 2050-2115.5, Chapter 1.5 Endangered Species

[29] FGC § 2081, Article 3. Taking, Importation, Exportation, or Sale

[30] FGC § 2080.1, Article 3. Taking, Importation, Exportation, or Sale

[31] 2023 CEQA Statute & Guidelines

California Endangered Species Act

Under CESA, it is unlawful to take a State-listed endangered or threatened species. FGC § 86[32] defines take as "hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture or kill." CDFW maintains authorization over CESA if there is potential for take of a State-listed plant or wildlife species.

The City of Long Beach General Plan Open Space and Recreation Element contains policies for the preservation of open space and natural resources (City of Long Beach 2002). The City also regulates the removal of certain trees through its street tree ordinance.

3.4.2 Environmental Setting

The Project site is entirely developed with buildings, paved surfaces, and ornamental landscaping. No natural habitats, riparian areas, or designated critical habitats occur onsite. The landscaping consists of non-native, ornamental plantings with limited habitat value. Sensitive biological resources have not been identified on the Project site or immediately adjacent areas.

Critical Habitat

The USFWS map (USFWS 2025a) was consulted for areas marked as critical habitat for listed species. No designated critical habitat occurs on or adjacent to the Project site.

Special-Status Species

For the purposes of this assessment, special-status species have been defined to include those species that are:

- Listed as endangered or threatened under FESA (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under CESA (or proposed for listing);
- Designated as endangered or rare, pursuant FGC § 1901;[33]
- Designated as fully protected, pursuant to FGC § 3511,[34] § 4700,[35] or § 5050[36]);
- Designated as species of concern to the CDFW;
- Covered under the MBTA; or
- Defined as rare or endangered under CEQA.

[32] FGC, Division 0.5. General Provisions and Definitions [1-99.5], Chapter 1 General Definitions [1.89.5]

[33] FGC § 1901, Chapter 10. Native Plant Protection

[34] FGC § 3511, Chapter 1. General Provisions

[35] FGC § 4700, Chapter 8. Fully Protected Mammals

[36] FGC § 5050, Chapter 2. Fully Protected Reptiles and Amphibians

A Special-Status Species List was generated from the USFWS Information for Planning and Consultation (IPaC)[37] project planning tool. The list identifies 10 special-status plant, animal, and insect species with the potential to occur in the region of the Project site that are proposed, candidate, threatened, or endangered under federal status (USFWS 2025b). However, there is no habitat for any of the species on or near the Project site. Millikan is an existing high school campus and will remain so; there will be no change in land use.

3.4.3 Impact Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

The Project site is currently developed with a school and is within an urbanized portion of the City and surrounded by residential and commercial uses on all sides. There are threatened and endangered species located within the region, however no habitat exists (USFWS 2025a). If any onsite ornamental trees need to be removed during nesting bird season, the District will conduct nesting bird surveys to ensure avoidance as a standard condition of construction. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less than Significant Impact.

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 CDFW or USFWS?

The Project site is currently developed as a school. No riparian habitats were identified onsite (USFWS 2025b). As such, no impacts would occur, and no further analysis is required.

Impact Designation: No Impact.

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

The Project site is currently developed as a school; no wetland or drainage areas have been identified on the National Wetlands Inventory (USFWS 2025c). Therefore, no impacts would occur to wetlands or drainage areas, and no further analysis is required.

Impact Designation: No Impact.

[37] USFWS, Information for Planning and Consultation

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?

Wildlife movement corridors facilitate movement of species between large patches of natural habitat. The Project site receives heavy use and is in an urbanized area. No wildlife corridors exist on the Project site. Millikan is an existing high school campus and will remain so; there will be no change in land use. If any onsite ornamental trees need to be removed during nesting bird season, the District will conduct nesting bird surveys to ensure avoidance as a standard condition of construction. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

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

The City's Public Works Department Tree Maintenance Policy contains guidance regarding maintenance, planting, and removal guidelines (City of Long Beach 2006) and the City has enacted protective measures for MBTA-protected bird species within the Coastal Zone, however the Project site is not within the Coastal Zone. Therefore, the Proposed Project does not conflict with any local biological resource policies. No further analysis is required.

Impact Designation: No Impact.

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

The Project site is currently developed, and the Project site is not covered by any adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

3.5 Cultural Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 14 CCR § 15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in 14 CCR § 15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

3.5.1 Regulatory Setting

Federal

The Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) establishes principles for the preservation, rehabilitation, restoration, and reconstruction of historic buildings and districts (36 CFR Part 67). Of these, Rehabilitation is the most flexible approach and allows for compatible new uses and alterations while retaining the property's historic character. CEQA Guidelines §15064.5(b)(3) state that projects consistent with the SOIS are generally considered to have a less-than-significant impact on historical resources. The Standards include ten criteria that guide how new construction, alterations, or demolition should be evaluated in relation to a historic property.

State

CEQA requires that public agencies having authority to finance or approve public or private projects assess the effects of those projects on cultural resources. Cultural resources include buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. CEQA states that if a proposed project would result in an effect that may cause a substantial adverse change in the significance of a significant cultural resource (termed a "historical resource"), alternative plans or mitigation measures must be considered. Because only significant cultural resources need to be addressed, the significance of cultural resources must be determined before mitigation measures are developed.

PRC § 5024.1[38] and CEQA Guidelines § 21084.1[39] define a historical resource as "a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources." A historical resource may be eligible for inclusion in the California Register of Historical Resources if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important to our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction represents the work of an important creative individual; or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important to prehistory or history.

In addition, CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, and "unique archaeological resources." An archaeological resource is considered unique if it:

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory;
- Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods (PRC § 21083.2).[40]

According to the CEQA Guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource, or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR § 15064.5[b]).[41] CEQA further states that a substantial adverse change in the significance of a resource means the 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 City of Long Beach Historic Preservation Element and Municipal Code Title 16 (Historic Preservation) provide policies and procedures for identifying and protecting historic resources.

[38] PRC § 5024.1

[39] 2023 CEQA Statute & Guidelines

[40] PRC § 21083.2, Chapter 2.6. General

[41] 14 CCR § 15064.5[b], Determining the Significance of Impacts to Archaeological and Historical Resources

3.5.2 Environmental Setting

Existing Environment

The District commissioned a Cultural Resources Assessment (PCR 2017) for the District's schools including Millikan HS. An updated assessment was recently commissioned and is titled District-Wide Cultural Resources Assessment Report Update for Long Beach Unified School District, Los Angeles County, California, in May 2025 (Kleinfelder 2025). Both studies identified Millikan HS as eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) as an excellent example of a Post-War Modern style school campus designed by prolific architect C. Hugh Gibbs with landscaping by Eckbo, Royston and Williams. The 2025 study additionally identifies the school site plan as a contributing historic element.

In addition to the District-wide assessment, the District commissioned a Phase II Intensive Historic Resources Impact Assessment Report (HRAR, **Appendix B**). This memo evaluated whether demolition of the Industrial Arts Building (Building 700/3000) and construction of the new Aquatic Center would be consistent with the SOIS.

Archaeological Setting

The Long Beach area is situated within the Los Angeles Basin, a region with evidence of continuous human occupation for at least the last 7,000 years. Archaeological research in southern California has identified multiple cultural horizons, including:

- Paleocoastal period (>7000 years before present [BP] characterized by an emphasis on larger game;
- Millingstone Horizon (7000 – 4000 BP), characterized by manos, metates, and shell middens;
- Intermediate Period (4000 – 1500 BP), marked by more intensive exploitation of marine resources and trade networks; and
- Late Prehistoric/Gabrielino Period (1500 BP – AD 1542), associated with bow and arrow technology, steatite vessels, and expanded regional exchange (PCR 2017a).

Ethnographic Setting

At European contact, the Long Beach region was occupied by the Gabrielino-Tongva people, speakers of a Takic language of the Uto-Aztecan family. The Tongva occupied permanent villages along rivers, estuaries, and the coastline, with semi-subterranean dwellings, ceremonial enclosures, and tule reed boats for nearshore fishing. Important villages such as Puvungna, located on the modern campus of California State University-Long Beach, are central to Tongva history and mythology and are considered sacred landscapes. The Tongva maintained extensive trade networks stretching from the Channel Islands inland to the Mojave Desert, exchanging steatite, shell beads, and food resources (Bean and Smith 1978).

Historic Period Setting

In the 1500s, Spanish explorer Juan Rodriguez Cabrillo called Long Beach the "Bay of the Smokes", who observed the native peoples' ancient communication method of sending smoke signals from Signal Hill. In the late 1700s, the Spanish-owned land was rewarded to two Spanish soldiers and divided to become Rancho Los Cerritos and Rancho Los Alamitos. The first homes and school were built by developer William Wilmore in the 1880s, who named the area Wilmore City. Soon after, the growing population voted to incorporate the city and rename it the City of Long Beach (City of Long Beach 2025).

The discovery of oil in Long Beach and Signal Hill in 1921 triggered a rapid growth, with a million-dollar-per-month construction boom in downtown. It also helped establish the town as a popular seaside resort and port city, with a boardwalk entertainment area. A 6.4-magnitude earthquake in 1933 hit the downtown area, taking 120 lives and costing $50 million in damage. This tragedy gave birth to the California Field Act of 1933, which requires earthquake-resistant design and construction for all public schools (City of Long Beach 2025).

California Historical Resources Information System Records Search

A record search request was submitted to the South Central Coastal Information Center of the California Historical Resources Information System (Records Search File No.: 27504.13493) and results received on October 10, 2025. Five archaeological surveys have been completed within 0.5 miles of the Project site but none are noted within the Millikan High School campus. Only one, for a 2008 cell tower location immediately north of Millikan HS, is adjacent to the school. The only archaeological site noted within the search radius consists of P-19-000831, located approximately 0.45 miles to the southwest. P-19-000831 includes a shell midden with burials that was disturbed in the 1950s and partially re-recorded in the 1970s.

Additional Research

In 2017, the District commissioned a facility-wide archaeological study (PCR 2017a) which provided background information regarding cultural resources and did not report any archaeological site locations near Millikan HS.

Starting in the early 1850s, the General Land Office (GLO) started conducting widespread mapping of lands within California, as well as throughout the western U.S. These "plat" maps, ranges, and sections typically depicted major landforms, waterways, historic-era developments such as ranches, farms, and associated buildings, and occasionally provided assessments of the suitability of land for livestock grazing, agriculture, or timber harvesting. However, the GLO typically did not survey Spanish/Mexican West land grant areas, including the Los Alamitos land grant, where the Project site is located.

Field Surveys

A qualified architectural historian conducted a field survey of Millikan High School as part of the District-wide reconnaissance and intensive survey update (Kleinfelder 2025). The site visit documented the existing conditions of the campus and confirmed that Millikan retains sufficient integrity to be considered eligible for listing in the NRHP and CRHR.

3.5.3 Impact Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to 14 CCR § 15064.5?

As previously documented (Kleinfelder 2025, PCR 2017), Millikan High School is considered eligible for listing in both the NRHP and the CRHR as an excellent example of Post–War Modern school design by architect C. Hugh Gibbs with site planning by Eckbo, Royston, and Williams. The campus retains a high degree of integrity in layout, materials, and design, with multiple buildings—including Building 700/3000 (Industrial Arts Building)—identified as contributors to the overall historic character of the campus.

The Proposed Project would demolish Building 700/3000 and adjacent portable classrooms to construct a new Aquatic Center. While the new facility would modernize campus functions, the demolition of a contributor to a CRHR-eligible historical resource represents a substantial adverse physical change under CEQA Guidelines §15064.5(b). The HRAR concluded that the demolition of Building 700/3000 is not consistent with various Secretary of the Interior's Standards, and the Proposed Project would result in alterations to the historic resource that would affect its ability to convey the historic significance that led to the determination that the resource is eligible for listing in the CRHR. This impact is therefore considered potentially significant and will be evaluated in detail in the EIR.

Impact Designation: Potentially Significant Impact.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 14 CCR § 15064.5?

While previous surveys have not identified recorded archaeological sites within the Millikan High School campus, the project area is located within the Los Angeles Basin, an area known for extensive prehistoric occupation by the Gabrielino–Tongva people. The region contains known archaeological sites and sacred landscapes (e.g., Puvungna, located approximately 2 miles west), and there remains a potential for subsurface archaeological materials to exist within previously disturbed soils.

Project construction would include deep excavation for the competition pool, utilities, and bioretention systems, extending into native soils that may not have been disturbed during prior construction. Ground disturbance at these depths could uncover previously unrecorded prehistoric or historic-period archaeological deposits. Therefore, impacts to archaeological resources are considered potentially significant and will require further evaluation and consultation in the EIR.

Impact Designation: Potentially Significant Impact.

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

No human remains are known to occur within the Millikan High School campus; however, given the project's proximity to areas of known prehistoric occupation and its potential to disturb previously unexcavated soils, there remains the possibility that human remains or associated funerary artifacts could be encountered during grading or excavation.

While compliance with Health and Safety Code §7050.5 and PRC §5097.98 would govern the treatment of any discovery, the potential to disturb previously unknown human remains constitutes a potentially significant impact under CEQA pending confirmation through additional research and tribal consultation.

Further analysis in the EIR will evaluate whether additional avoidance or monitoring measures are warranted to reduce this impact.

Impact Designation: Potentially Significant Impact.

3.6 Energy

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Proposed Project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Regulatory Setting

State

California's electricity grid is transitioning to renewable energy under the Renewables Portfolio Standard (RPS) program.[42] Renewable sources of electricity include biomass, geothermal, hydroelectric, solar, and wind. Electricity production from renewable sources is generally considered carbon neutral.

State Executive Order (EO) S-14-08,[43] signed in November 2008, required retail sellers of electricity to serve 33 percent of their load with renewable power by the year 2020. Senate Bill (SB) 350 was signed into law in 2015 and mandated a 50 percent RPS by 2030. In 2018, SB 100 was signed, raising California's renewable resources target to 60 percent by December 31, 2030, and requiring 100 percent of the state's electricity be generated by carbon-free resources by 2045. Under SB 100, California cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free resource target.[44]

California Green Building Standards Code

CALGreen (Title 24, Part 11 of the CCRs) was developed by the California Energy Commission (CEC) and applies to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential, commercial, and public-school buildings. CALGreen is updated every 3 years, with the 2022 update becoming effective January 1, 2023. The purpose of CALGreen is to improve public health,

[42] California Energy Commission, Renewable Portfolios Standard

[43] California, Office of the Governor, EO S-14-08

[44] California SB 100, California Renewables Portfolio Standard Program: emissions of greenhouse gases

safety, and general welfare by enhancing the design and construction of buildings utilizing building concepts that have a positive environmental impact and encourage sustainable construction practices in the following categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) environmental quality. The CEC's long-term vision is that future updates to the California Energy Code will support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and non-residential buildings by 2030.

The 2022 CALGreen update includes numerous revisions to Chapter 5 (Nonresidential Mandatory Measures). Section 5.106.5.3[45] pertains to electric vehicle (EV) charging and provides standards for the number of EV spaces that must be provided based on the total number of actual parking spaces. Additional technical requirements regarding the electrical load capacity, connection types, and other details are also provided in this section. Section 5.106.12.1[46] provides a new exception for surface parking areas to be covered with either photovoltaic shade structures or shade structures with specific roofing materials in lieu of shade tree plantings in whole or in part; a similar exception applies to hardscape areas in Section 5.106.12.3[47]. A new subsection, 5.504.4.7.1[48], has been added to provide compliance verification requirements for all thermal insulation materials meeting the pollutant emission limits.

3.6.2 Environmental Setting

The Project site is served by Southern California Edison and Southern California Gas Company. Current buildings use electricity and gas typical of educational facilities. Natural gas service in the City of Long Beach is primarily provided by the Southern California Gas Company, which maintains an extensive service area that includes Long Beach.

3.6.3 Impact Discussion

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

The Proposed Project would use high-efficiency equipment and comply with Title 24 and CALGreen, avoiding wasteful energy use.

Short-Term Impacts During Construction

Electrical Energy. Construction of the Proposed Project would not require electricity to power most equipment. The electricity used during construction would vary based on the phase of construction;

[45] CALGreen, Section 5.106.5.3, Electric Vehicle (EV) Charging [N]

[46] CALGreen, Section 5.106.12.1, Surface Parking Areas

[47] CALGreen, Section 5.106.12.3, Hardscape Areas

[48] CALGreen, Section 5.504.4.7.1, Verification of compliance

however, the majority of equipment during demolition, site preparation, trenching, and grading would be powered by diesel or gasoline. Some construction activities later in the process could require electric-powered equipment such as hand tools (e.g., drills, saws, compressors) and task lighting, which would result in minimal electricity usage. Overall, the use of electricity would be temporary in nature and would fluctuate according to the particular construction activity. Therefore, as electricity consumption during construction would be minimal and would occur only when necessary to construct the Proposed Project, related construction activities would not result in wasteful or unnecessary electricity demands, and impacts would be less than significant. No further analysis is required.

Natural Gas Energy. It is not anticipated that any natural gas-powered equipment would be used during construction of the Proposed Project. Therefore, impacts would be less than significant with respect to natural gas usage. No further analysis is required.

Transportation Energy. Transportation energy use depends on the mode of travel, type and number of trips, vehicle miles traveled, and the fuel efficiency of vehicles. Transportation energy used during construction would result from the transportation of construction equipment and materials to the Project site, the use of construction equipment, delivery vehicles, and vehicles operated by construction workers traveling to the Project site that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the construction activity and would be temporary in nature. Once construction is complete, the use of construction equipment would cease. Furthermore, construction contractors are anticipated to minimize non-essential idling of construction equipment during construction in accordance with 13 CCR § 2449[49] which limits the non-essential idling of diesel-powered off-road equipment to 5 minutes. Such required practices would limit wasteful and unnecessary energy consumption.

There are no unusual characteristics that would directly or indirectly cause construction activities to be any less efficient than at other construction sites. The proposed utility infrastructure would connect to the existing water, sewer, storm drain system, and electricity network in the area because the land use would remain the same. Therefore, it is expected that energy used during construction of the Proposed Project would not differ significantly from similar projects and impacts would be less than significant. No further analysis is required.

Long-Term Impacts During Operation

The Proposed Project would have various energy needs during operation such as heating, cooling, and ventilation of buildings; however, these would largely be the same needs that currently exist. Therefore, the Proposed Project would not create increased demands on energy infrastructure during operation. No further analysis is required.

Electrical Energy. It can be assumed that the electrical energy needed to run resources at the Aquatic Center other than the pool would be approximately equivalent to what is needed to operate the existing classroom buildings that would be demolished for the new construction. Heating the pool itself would require more electricity, though the quantity needed would vary depending on whether the pool is

[49] 13 CCR § 2449, General Requirements for In-Use Off-Road Diesel-Fueled Fleets

indoors, outdoors, left uncovered, or is covered when not in use. The pool proposed by the District is a Myrtha Pool, measuring approximately 51.5 meters x 22.9 meters, giving a surface area of 1,177 square meters.

Outdoor pool energy demand in Southern California typically ranges 1,500 kilowatt hours per square meter (kWh/m²) per year uncovered and 600 kWh/m² per year covered (CEC 2025). Electricity demand is reduced by a factor of ~4 when using a heat pump with COP 4.0 (ASHRAE Handbook 2019). As a result, it is anticipated that heating the Myrtha Pool would require approximately:

- Uncovered pool: ~ 441,000 kilowatt hours/year
- With pool cover: ~ 177,000 kilowatt hours/year

By comparison, the remaining Aquatic Center building uses would amount to approximately 32,000 kilowatt hours/year for space heating.

While the Proposed Project would increase energy use at Millikan HS, use of high-efficiency equipment and compliance with Title 24 and CALGreen would avoid wasteful energy use. No further analysis is required.

Impact Designation: Less-than-Significant Impact.

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

The Proposed Project would not conflict with any adopted renewable energy or efficiency programs. Implementation of the Proposed Project would encompass only all-electric buildings, which would generally have greater energy efficiency than existing buildings and must comply with the latest Building Energy Efficiency Standards and CALGreen. Therefore, implementation of the Proposed Project would not conflict or obstruct plans for renewable energy or energy efficiency, and impacts would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.7 Geology and Soils

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
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 in 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 & Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☒	☐
d) Be located on expansive soils, as defined in Table 181-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternate wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

3.7.1 Regulatory Setting

Federal

The Federal Emergency Management Agency (FEMA) has established seismic building codes to control seismic hazards in the event of an earthquake to save lives and reduce losses. Building codes "specify the minimum requirements to adequately safeguard the health, safety and welfare of building occupants" by regulating the design, construction, alteration, and maintenance of structures (FEMA 2023). Code enforcement is largely the "responsibility of local building officials who review design plans, inspect construction work, and issue building and occupancy permits" (FEMA 2023).

State

The Alquist-Priolo Earthquake Fault Zoning Act of 1972[50] established earthquake fault zones that are regulatory zones surrounding the surface traces of active faults in California. Structures for human occupancy cannot be built over a fault and must be a minimum distance from fault lines. For regulatory purposes, the California Geological Survey defines an active fault as one that has ruptured during the Holocene epoch, or within approximately the last 11,000 years.

The Seismic Hazards Mapping Act of 1990[51] requires the DOC and California Geological Survey (CGS) to identify and map areas that are susceptible to liquefaction, earthquake-induced landslides, and amplified ground shaking. This act requires the State Geologist to establish "Zones of Requires Investigation" and "Seismic Hazard Zone" maps that cities, counties, and state agencies can use for planning, construction, and development.

These two acts were implemented to establish regulatory "Zones of Required Investigation" to reduce the threat to public health and safety and to minimize the loss of life and property that can be caused by earthquake-triggered ground failures. Property sellers in California are required to disclose at the time of sale if a property is within a mapped hazard zone (DOC 2024).

Local

The Seismic Safety Element of the City's General Plan (City of Long Beach 1988) acknowledges the potential for seismic events and has approved a number of policies focused on the reduction of seismic hazards to the degree possible, requiring site-specific geological studies within specific locales, stormwater management, erosion control, compliance with CBC and Uniform Building Code standards, and utility system upgrades.

3.7.2 Environmental Setting

Soils on the Project site consist of Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes. These soils can be prime farmland if irrigated and drained and consist of somewhat poorly

[50] Alquist-Priolo Earthquake Fault Zoning Act of 1972

[51] DOC, California Seismic Hazard Zones

drained discontinuous human-transported material over mixed alluvium derived from granite and/or sedimentary rock (Natural Resources Conservation Service [NRCS] 2019).

Millikan HS is currently developed and located within a residential neighborhood in the City. It is not located in an Alquist-Priolo Earthquake Fault Zone and there are no fault lines that traverse the Project site (DOC 2024). The Reservoir Hill Fault is located approximately 2 miles to the southwest and the Cherry Hill Fault is located approximately 3.5 miles to the west; both are within the Newport-Inglewood-Rose Canyon Fault Zone; however, the Project site is not located within a Seismic Hazard Zone (DOC 2025a). Despite the lack of fault lines within the Project site, the region is seismically active, and seismic shaking must be considered as part of project planning.

The Project site is located within a State-Designated Liquefaction Hazard Zone. Because the Project site is level and developed, landslides and erosion are not a significant consideration for development on the Project site (DOC 2015).

3.7.3 Impact Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

The Project site is not in an Alquist-Priolo Earthquake Fault Zone and no fault lines traverse the Project site (DOC 2025a). No active or potentially active faults are known to traverse the site, and the nearest Alquist-Priolo Fault Zone is several miles away. Therefore, the potential for surface fault rupture at the site is considered low. No further analysis is required.

Impact Designation: No Impact.

ii) Strong seismic ground shaking?

As stated above, the Project site is not within a known fault or Alquist–Priolo Earthquake Fault Zone. However, the site is located in a seismically active region of Southern California, and strong ground shaking from regional fault systems such as the Newport–Inglewood and Los Alamitos faults could occur. All new construction is required to comply with the California Building Code (CBC, Title 24), which incorporates seismic design criteria appropriate to the site’s seismic zone and soil conditions. Adherence to these mandatory regulations ensures that the Project would be designed to withstand expected ground shaking, and potential impacts related to seismic ground shaking would be less than significant. No further analysis is required.

Impact Designation: Less-than-Significant Impact

iii) Seismic-related ground failure, including liquefaction?

Liquefaction refers to loose, saturated sand or gravel deposits that lose their load-supporting capability when subjected to intense shaking. The Division of the State Architect (DSA) oversees design and construction of K–12 schools and community colleges in California. California law requires public school facilities to meet rigorous seismic safety standards under the Field Act. That means any new construction, modernization, or addition reviewed by DSA must demonstrate structural safety against earthquakes.

If a site is within a mapped Seismic Hazard Zone for Liquefaction, as the Project site is, California law (Seismic Hazards Mapping Act) requires a site-specific geotechnical investigation. That report must evaluate soil profile, groundwater depth, potential for liquefaction, settlement, and lateral spreading. The report must provide recommendations for foundation design, ground improvement, or other mitigation. DSA reviewers would incorporate the results of the investigation in order to complete a design that addresses the potential for liquefaction. Therefore, impacts resulting from seismic-related ground failure including liquefaction would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

iv) Landslides?

No landslides have been mapped on the Project site (DOC 2015), and the site is generally flat, eliminating the potential for landslide hazards. In addition, all new construction must comply with the 2024 CBC or most recent version, which establishes design and construction standards to address site-specific geotechnical conditions. Accordingly, the Project would not be subject to landslide risk, and no impact would occur. No further analysis is required

Impact Designation: No Impact.

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

Erosion is a normal and inevitable geologic process whereby earthen materials are loosened, worn away, decomposed, or dissolved, and removed from one place and transported to another. The Project site is an existing school with paved and impervious surfaces (parking lots, buildings) as well as pervious surfaces (turf field, vegetation). The Project site would implement structural and non-structural BMPs before and during construction in accordance with the Construction General Permit (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) to retain sediment on the Project site. Once the Proposed Project is constructed, soil erosion would be controlled with improvements installed on the Project site. Therefore, a less-than-significant impact would occur, and no further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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?

Subsidence of basins attributed to overdraft of groundwater aquifers or over pumping of petroleum reserves has been reported in various parts of California. Collapsible soils may appear strong and stable in their natural (dry) state, but they rapidly consolidate under wetting, generating large and often unexpected settlements. Seismically induced settlement consists of dynamic settlement of unsaturated soil (above groundwater) and liquefaction-induced settlement (below groundwater). These settlements occur primarily in low-density sandy soil due to the reduction in volume during and shortly after an earthquake.

As discussed in Section 3.7.2, the Project site is located within a mapped liquefaction zone in a seismically active area. Although the level topography of the site eliminates potential for landslides or substantial erosion, the potential for liquefaction must be addressed in project design. All school construction is subject to DSA review, which includes geotechnical investigation and structural design requirements for sites in liquefaction zones. Compliance with DSA requirements ensures that the Project would be designed and constructed to withstand soil movement associated with liquefaction. Therefore, impacts would be less than significant and no further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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?

Expansive soils can swell when they become wet and shrink as they dry, potentially causing damage such as cracking or differential settlement in building foundations and slabs. However, according to the Natural Resources Conservation Service (NRCS, 2019), the Biscailuz–Hueneme complex soils underlying the project site are not classified as expansive. These soils exhibit stable characteristics with low shrink–swell potential, reducing the likelihood of soil movement that could affect structural integrity. Therefore, the project site is not expected to be subject to hazards associated with expansive soils, and no impact would occur. No further analysis is required.

Impact Designation: No Impact.

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

The Proposed Project would not require the installation of a septic tank or alternative wastewater disposal system as it would utilize the existing sewer system. Therefore, no impacts would result from soil conditions in relation to septic tanks or other on-site water disposal systems. No further analysis is required.

Impact Designation: No Impact.

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

The Project site is currently developed. The Proposed Project would require grading and excavation as well as other ground-disturbing construction activities to accommodate construction and utility requirements. The District commissioned a facility-wide assessment of the potential for paleontological resources to occur (PCR 2017b); none of the results indicated finds at or near Millikan HS. Due to the ground disturbance associated with construction, there is potential that natural landforms beneath the Project site would be encountered during construction and that subsurface resources and/or paleontological resources could be discovered. However, the District would comply with the recommendations included within the PCR (2017b) assessment and therefore impacts to paleontological resources discovered during ground-disturbing activities would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant effect on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?	☒	☐	☐	☐

3.8.1 Regulatory Setting

State

The State of California has passed many regulations intended to reduce greenhouse gas (GHG) emissions from the transportation sector, commercial and industrial facilities, and the general public. Governors have also signed EOs, with which State entities must comply but which remain goals and recommendations for other jurisdictions until and unless they are signed into law.

Senate Bill 97

In August 2007, SB 97[52] was adopted to recognize the need to address climate change under CEQA. The Governor's Office of Planning and Research (OPR) was directed to prepare guidelines for mitigation of GHG emissions, including guidelines for public agencies in analyzing and mitigating GHG emissions. Particularly, it recognized the need to address cumulative contribution of emissions for a development project. It also required that lead agencies make a good-faith effort to calculate and describe GHG emissions potentially resulting from a project. SB 97 allowed on- and off-site mitigation, including project design features to reduce emissions, as well as sequestration. Following SB 97, the California Air Pollution Control Officers Association provided guidance on integrating analysis of climate change in its 2008 white paper *CEQA & Climate Change-+*.

[52] SB 97 CEQA: greenhouse gas emissions

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act,[53] was adopted in September 2008. Building on AB 32, SB 375 directed CARB to develop regional GHG emission reduction targets to be achieved by metropolitan planning organizations. These organizations became required to align their regional transportation, housing, and land use plans and prepare sustainable community strategies to reduce vehicular travel and GHG emissions.

Through SB 375, the State encouraged alternative transportation planning in regional plans. CARB determines whether the sustainable community strategies will achieve the region's GHG emissions reduction goals. Under SB 375, certain qualifying in-fill residential and mixed-use projects are eligible for streamlined CEQA review.

California Code of Regulations Title 20: Appliance Efficiency Regulations

California's Appliance Efficiency Regulations, CCR Title 20,[54] contain standards for both federally regulated appliances and non-federally regulated appliances. The regulations are updated regularly to allow consideration of new energy efficiency technologies and methods. The current standards were adopted by the CEC in 2018. The standards outlined in the regulations apply to appliances that are sold or offered for sale in California. More than 23 different categories of appliances are regulated, including refrigerators, freezers, water heaters, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings.

California Code of Regulations Title 24, Part 6: California Energy Efficiency Standards

California regulates energy consumption under California Building Standards Code, Title 24, Part 6 of the CCR (also known as the California Energy Code). The *2025 Building Energy Efficiency Standards for Residential and Nonresidential Building* were developed by the CEC and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings.[55] The California Energy Code is updated every 3 years, with the most recent iteration (2022) effective January 1, 2023, and the next version (2025) planned to go into effect on January 1, 2026. The CEC's long-term vision is that future updates to the California Energy Code will support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and non-residential buildings by 2030.

California Code of Regulations Title 24, Part 11: California Green Building Standards Code

The purpose of California Green Building Standards Code (CALGreen) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in

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[53] SB 375 Transportation planning: travel demand models: sustainable community strategy: environmental review

[54] CCR Title 20, Public Utilities and Energy

[55] California Energy Commission, 2025 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

the following categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) environmental air quality.

Local

South Coast Air Quality Management District Climate Change Guidelines

At the regional level, the SCAQMD (2023) published CEQA thresholds of significance for projects establishing a threshold of 10,000 metric tons per year (MT/Yr) of CO_2 equivalent emissions for industrial facilities. No general screening threshold is provided for non-industrial land-use projects. In 2011, SCAQMD adopted its Air Quality–Related Energy Policy[56], which encourages energy efficiency, electrification, and deployment of near-zero emission technologies. More recently, the Final 2022 AQMP[57] integrates climate change strategies into air quality planning, emphasizing the co-benefits of reducing fossil fuel consumption for both GHG and criteria pollutant reductions.

At the local level, the City of Long Beach Climate Action and Adaptation Plan sets forth goals for reducing municipal and community-wide GHG emissions through measures such as electrification of buildings, renewable energy procurement, and sustainable transportation (City of Long Beach 2022).

3.8.2 Environmental Setting

The Project site currently generates GHG emissions associated with electricity and natural gas consumption, mobile sources (student, staff, and visitor vehicles), and landscape maintenance.

3.8.3 Impact Discussion

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction of the Proposed Project would result in temporary GHG emissions from demolition of existing buildings, excavation for the new competition pool, on-site use of heavy construction equipment, material hauling, and worker commute trips. While construction emissions are often amortized over the life of a project, the Proposed Project's site work—including excavation, concrete placement, and pool installation—could generate notable short-term emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).

In addition, operation of the new Aquatic Center would require continuous pool heating, water filtration, and circulation systems, which are energy-intensive and could lead to increased natural gas and electricity consumption compared to existing campus facilities. The project would also result in periodic spectator and community events that would increase vehicle trips and associated GHG emissions beyond baseline levels. Given these factors, the Proposed Project may generate GHG

[56] SCAQMD Air Quality-Related Energy Policy

[57] SCAQMD 2022 AQMP

emissions that could have a significant impact on the environment, and this impact is therefore considered potentially significant pending detailed analysis in the EIR.

Impact Designation: Potentially Significant Impact.

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

The Proposed Project would be designed to comply with CALGreen and the California Energy Code (Title 24, Part 6); however, its new aquatic facilities would introduce substantial new sources of energy consumption and fossil fuel use, particularly for pool heating and mechanical filtration systems. While the facility would incorporate LED lighting and modern controls, the combined construction, operation, and event activity could increase total energy use and GHG emissions relative to existing conditions. The project's potential conflicts with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or to the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

3.9.1 Regulatory Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material, per Title 22 of the CCRs,[58] is defined by California HSC § 25501(n)[59] as follows.

> "Hazardous material" means a material listed in paragraph (2) that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment, or a material specified in an ordinance adopted pursuant to paragraph (3).

Paragraph 2 of the HSC clarifies hazardous materials to include all of the following:

A. A substance or product for which the manufacturer or producer is required to prepare a material safety data sheet pursuant to the Hazardous Substances Information and Training Act (Chapter 2.5 [commencing with § 6360] of Part 1 of Division 5 of the Labor Code) or pursuant to any applicable federal law or regulation.

B. A substance listed as a radioactive material in Appendix B of Part 30 (commencing with Section 30.1) of Title 10 of the CFR, as maintained and updated by the Nuclear Regulatory Commission.

C. A substance listed pursuant to Title 49 of the CFR.

D. A substance listed in Section 339 of Title 8 of the CCR.

E. A material listed as a hazardous waste, as defined by Sections 25115, 25117, and 25316.

Federal

The EPA provides leadership for environmental science, research education, and assessment across the United States. The EPA works with state and local agencies, Native American tribes, and other federal agencies including the U.S. Department of Transportation, the U.S. Department of Labor's Occupational Safety and Health Administration, and the National Institute of Health to develop and enforce regulations related to hazards.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA)[60] was enacted in 1976 as an amendment to the Solid Waste Disposal Act. The purpose of RCRA is to address municipal and industrial waste across the U.S. that is currently being disposed of, and includes the following goals:

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[58] CCR § 66260.10, Definitions

[59] California HSC § 25501(n), "Hazardous material"

[60] RCRA Orientation Manual 2014, Resource Conservation and Recovery Act

- To protect human health and the environment from the potential hazards of waste disposal;
- To conserve energy and natural resources;
- To reduce the amount of waste generated; and
- To ensure that wastes are managed in an environmentally sound manner.

RCRA enables the EPA to develop criteria for identifying hazardous waste and provides the EPA with the authority to regulate underground storage tanks. The EPA develops guidance documents advising how to comply with various hazardous waste regulations and provides an interpretation of RCRA requirements. The EPA is also charged with making policy statements that serve to provide standard operating procedures for how to implement RCRA programs.

Subtitle C of RCRA established a cradle to grave process for managing hazardous waste. These regulations were developed by EPA to specify the way hazardous waste is generated, transported, treated, stored, and disposed of. The EPA requires individual states to develop their own permitting program and ensure the program meets the minimum federal criteria under Subtitle C. If the state's program is at least as stringent as the federal program, the EPA will grant authority to the state to implement their own program in lieu of the federal program.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted by the U.S. Congress in 1980. CERCLA, most often referred to as the Superfund, created a tax on the chemical and petroleum industries but also gave the federal government the authority to directly respond to potential or actual releases that could endanger human health or the environment. Importantly, CERCLA "established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified". [61]

CERCLA enables the federal government to respond with both short- and long-term actions; short-term removals are implemented when a potential or actual release requires a swift response. Long-term actions are those that respond to situations that, while serious, are not immediately life threatening. Long-term actions require responses that provide permanent results to significantly reduce the related dangers caused by hazardous materials. Regardless of the type of response, CERCLA also provides both the funds and the authority for the EPA to respond to and clean up contaminated sites, particularly when no responsible party can be identified.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 (TSCA) became effective January 1, 1977, and grants the EPA the authority to require reporting, record keeping, and testing requirements as well as restrictions related to chemical substances and mixtures. TSCA excludes some items including food, drugs,

[61] EPA, Superfund: CERCLA Overview

cosmetics, and pesticides but does address polychlorinated biphenyls, asbestos, radon, and lead-based paint [62]

Federal Insecticide, Fungicide, and Rodenticide Act

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) regulates the registration, distribution, sale, use, and disposal of pesticides across the U.S. Most pesticides must be registered with the EPA which requires the pesticide to conform with specifications that ensure the product will not generally cause adverse effects to the environment. FIFRA is administered by the U.S. Food and Drug Administration and specifies labeling and packaging requirements as well as protection standards for workers who are exposed to pesticides in the workplace. Standards for commercial pesticide applicators are also established by the EPA. [63]

State

Cortese List

California Government Code § 65962.5[64] requires that the Department of Toxic Substances Control (DTSC), a division of the California Environmental Protection Agency, compile and update, at least annually, a list detailing important information about hazardous waste facilities and lands designated as or bordering hazardous waste properties. This inventory, commonly referred to as the Cortese List, provides detailed information about the locations and provides a method for various parties to comply with CEQA (DTSC 2023).

Envirostor

EnviroStor[65] is an online database maintained by DTSC for the purpose of tracking hazardous material incidents in California. The database lists facilities that process or transfer hazardous waste, have known contamination, or have possible contamination that warrants further investigation, including sites found on the Cortese List. The database includes federally designated, state response, military, school, and voluntary cleanup sites. Each entry in the database contains a report that includes information on the location and site type; site information such as the cleanup status, acreage, assessor's parcel number, agencies providing cleanup oversight, and other information about the location; a regulatory profile that lists past uses that caused contamination, potential contaminants of concern, and potential media affected; and a site history. EnviroStor also provides a running log of completed cleanup activities at a particular site including the date the activity concluded and any comments on the activity. Related documents are also easily accessible within the database as well as information regarding related sites. The California Office of Environmental Health Hazard Assessment also provides a mapping tool (CalEnviroScreen) via EnviroStor. CalEnviroScreen provides detailed information about air quality,

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[62] Toxic Substances Control Act

[63] Federal Insecticide, Fungicide, and Rodenticide Act

[64] California Government Code § 65962.5, Article 6. Development Permits for Classes of Projects

[65] California Department of Toxic Substances Control, EnviroStor

drinking water contaminants, lead risk, and other indicators related to sensitive populations or socioeconomic factors.

GeoTracker

The State Water Resources Control Board (SWRCB) maintains an online database (GeoTracker)[66] to track sites that impact or have the potential to impact water quality in California. GeoTracker provides records about a variety of sites that require cleanup such as leaking underground storage tank (LUST) sites, U.S. Department of Defense sites, and Cleanup Program sites. Records are also kept for unregulated projects related to irrigated lands, oil and gas production, operating permitted underground storage tanks, and land disposal sites).[66]

GeoTracker allows a user to query a particular address and locate information about a site's regulatory profile and history. This includes the cleanup status, facility type, potential contaminants of concern, potential media of concern, designated groundwater beneficial uses, the respective Department of Water Resources groundwater sub-basin, and the California Water Service watershed name. Cleanup action reports, a log of regulatory activities with related notes and documentation, environmental data, site maps and documents, community involvement information and environmental justice statistics are all posted on GeoTracker as well as information about related cases near a particular site.

Local

At the local level, the City of Long Beach Fire Department administers hazardous materials business plans and inspections. The City also enforces demolition permitting procedures that include asbestos and lead-based paint (LBP) surveys.

3.9.2 Environmental Setting

The Project site includes Building 700/3000 and portable classrooms, which may include asbestos-containing materials (ACM) and LBP. Background research included an evaluation of the GeoTracker and EnviroStor websites, operated by the State Water Resources Control Board (SWRCB) and the DTSC, respectively. No contaminated sites were listed on or adjacent to the Project site.

3.9.3 Impact Discussion

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

As noted above, because of the date of construction for Building 700/3000, it could contain ACM or LBP, however the District conducts hazardous materials surveys ahead of work to ensure that abatement workplans are adequate and provides oversight of abatement as well as disposal of hazardous materials. Routine construction practices involving certified professionals would reduce the potential for significant release during demolition of these materials. Routine construction activities would not involve a

[66] SWRCB, GeoTracker

significant amount of hazardous materials and the use of such items would be temporary. Construction workers would be trained in the proper handling, use, storage, and disposal of hazardous materials. Furthermore, supplies would be maintained onsite for containing and cleaning small spills of hazardous materials and workers would be trained in how to respond to hazardous material releases. The Project site would continue to be operated as a school and would not warrant use of hazardous materials in quantities that could result in a significant impact. Therefore, there would be a less-than- significant impact. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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?

Demolition activities may include stockpiling materials before transfer to an off-site disposal location or stockpiling soil and construction materials. The District complies with Cal/OSHA regulations, DTSC regulations, and Certified Unified Program Agency (CUPA) and NPDES requirements, which would include preparation of a SWPPP and adherence to BMPs to reduce or eliminate pollutants in stormwater discharges. Therefore, there would be a less than significant impact. No further analysis is required.

Operation of the Aquatic Center would require regular chemical treatment of the pool and associated facilities. Based on the assumption that pool maintenance would be performed by the District, storage of potentially hazardous chemicals would be required. Adherence to BMPs would reduce potential impacts related to storage to a less-than-significant level. Because the Proposed Project would continue to operate as a high school, routine maintenance could require the use of cleaners, solvents, and other custodial products, as well as pesticides, that are potentially hazardous. These materials would be used in small quantities, clearly labeled, and stored in compliance with State and federal requirements. With these routine practices, the Proposed Project would not create substantial hazards to the public or the environment.

Compliance with the regulations and mitigation measure below would ensure that risks resulting from the routine transportation, use, storage, and/or disposal of hazardous materials or hazardous wastes associated with the Proposed Project and the potential for an accidental release is less than significant and no further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

The Project site would continue to operate as a high school and would not emit hazardous emissions or handle hazardous materials or substances beyond minor custodial supplies and pool chemicals, and the District will comply with local CUPA requirements including the preparation of a hazardous material business plan for submittal to the CUPA, when required. Therefore, a less-than-significant impact would occur. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

The Project site is not listed on Hazardous material sites compiled pursuant to Government Code Section 65862.5. Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

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

The Project site is not within 2 miles of a public use airport; the Project site is approximately 2.5 miles southeast of Long Beach Airport (LGB). The Los Angeles County Airport Land Use Commission has adopted an Airport Land Use Compatibility Plan (ALUCP) for LGB that defines compatibility zones extending outward from the airport (LA County 1991). These zones generally extend less than 2 miles in most directions. Based on the City's maps and the LGB ALUCP, Millikan HS is outside both the 2-mile radius and the ALUCP influence area for LGB. There would be no change in land use and an increase in noise resulting from airports is not anticipated. Therefore, no impacts would occur, and no further analysis is required.

Impact Designation: No Impact.

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

The Proposed Project would not conflict with adopted emergency response or evacuation plans, as nothing at the Project site would change other than converting an extant building and portable classrooms into an Aquatic Center at the same location within the campus. The surrounding public roadways would continue to provide emergency access to the Project site and surrounding properties during both construction and operation in the same manner as existing conditions. No impact would occur, and no further analysis is required..

Impact Designation: No Impact.

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

The Project site is not located in a fire hazard zone of any severity level per the CAL FIRE fire hazard severity zones map.[67] The Project site is located in an urbanized portion of Long Beach on a site that is currently developed as a high school. The Proposed Project would be required to comply with the 2022 California Fire Code[68] and applicable building standards, such as the 2022 CBC.[69] Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

[67] CAL FIRE, Fire Hazard Severity Zones

[68] California Fire Code 2022

[69] 2022 California Building Code, Title 24, Part 2

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
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 offsite;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
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	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

3.10.1 Regulatory Setting

Federal

The Federal CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. It operates on the principle that all pollutant discharges

into the nation's waters are unlawful unless specifically authorized by a permit. The CWA authorizes the USEPA to protect and maintain the quality and integrity of the nation's waters. Part of the CWA provides for the National Pollutant Discharge Elimination System (NPDES), in which discharges into navigational waters are prohibited except in compliance with specified requirements and authorizations.

The Federal Emergency Management Agency (FEMA) is responsible for predicting the potential for flooding in most areas. FEMA routinely performs this function through the update and issuance of Flood Insurance Rate Maps (FIRMs), which depict various levels of predicted inundation.

State

At the state level, hydrology and water quality are primarily regulated under the California Porter-Cologne Water Quality Control Act (Water Code, Division 7), which establishes the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs). The Project is under the jurisdiction of the Los Angeles RWQCB, which adopts and implements the Water Quality Control Plan for the Los Angeles Region (Basin Plan). The Basin Plan designates beneficial uses for surface and groundwater bodies and sets water quality objectives to protect those uses.

Construction projects in California are also regulated under the Statewide National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002). This permit applies to construction activities that disturb one acre or more of soil and requires preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP), including best management practices (BMPs) to control erosion, sedimentation, and the discharge of construction-related pollutants to stormwater. The permit also requires inspection, monitoring, and reporting.

In addition, California's Municipal Separate Storm Sewer System (MS4) Permit for the City of Long Beach regulates stormwater discharges from municipal storm drain systems into receiving waters. The MS4 permit requires the City to implement a Stormwater Management Program to reduce pollutants to the maximum extent practicable, and project applicants must comply with local ordinances implementing those requirements.

Finally, the California Water Code requires that discharges to waters of the State that could affect water quality adhere to Waste Discharge Requirements (WDRs) from the appropriate RWQCB unless they are already covered under a general permit such as the Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002).

3.10.2 Environmental Setting

The Project site is fully developed and drains to the municipal storm drain system, ultimately discharging to the San Gabriel River and Pacific Ocean. No natural streams, floodplains, or wetlands occur onsite. The Project site is located within FEMA Zone A, however that has been reduced to a Flood Zone X rating due to the presence of a river levee and therefore deemed to have minimal flood potential (FEMA 2008).

3.10.3 Impact Discussion

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

Pursuant to Section 402 of the CWA,[70] the EPA has established regulations under the NPDES program to control direct stormwater discharges. In California, the SWRCB administers the NPDES permitting program and is responsible for developing permitting requirements. The NPDES Construction General Permit regulates stormwater discharges from construction activity that disturbs 1 acre or more of soil, or is part of a larger common plan of development. Because the Proposed Project would disturb more than 1 acre, coverage under the Construction General Permit is required. The District will prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the Permit. The SWPPP will include required site-specific best management practices such as erosion and sediment controls, dust suppression, and good housekeeping measures to minimize the potential for construction-related pollutants, including sediment, to leave the site and to prevent violations of water quality standards.

Construction

Clearing, grading, excavation, and construction activities associated with the Proposed Project have the potential to impact water quality through soil erosion and increase the amount of silt and debris carried in runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. To address these potential impacts, the Proposed Project is required to obtain coverage under the Construction General Permit and prepare and implement a SWPPP. Compliance with the Construction General Permit ensures that site-specific best management practices are implemented to control erosion, manage runoff, and prevent pollutants from leaving the site. With compliance, potential impacts would be less than significant and no further analysis is required.

Operation

During operation, the pool system is designed so pool water is physically isolated from the stormwater network. The civil plans include a dedicated surge tank and sump pump coordination for pool systems; these features provide controlled containment and routing of pool water, rather than allowing overflows or backwash to enter on-site storm drains. In short, pool water does not commingle with stormwater and would be managed through dedicated pathways in accordance with City standards (e.g., sanitary discharge or other agency-approved methods). No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

[70] EPA, Clean Water Act, Section 402: National Pollutant Discharge Elimination System

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

The Project site is currently developed with buildings and pavement. The Aquatic Center would not substantially increase impervious surface area compared to existing conditions and would incorporate LID features to promote infiltration. Bioretention planters, landscaped swales, and underground dry wells would capture and infiltrate stormwater onsite, thereby supporting groundwater recharge. The Proposed Project would not directly withdraw groundwater and would rely on municipal water supplies provided by the City of Long Beach. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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 offsite?

The Aquatic Center would be constructed on the existing Millikan HS campus within a developed portion of the Project site. No natural streams or rivers occur on the Project site, and no alterations or diversions of any surface water features are proposed. Site grading would follow the recommendations of the geotechnical report and civil plans, directing stormwater to on-site drains and the existing campus storm drain system. The Proposed Project would not alter any natural drainage courses or create conditions likely to result in erosion or siltation beyond standard construction-phase effects, which are addressed through BMPs under the Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002). No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

The Proposed Project replaces Building 700/3000 and associated portable classrooms with a pool, pool deck, and support facilities. The net increase in impervious surface is minimal compared to the existing developed condition. Drainage design directs runoff to on-site inlets and sump pumps tied into the existing storm drain system. Because the Project site is already developed, the Proposed Project would not substantially increase runoff volumes or rates such that downstream flooding would occur. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

The drainage system is designed to retain and convey runoff in compliance with City of Long Beach and Los Angeles County standards. Stormwater would be captured and conveyed via graded pool decks and

drains to prevent uncontrolled flow. Importantly, pool water is separated from the stormwater system—surge tanks, sump pits, and backwash systems are included in the design, preventing the co-mingling of chlorinated pool water with stormwater. Any discharge of pool water would be subject to applicable NPDES and City requirements. With these design features and compliance with MS4 permit requirements, the Proposed Project would not exceed storm drain capacity or introduce polluted runoff. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

iv) Impede or redirect flood flows?

The Project site does not contain a mapped floodway. The Aquatic Center would be constructed on level ground within an already developed campus. Project grading would be limited to the Project site footprint and designed to maintain positive drainage toward existing storm drain connections. The Proposed Project would not introduce barriers that impede or redirect flood flows. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dams, or other artificial body of water. There are no large water tanks in the area that could impact the Project site, and there are no dams or similar bodies of water in proximity to the Project site that are likely to experience seiche wave effects in the region that could create flooding impacts. Given the distance from likely seiche impact areas (contained bodies of water), no seiche impact would occur.

A tsunami is earthquake-induced flooding that is created from a large displacement of the ocean floor. The Project site is identified as being outside of a tsunami zone (DOC 2025b); therefore, the likelihood of a tsunami impacting the Project site is low. No tsunami impact would occur.

A mudflow is a landslide event in which debris, land mass, and soil are saturated during their displacement. The Project site is relatively flat, with no slopes near the Project site that could generate mudflow. No mudflow impact would occur.

No further analysis is required.

Impact Designation: No Impact.

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

The Proposed Project would comply with the Los Angeles Regional Water Quality Control Board Basin Plan, the Construction General Permit (ORDER WQ 2022-0057-DWQ NPDES NO. CAS000002), City of

Long Beach LID standards, and municipal code requirements. While the Project site is located within the Central Basin Groundwater Management Area, the Proposed Project does not involve direct groundwater extraction and would not interfere with groundwater management and therefore there would be a less-than-significant impact. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.11 Land Use and Planning

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.11.1 Regulatory Setting

Local

The City of Long Beach General Plan Land Use Element (City of Long Beach 2019) designates the Project site as Zone I (Institutional) for institutional/school use.

3.11.2 Environmental Setting

Millikan HS has operated at this location since 1956. Surrounding uses include residential neighborhoods and commercial development.

3.11.3 Impact Discussion

a) Physically divide an established community?

The Proposed Project would be located entirely within the boundaries of the existing Millikan High School campus, which is surrounded by established single-family residential neighborhoods to the east and northwest and by commercial and community-serving development directly north of the Project site. The Proposed Project consists of replacing one campus building (Building 700/3000) and adjacent portable classrooms with a new aquatic center, including a swimming pool, bleachers, and supporting facilities. All improvements would be confined to the school property and would not introduce new roadways, barriers, or other physical features that could bisect or disrupt surrounding residential neighborhoods or community patterns.

The project would not change the campus's overall function as a high school, would not expand the school boundaries, and would not alter the connectivity of the surrounding street network. Access to

adjacent residential areas and nearby community uses would remain the same, and no new barriers to circulation or community interaction would be created.

Accordingly, the Proposed Project would not physically divide an established community. No further analysis is required.

Impact Designation: No Impact.

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

The Project site is currently zoned as industrial by the City. The changes contained within the Proposed Project would involve the reconfiguration of an existing high school. No impact would occur as a result of the Proposed Project. No further analysis is required.

Impact Designation: No Impact.

3.12 Mineral Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☐	☒
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?	☐	☐	☐	☒

3.12.1 Regulatory Setting

State

California Department of Conservation

The DOC is charged with protecting energy, land, and mineral resources within California. The agency notes that the primary mineral hazards of concern in the State are mercury, naturally occurring asbestos, and radon (DOC 2025c).

California Geological Survey

The CGS is an agency within the DOC that is charged with providing geological expertise and information about non-fuel mineral resources (metals, industrial minerals, and construction aggregate) within the State.

Division of Mines and Geology

The Division of Mines and Geology also falls within the DOC. This agency is responsible for setting guidelines and creating protections for mineral resources within the State.

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA)[71] was enacted by the California Legislature in 1975 and provides for the reclamation of mined lands. SMARA also directs the State Geologist to identify and map minerals within the State to indicate where "economically significant mineral deposits occur"[71].

3.12.2 Environmental Setting

The Project site is fully developed for educational use. No significant mineral resources are identified on or near the Project site (DOC 2010).

3.12.3 Impact Discussion

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

The areas surrounding the Project site are developed with residences and commercial uses and are not developed for any type of mineral extraction or mining activity, and there is no mining activity on the Project site. Therefore, no loss of known resources would result from implementation of the Proposed Project. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

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

Because the Project site has been developed as a high school since the mid-1950s and no mining or extraction activities occur onsite, the Proposed Project would not result in a loss of availability of a mining site. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

[71] SMARA Statutes and Regulations (ca.gov)

3.13 Noise

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Generation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) For a project located within the vicinity of a private airstrip or within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing in or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.13.1 Regulatory Setting

State

California Code of Regulations Title 5, Section 14040(q): California Department of Education Standards for School Site Selection

Under 5 CCR 14040,[72] California Department of Education (CDE) regulations require school districts to consider noise in the site selection process. As recommended by CDE guidance, if a school district is considering a school site near a freeway or other source of noise, it should hire an acoustical engineer to determine the level of sound that the site is exposed to and to assist in designing the school should that site be chosen.

California Building Code

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a general plan that includes a noise

[72] 5 CCR 14040, Determining Specific Allowable Operational Direct Costs

element which is to be prepared according to guidelines adopted by OPR. The purpose of the noise element is to "limit the exposure of the community to excessive noise levels."

CALGreen has requirements for insulation that affect exterior interior noise transmission for non-residential structures. Pursuant to CALGreen Section 5.507.4.1, "Exterior Noise Transmission," an architectural acoustics study may be required when a Project site is within a 65 a-weighted decibels (dBA) community noise equivalent level or day-night average sound level noise contour of an airport, freeway or expressway, railroad, industrial source, or fixed-guideway source. Where noise contours are not readily available, if buildings are exposed to a noise level of 65 dBA equivalent continuous sound pressure level during any hour of operation, specific wall and ceiling assembly and sound-rated windows may be necessary to reduce interior noise to acceptable levels.

Local

City of Long Beach Noise Ordinance

Construction. The City's noise ordinance states that construction in a residential district may only occur from Monday through Friday from 7 a.m. to 7 p.m. and on Saturdays from 9:00 a.m. to 6:00 p.m. Work on Sundays requires a permit from the Noise Control Officer and is limited between 9:00 a.m. to 6:00 p.m (City of Long Beach 2025b).

Exterior Noise Standards. The City's municipal code (Section 8.80.130[73]) prohibits daytime noise levels over 50 dBA and nighttime noise limit at 45 dBA, though variances can be obtained from the Noise Control Officer.

3.13.2 Environmental Setting

The Project site is located in a residential neighborhood of East Long Beach. Ambient noise levels are dominated by school-related activities, local traffic, and neighborhood uses. Sensitive receptors include students and staff at the school as well as residences near the Project site to the east across Palo Verde Avenue and to the northwest along Snowden Avenue. Residences further south along East Barbanell Street are separated from the Project site by intervening school facilities and athletic fields.

3.13.3 Impact Discussion

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

Construction activities such as demolition of Building 700/3000, grading, pool excavation, and building construction would generate temporary noise from heavy-duty equipment and haul trucks. The Proposed Project is required to comply with the City of Long Beach Municipal Code, which restricts

[73] Long Beach Municipal Code Section 8.80.130

construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 6:00 p.m. on Saturdays, with no construction permitted on Sundays or holidays. Equipment used on-site must also comply with applicable state and local noise requirements, including the City's performance standards for construction equipment.

Operation of the Aquatic Center may generate noise from pool mechanical systems, public address announcements, spectator events, and increased vehicle activity during meets or community programs. These operational sources could increase ambient noise levels relative to existing on-campus conditions.

The project's potential to result in significant construction or operational noise impacts will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

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

Construction activities such as demolition of Building 700/3000, site preparation, grading, and building construction would generate temporary groundborne vibration from heavy-duty equipment. The nearest sensitive receptors are residential uses approximately 450 feet east of the project site. While construction vibration levels are expected to be well below thresholds for building damage, temporary perceptible vibration could occur during periods of heavy equipment use.

Operation of the Aquatic Center would not include substantial vibration-generating activities, though occasional event-related activity and mechanical equipment could contribute minor sources of groundborne noise.

The project's potential to result in significant construction or minor operational vibration impacts will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The nearest airport, Long Beach Airport, is located approximately 2.5 miles northwest of the project site. The site is outside the airport's established Airport Influence Area and well beyond the 65 dBA CNEL noise contour identified in the Long Beach Airport Land Use Compatibility Plan. No private airstrips are located within 2 miles of the site. Therefore, the project would not expose students, staff, or visitors to excessive noise levels associated with airport operations and no further analysis is required.

Impact Designation: No Impact.

3.14 Population and Housing

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 Regulatory Setting

State

Statewide Housing Plan

The California Department of Housing and Community Development (HCD) is charged with preparing the *Statewide Housing Plan*. The most recent plan was published in March 2022, and has three objectives:

- Keep Californians in their homes;
- Produce more affordable and climate-smart housing; and
- Continue to act with urgency to address homelessness and housing need.

The *Statewide Housing Plan* is meant to guide housing policy at the local level and is pursuant to California HSC § 50423.[74]

3.14.2 Environmental Setting

The Project site is within an established residential community in an urban setting within the City limits in Los Angeles County. The Project site has been developed as a high school since the mid-1950s and is surrounded by established residences and commercial establishments. Because of the urban setting of the Project site and the large workforce in the region, workers who would serve the construction phase of the Proposed Project are likely to be local to the area.

[74] California HSC § 50423, Chapter 1.5. Statewide Housing Plan

3.14.3 Impact Discussion

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

The Proposed Project would not increase the capacity of Millikan HS; student capacity would remain the same. Therefore, the Proposed Project would not directly increase population growth in the area. No construction of new homes or businesses is proposed, nor is the extension of roads or other infrastructure. No impact would occur as a result of implementing the Proposed Project. No further analysis is required.

Impact Designation: No Impact.

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

The Proposed Project is the demolition of a school building and construction of an Aquatic Center within the existing school footprint. None of these actions would create a need for any additional housing. Therefore, no impact would occur, and no further analysis is required.

Impact Designation: No Impact.

3.15 Public Services

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

3.15.1 Environmental Setting

The Project site is located in a fully urbanized area of Long Beach and is surrounded by established residential neighborhoods to the east and northwest and commercial and community-serving uses along major corridors such as East Spring Street and Palo Verde Avenue. As an existing comprehensive high school campus, the Project site (Project site) is already served by the full range of urban public services.

Law enforcement services are provided by the Long Beach Police Department, with patrol and response activities coordinated through nearby precincts that already serve the Millikan High School campus and its surrounding community. Fire protection and emergency medical services are provided by the Long Beach Fire Department, which maintains stations in proximity to the campus and responds to both on-campus incidents and surrounding neighborhood calls.

The Project site itself is a school facility, and educational services are provided by the Long Beach Unified School District. No new schools would be required to serve the Project. Parks and recreation facilities in the vicinity are provided by the City of Long Beach Department of Parks, Recreation and Marine, which manages multiple public parks within a short distance of the campus. Library services are provided by the Long Beach Public Library system, with several branches serving nearby neighborhoods.

Because the campus is located in a fully built-out urban environment with established service providers, all public services are currently available to the Project site and surrounding community.

3.15.2 Impact Discussion

a) Fire protection?

The Project site would continue to be served by the Long Beach Fire Department (LBFD). The Proposed Project would not change the number of students or buildings or significantly alter the configuration of the campus; therefore, no change would occur to the type of firefighting activities that could be required in the event of an emergency. The closest fire station, LBFD Station 18 at 3361 Palo Verde Avenue (approximately 0.62 miles north of the Project site), would be the primary response unit. The proposed demolition and building construction at Millikan HS would not require the LBFD to acquire any additional equipment. The Proposed Project would not increase the number of students or staff onsite, and the Project site would continue to operate as a high school. Therefore, implementation of the Proposed Project would not affect LBFD's response times or require expansion of fire protection services such that new or physically altered fire stations would be required. Impacts would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

b) Police protection?

Law enforcement services for the project site are provided by the Long Beach Police Department. The Proposed Project would replace one existing building with an aquatic center but would not increase overall student enrollment or staff capacity at Millikan High School. Because the campus population would remain unchanged, the Project would not generate additional demand for police protection services during regular school hours.

The new aquatic center would be used for physical education, athletic practices and competitions, and occasional community programs, similar to existing after-hours uses of other campus facilities such as the gymnasium and athletic fields. These types of events are already accommodated within the Long Beach Police Department's service patterns for Millikan High School. Therefore, the Project would not result in a substantial increase in after-hours police service needs beyond existing conditions. Accordingly, the Project would not necessitate the construction of new or expanded police facilities, the absence of which could have an environmental impact. No further analysis is required.

Impact Designation: No Impact.

c) Schools?

School service needs are related to the size of a residential population, geographic area served, and community characteristics. The Proposed Project would address new facilities at Millikan HS. Once constructed, the new school facilities would continue to serve the existing Millikan HS population and students in the District's attendance area. No impact on school facilities or services would occur. No further analysis is required.

Impact Designation: No Impact.

d) Parks?

The Proposed Project would not generate a demand for park space, which is typically caused by population and/or employment growth. The Proposed Project would improve the recreational facilities at Millikan HS. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

e) Other public facilities?

The need for public services and facilities (e.g., libraries, hospitals, childcare, and teen or senior centers) is typically caused by residential uses. As the Project site is currently developed as a high school and would continue to operate as such, no new or expanded public facilities would be required. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

3.16 Recreation

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

3.16.1 Environmental Setting

The Project site is within an established residential community in an urban setting within the City limits in Los Angeles County. The Project site has been developed as a high school since the mid-1950s and is surrounded by established residences, commercial development, and road systems. The Project site includes athletic fields and is located approximately 1 mile west of El Dorado Park.

3.16.2 Impact Discussion

a) Would the Proposed 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?

Operation of the Proposed Project would not require students to use existing neighborhood or regional parks to any greater or lesser extent. The Proposed Project would provide new recreational facilities. The student capacity would remain unchanged upon implementation of the Proposed Project and no impact on off-site recreational facilities would result. No further analysis is required.

Impact Designation: No Impact.

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

The Proposed Project would include demolition of existing classrooms to create an Aquatic Center. No changes in the student population would occur and construction personnel would be drawn from

existing residents; therefore, no additional demand for recreational facilities would result. A less-than-significant impact would occur, and no further analysis is required.

Impact Designation: Less-than-Significant Impact.

3.17 Transportation and Circulation

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

3.17.1 Regulatory Setting

State

Senate Bill 375

SB 375,[75] the Sustainable Communities and Climate Protection Act, was adopted in September 2008. Building on AB 32 (Global Warming Solutions Act of 2006),[76] SB 375 directed CARB to develop regional GHG emission reduction targets by using a regional transportation planning process. SB 375 also required city and county involvement in regional transportation, housing, and land use planning.

Local governments retain authority over land use decisions under SB 375 but are expected to coordinate their regional housing needs with regional transportation. Furthermore, SB 375 offers CEQA incentives for projects that are consistent with a regional plan that reduces GHGs. These incentives are offered if a project is consistent with the local Sustainable Communities Strategy, a component of the regional transportation plan that demonstrates how GHG targets will be met (Institute for Local Government 2025).

[75] SB 375 Transportation planning: travel demand models: sustainable communities strategy: environmental review

[76] AB 32 Air pollution: greenhouse gases: California Global Warming Solutions Act of 2006

Senate Bill 743

SB 743[77] was signed into law in 2013 and changed how public agencies must evaluate project-related transportation impacts. The bill required the CEQA Guidelines to be updated to establish new criteria for determining the significance of a project's transportation impacts that more appropriately balances the needs of congestion management with State-wide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

As required under SB 743, OPR developed potential metrics to measure transportation impacts that may include, but are not limited to, VMT, VMT per capita, automobile trip generation rates, or automobile trips generated. The new metrics would replace the use of auto delay (measured by "level of service") as the metric to analyze transportation impacts under CEQA. OPR recommends different thresholds of significance for projects depending on land use.

3.17.2 Environmental Setting

The Project site is located within an entirely urbanized area, bound by East Belen Street to the north, Snowden Avenue to the west, East Barbanell Street to the south, and Palo Verde Avenue to the east. Vehicle traffic enters from multiple locations including parking on the north and west. Major nearby travel corridors include Woodruff Avenue, Spring Street, and Interstate 405.

3.17.3 Impact Discussion

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

The Proposed Project would not change student enrollment or attendance boundaries at Millikan HS. As a result, the number of daily trips associated with student, parent, and staff travel to campus would remain consistent with existing conditions. Vehicular access to the Project site would continue from Snowden Avenue, Palo Verde Avenue, East Belen Street, and East Barbanell Street, and no reconfiguration of existing parking lots is proposed. Parking for the aquatic center would be provided by the existing adjacent parking lot, consistent with existing operations for events within the campus. Bicycle and pedestrian access would also remain unchanged, with continued use of existing sidewalks, crosswalks, and designated bicycle routes. The Proposed Project would not conflict with adopted circulation system plans or policies. No further analysis is required.

Impact Designation: No Impact.

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

Under CEQA Guidelines § 15064.3, transportation impacts are assessed based on Vehicle Miles Traveled (VMT), not Level of Service (LOS). The Proposed Project would not increase student enrollment or

[77] CEQA: Transportation Impacts (SB 743) - Office of Planning and Research (ca.gov)

introduce a new trip-generating land use; it merely replaces existing athletic uses with a similarly sized aquatic facility. Accordingly, it would not substantially increase daily VMT.

Although community swim programs and spectator events may generate trips during evenings and weekends, these events fall within the campus' established athletic usage pattern and would occur intermittently, not permanently increasing VMT.

Per the OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (2018[78]), projects of this type—locally serving community institutions—can typically be presumed to have a less-than-significant VMT impact, especially when there is no net increase in users or trips. Therefore, the Proposed Project would not exceed OPR-recommended thresholds for school facilities. No further analysis is required.

Impact Designation: No Impact.

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

The Proposed Project would be located within an existing high school campus and would not alter roadway geometry, add new driveways, or change circulation patterns. Internal circulation would continue to use existing campus access points and the adjacent parking lot for school events. The Proposed Project would not introduce incompatible uses such as farm equipment, and no new hazardous design features would be created. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

d) Result in inadequate emergency access?

Emergency vehicle access to the Project site would continue to be provided through existing gated entrances along Snowden Avenue and other perimeter gates serving the athletic fields. No reconfiguration of access points or circulation routes is proposed. During construction, staging and contractor parking would be confined to designated areas within the campus, and emergency access would remain available. The completed Proposed Project would maintain adequate emergency access consistent with LBFD standards. No further analysis is required.

Impact Designation: No Impact.

[78] OPR Technical Advisory on Evaluating Transportation Impacts in CEQA

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project cause a substantial adverse change in the significance of a tribal cultural resource (TCR), defined in PRC § 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:				
a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k)?	☒	☐	☐	☐
b) 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☒	☐	☐	☐

3.18.1 Regulatory Setting

State

AB 52 mandates early tribal consultation prior to and during CEQA review for those tribes that have formally requested, in writing, notification on projects subject to AB 52, i.e., projects that have published Notices of Preparation for EIRs or Notices of Intent to adopt NDs or MNDs since July 1, 2015. AB 52 establishes a new category of TCRs for which only tribes are experts; these resources may not necessarily be visible or archaeological but could be religious or spiritual in nature. Significant impacts to a TCR are considered significant effects on the environment.

3.18.2 Environmental Setting

A letter requesting a search of the Sacred Lands File (SLF) was sent to the NAHC on August 19, 2025 and a reply was received on August 26, 2025, reporting that the SLF search was positive. On September 26, 2025, LBUSD sent consultation letters to:

- Michael Mirelez, Cultural Resource Coordinator, Torres Martinez Desert Cahuilla Indians;

- Andrew Salas, Chairman, Gabrieleño Band of Mission Indians – Kizh Nation; and
- Anthony Morales, Chief, San Gabriel Band of Mission Indians.

As the Lead Agency, the District provided formal AB 52 consultation notices pursuant to Public Resources Code Section 21080.3.1. Of the tribes notified, the Gabrieleño Band of Mission Indians – Kizh Nation submitted a timely request for consultation. The District has initiated consultation with this Tribe.

3.18.3 Impact Discussion

a) Would the Proposed Project cause a substantial adverse change in the significance of a TCR, defined in PRC § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k)?

The Project site is located within the existing Millikan High School campus, originally constructed in the mid-1950s. Construction activities would occur entirely within the existing developed campus. Consultation with California Native American tribes pursuant to Assembly Bill 52 (AB 52) has been initiated. The project's potential to impact Tribal Cultural Resources will be assessed in the EIR.

Impact Designation: Potentially Significant Impact

b) Would the Proposed Project cause a substantial adverse change in the significance of a TCR, defined in PRC § 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: 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 PRC § 5024.1. In applying the criteria set forth in subdivision (c) of PRC § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.

Consultation with California Native American tribes pursuant to AB 52 has been initiated. The project's potential to impact Tribal Cultural Resources will be assessed in the EIR.

Impact Designation: Potentially Significant Impact

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) 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 relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the Proposed Project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the Proposed Project that it has adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 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.

3.19.2 Impact Discussion

a) 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 relocation of which could cause significant environmental effects?

The Proposed Project involves the demolition of a classroom building and portable classrooms and construction of an Aquatic Center; student capacity would not increase. Under the Proposed Project, the Project site would be reconfigured, requiring minor reconfiguration of utility connections. As such, the Proposed Project would remove existing utilities onsite and provide new utilities in addition to replacing existing connections. These connections and updates have been incorporated into project site design and specifications. No utility expansions are necessary to meet the needs of the Proposed Project. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

The Proposed Project involves the construction of an aquatic facility, which would require a draw on the local water supply for initial filling but only require periodic top-offs thereafter. Pool filters would recycle water; however, water levels in the pool would be lost daily due to evaporation. 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 CALGreen. Lastly, the pool filtration system is a regenerative media filtration system utilizing a technology that significantly reduces water use (20,000 gallons annually compared to sand's 500,000 to 1 million gallons), resulting in 97% annual water saving) and is more energy efficient (21% annul electrical saving) than the traditional sand filtration devices. This would ensure water use is greatly minimized.

Overall, while the Proposed Project would result in long-term use of water supplies, it is considered a nominal increase compared to the overall water consumption of such an urban area. The Proposed 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, and no further analysis is required.

Impact Designation: Less-Than-Significant Impact.

c) Result in a determination by the wastewater treatment provider, which serves or may serve the Proposed Project that it has adequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments?

Wastewater from the campus is treated at the Long Beach Water Reclamation Plant, which has a capacity of approximately 25 million gallons per day (Los Angeles County Sanitation Districts 2025). Because the Proposed Project does not increase student enrollment and only replaces existing facilities,

wastewater generation would remain consistent with current levels. Therefore, the provider has adequate capacity to serve the Proposed Project and any impact would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

The Proposed Project would produce a significant volume of waste during the demolition of Building 700/3000. The EPA (1998) estimates that non-residential demolition averages 155 pounds/square foot, or 0.0775 tons/square foot. Therefore, the weight of 1,000 square feet would be 77.5 tons, and volume conversion is approximately 0.25-0.5 tons/cubic yard. An approximate calculation is that between 155 and 320 cubic yards would be generated by the demolition.

The closest landfill is Scholl Canyon Landfill in Pasadena, located at 7721 North Figueroa Street. According to the Solid Waste Facility Permit issued in 2011 (City of Los Angeles 2011), Scholl Canyon has a permitted maximum daily tonnage of 3,400 tons per day, a remaining capacity of 9,900,000 cubic yards, and an estimated closure date of 2030. As such, the landfill has the capacity to accept the demolition debris from Proposed Project construction. Once operational, it is assumed that solid waste generation would be at a similar level to that generated currently; therefore, no impacts from operation would occur.

To ensure optimal diversion of solid waste resources by the Proposed Project, the District would require contractors to recycle or salvage non-hazardous waste materials generated during demolition and/or construction, to foster material recovery and reuse, and to minimize disposal in landfills. Therefore, Proposed Project impacts on landfill capacity would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

Construction of the Proposed Project would generate routine solid waste and, therefore, would require the consideration of waste reduction and recycling measures. The Proposed Project would be required to adhere to AB 939, which requires specific waste diversion goals. The Proposed Project would reuse and recycle construction material to the maximum extent feasible. The Proposed Project would not cause an increase in student and staff population that would result in the permanent and significant increase of solid waste during operation, only during demolition of the existing classroom building. Therefore, the Proposed Project is consistent with AB 939 and would result in a less-than-significant impact. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.20 Wildfire

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Proposed Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐

3.20.1 Environmental Setting

CAL FIRE identifies State Responsibility Area Fire Hazard Severity Zones. The existing setting is a school site within an urban setting and is not located in a Fire Hazard Severity Zone (CAL FIRE 2025).

3.20.2 Impact Discussion

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

The Proposed Project would not conflict with adopted emergency response or evacuation plans. The surrounding roadways would continue to provide emergency access to the Project site and surrounding properties during construction and operation. The Proposed Project would fully implement all existing fire safety codes and requirements. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less-Than-Significant Impact.

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

The Project site is within an existing urbanized setting and is in a relatively flat area. No change in use or prevailing conditions would occur. The Project site is not prone to wildland fires today and the risk would not increase if the Proposed Project were implemented. No impact would occur, and no further analysis is required.

Impact Designation: No Impact.

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

Due to the existing location and no change in use, the Proposed Project would not increase the fire risk to the Project site. Demolition and construction on the Project site would comply with existing fire codes, including full domestic water replacement and modifications to HVAC, electrical, and sprinkler systems. The Proposed Project may require limited changes to utility connections such as electricity, water, and sewer which would be installed to meet service requirements. The construction of infrastructure improvements for the Proposed Project would not increase fire risk. Impacts would be less than significant, and no further analysis is required.

Impact Designation: Less-Than-Significant 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?

The Project site is relatively flat and is not within a mapped landslide hazard area (DOC 2015). Additionally, the Project site is located within FEMA Zone X. As stated previously, no change is anticipated in fire risk and no impact to increased runoff or flooding from such risks would occur. Construction activities related to the Proposed Project would be subject to compliance with the CBC and would include BMPs. Therefore, with implementation of BMPs and compliance with the CBC, impacts would be less than significant. No further analysis is required.

Impact Designation: Less-Than-Significant Impact.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Would the Proposed Project:				
a) Does the Proposed Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the Proposed 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.)	☒	☐	☐	☐
c) Does the Proposed Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a) Does the Proposed 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?

The Proposed Project would include demolition of an existing school building and removal of portable buildings, then replacement with an Aquatic Center within the Millikan HS campus boundaries. The Project site is entirely landscaped, and no biological resources or critical habitat has been identified. The Proposed Project would comply with the MBTA bird nesting season restrictions and would not result in impacts to nesting regulatory birds protected by the MBTA. No sensitive animal or plant species would be impacted.

Preliminary review indicates that demolition of the Industrial Arts Building (Building 700/3000), a contributor to the CRHR-eligible Millikan High School campus, could incrementally contribute to cumulative impacts on historical resources in the District. Removal of a contributing element has the potential to reduce the integrity of the campus and, in combination with other projects that affect historic schools, could result in a cumulatively considerable significant impact. Accordingly, implementation of the Proposed Project could eliminate important examples of the major periods of California history or prehistory.

Impact Designation: Potentially Significant Impact.

b) Does the Proposed 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.)

Cumulatively considerable impacts for Air Quality, Cultural Resources, Greenhouse Gas Emissions, Noise, and Tribal Cultural Resources will be addressed in the EIR.

Impact Designation: Potentially Significant Impact.

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

Environmental effects associated with Air Quality and Noise will be assessed in the EIR.

Impact Designation: Potentially Significant Impact.

4 Preparers

4.1 Lead Agency

Long Beach Unified School District, Facilities Planning & Management

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Appendix A

Millikan High School Aquatic Center MUSCO Lighting Assessment

MILLIKAN HIGH SCHOOL AQUATIC CENTER
LONG BEACH, CA

Lighting System

Pole/Fixture Summary

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
P1-P4	60'	60'	1	TLC-LED-1200	1.17 kW	B
		60'	2	TLC-LED-1200	2.34 kW	A
4			**12**		**14.04 kW**	

Circuit Summary

Circuit	Description	Load	Fixture Qty
A	Pool	9.36 kW	8
B	Pool Egress	4.68 kW	4

Fixture Type Summary

Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	12

Single Luminaire Amperage Draw Chart

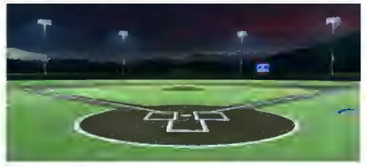
Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination Ave					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Egress	Horizontal Illuminance	12.43	2	23	10.39	5.50	B	4
Pool	Horizontal Illuminance	56.07	43	72	1.67	1.30	A,B	12
Pool Deck	Horizontal Illuminance	34.83	17	54	3.24	2.09	A,B	12
Spill @ 3ft	Horizontal Illuminance	0.0151	0.00	0.05	-	-	A,B	12
Spill @ 5ft	Max Candela Metric	1506.7423	0.00	5172.91	-	-	A,B	12
Spill @ 5ft	Max Vert Illuminance (by Light Bank)	0.0430	0.00	0.14	-	-	A,B	12

From Hometown to Professional



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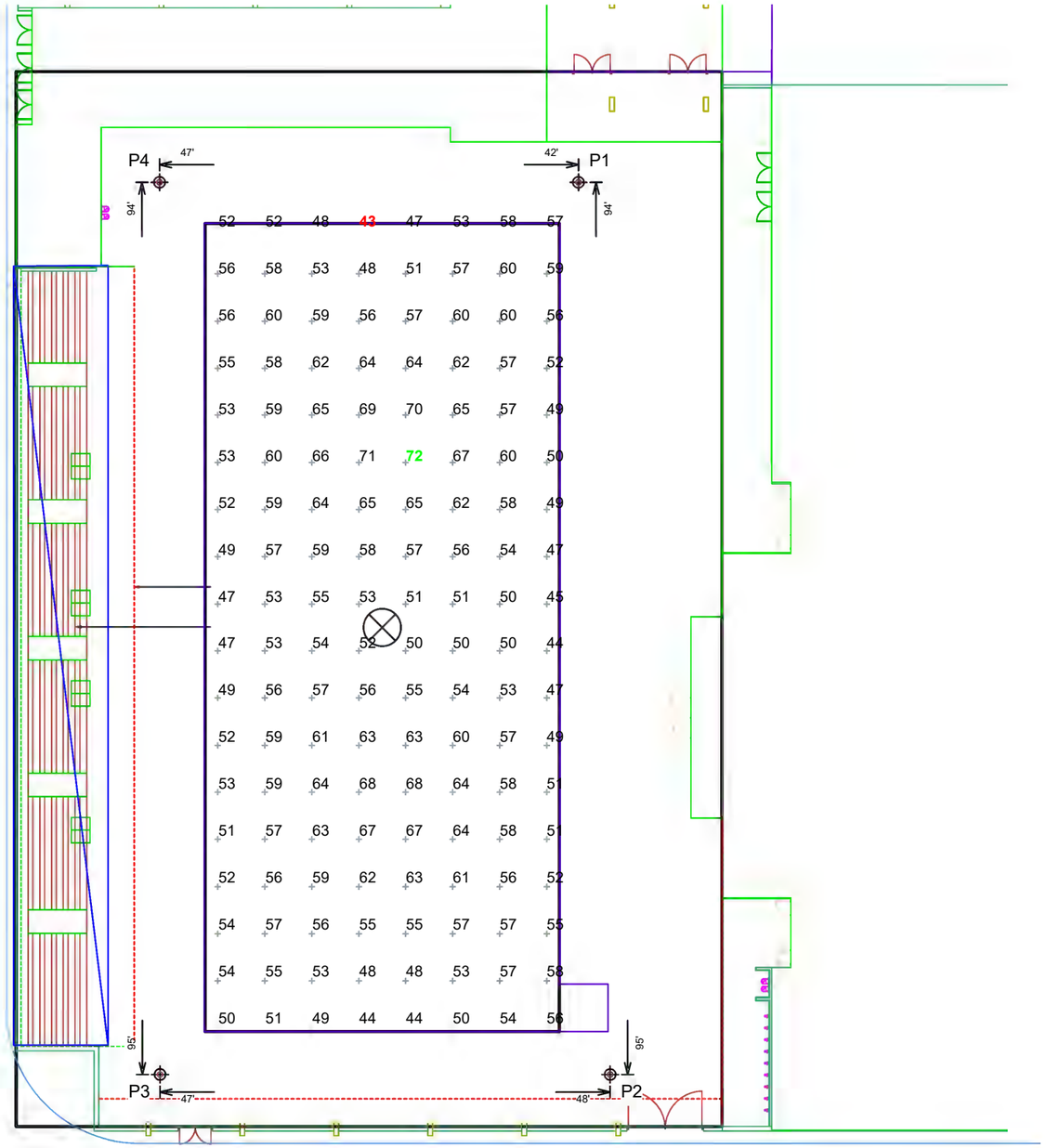
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole					Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4				Totals		12	12	0

*Above Grade level relative to the field



Grid Summary

Name	Pool
Size	75' x 171'
Spacing	10.0' x 10.0'
Height	3.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Guaranteed Average	**50**
Scan Average	56.07
Maximum	72
Minimum	43
Avg/Min	1.30
Guaranteed Max/Min	**2**
Max/Min	1.67
UG (adjacent pts)	1.19
CU	0.46
No. of Points	144
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 30

0' 30' 60'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) dimensions are relative to 0,0 reference point(s)

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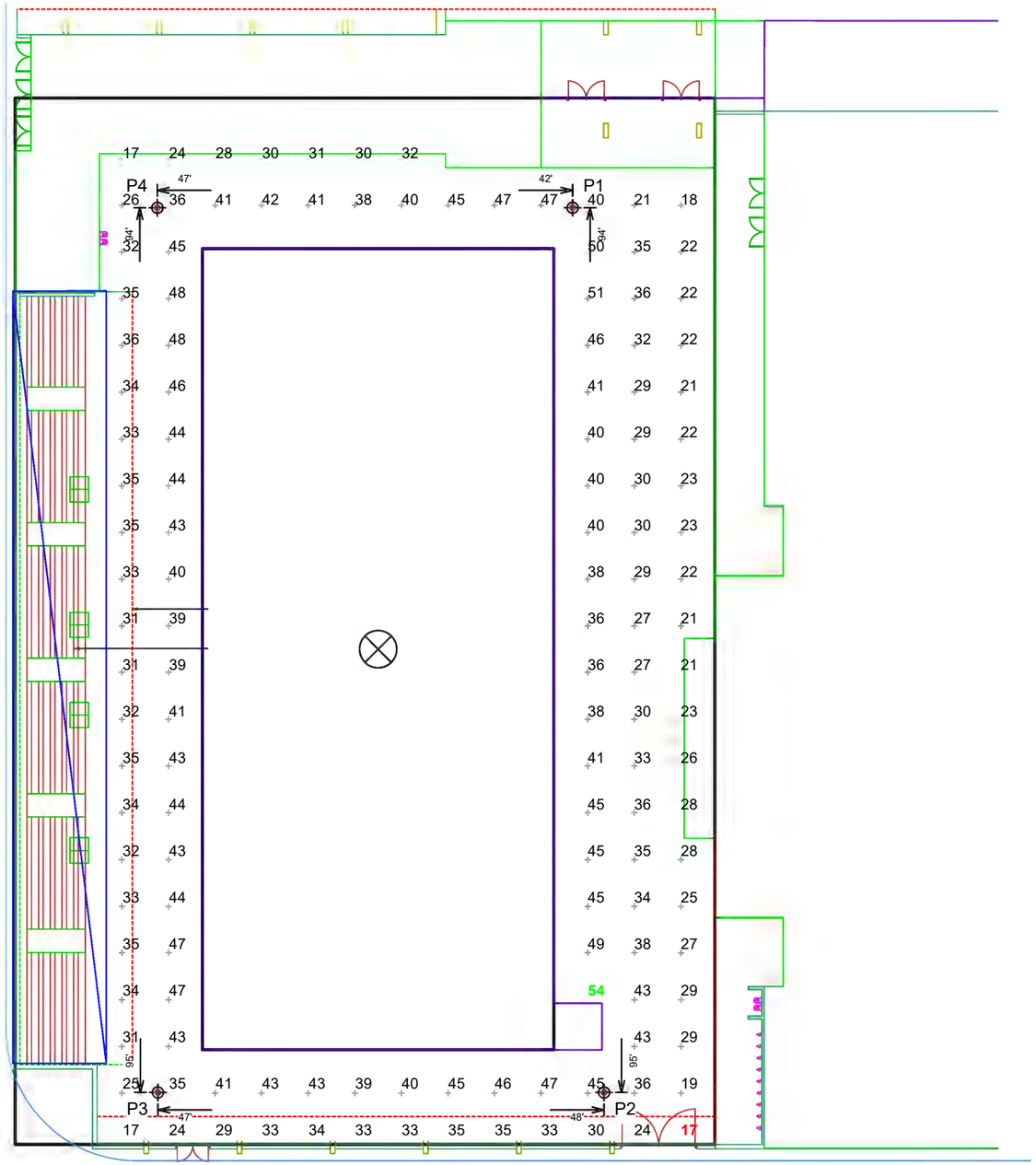
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4	Totals					12	12	0

*Above Grade level relative to the field



Grid Summary

Name	Pool Deck
Size	75' x 171'
Spacing	10.0' x 10.0'
Height	3.0' above grade

Illumination Summary

MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Guaranteed Average	**25**
Scan Average	34.83
Maximum	54
Minimum	17
Avg/Min	2.09
Max/Min	**3.24**
UG (adjacent pts)	1.92
CU	0.27
No. of Points	135
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 30

0' 30' 60'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) dimensions are relative to 0,0 reference point(s)

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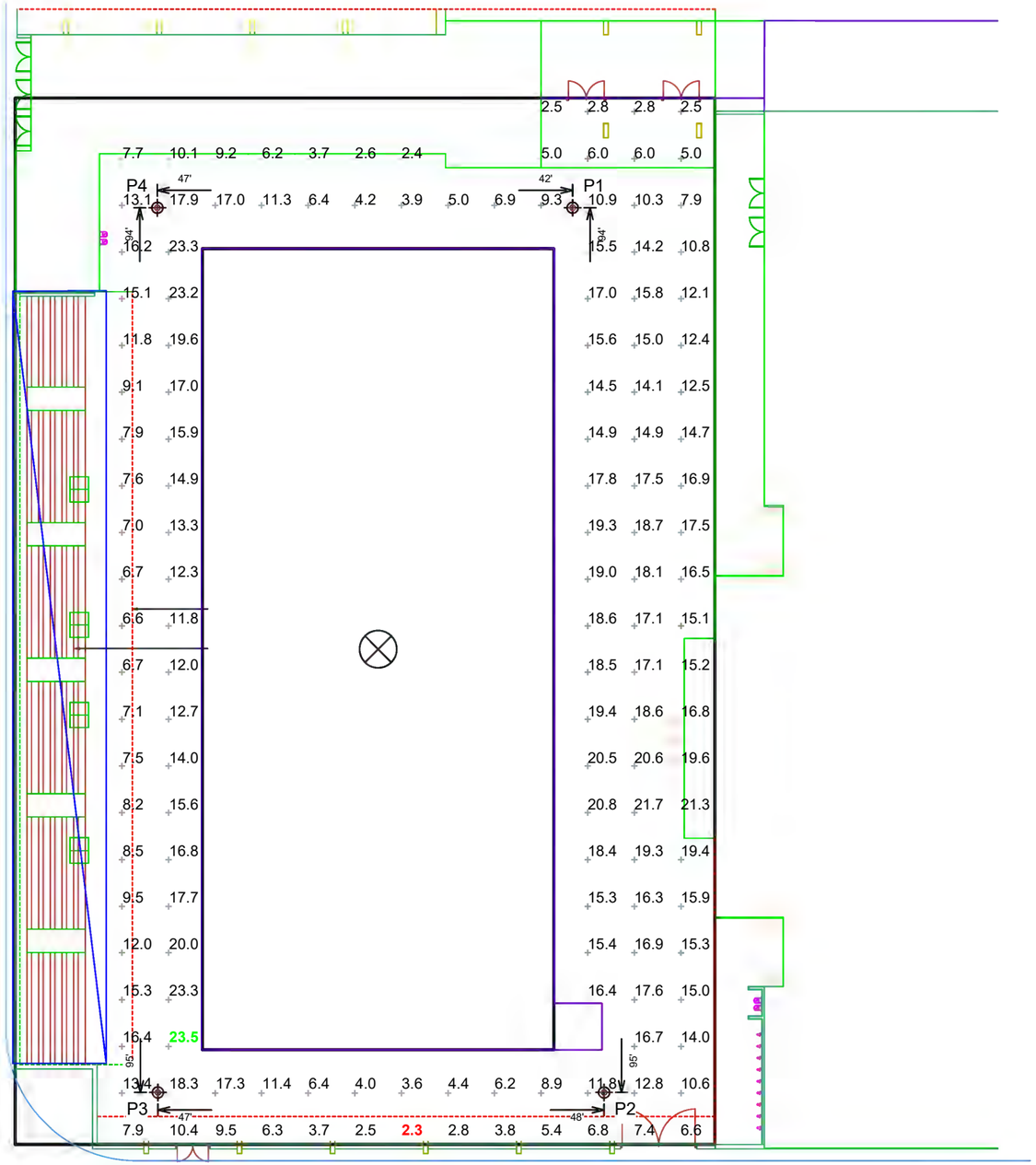
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	1	2
4				Totals		12	4	8

*Above Grade level relative to the field



Grid Summary

Name	**Egress**
Size	150' x 224'
Spacing	10.0' x 10.0'
Height	3.0' above grade

Illumination Summary

	MAINTAINED HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average	**12.43**
Maximum	23
Minimum	2
Avg/Min	5.50
Max/Min	**10.39**
UG (adjacent pts)	2.13
CU	0.30
No. of Points	143
LUMINAIRE INFORMATION	
Applied Circuits	B
No. of Luminaires	**4**
Total Load	4.68 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 30

0' 30' 60'

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Pole location(s) dimensions are relative to 0,0 reference point(s)

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MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole					Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4				Totals		12	12	0

*Above Grade level relative to the field

Grid Summary

Name	**Spill @ 3ft**
Spacing	30.0'
Height	3.0' above grade

Illumination Summary

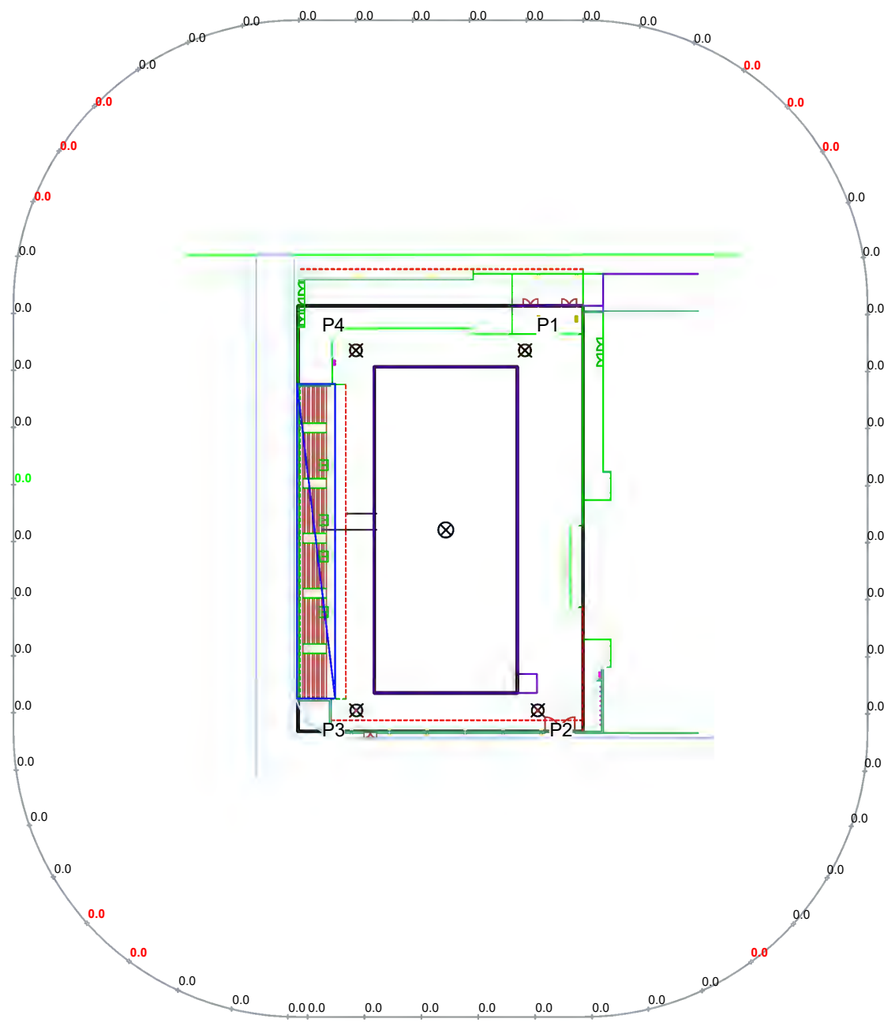
	INITIAL HORIZONTAL FOOTCANDLES
	Entire Grid
Scan Average	**0.0151**
Maximum	0.05
Minimum	0.00
CU	0.00
No. of Points	57
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 80

0' 80' 160'

Pole location(s) dimensions are relative to 0,0 reference point(s)

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MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole					Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4				Totals		12	12	0

*Above Grade level relative to the field

Grid Summary

Name	**Spill @ 5ft**
Spacing	30.0'
Height	5.0' above grade

Illumination Summary

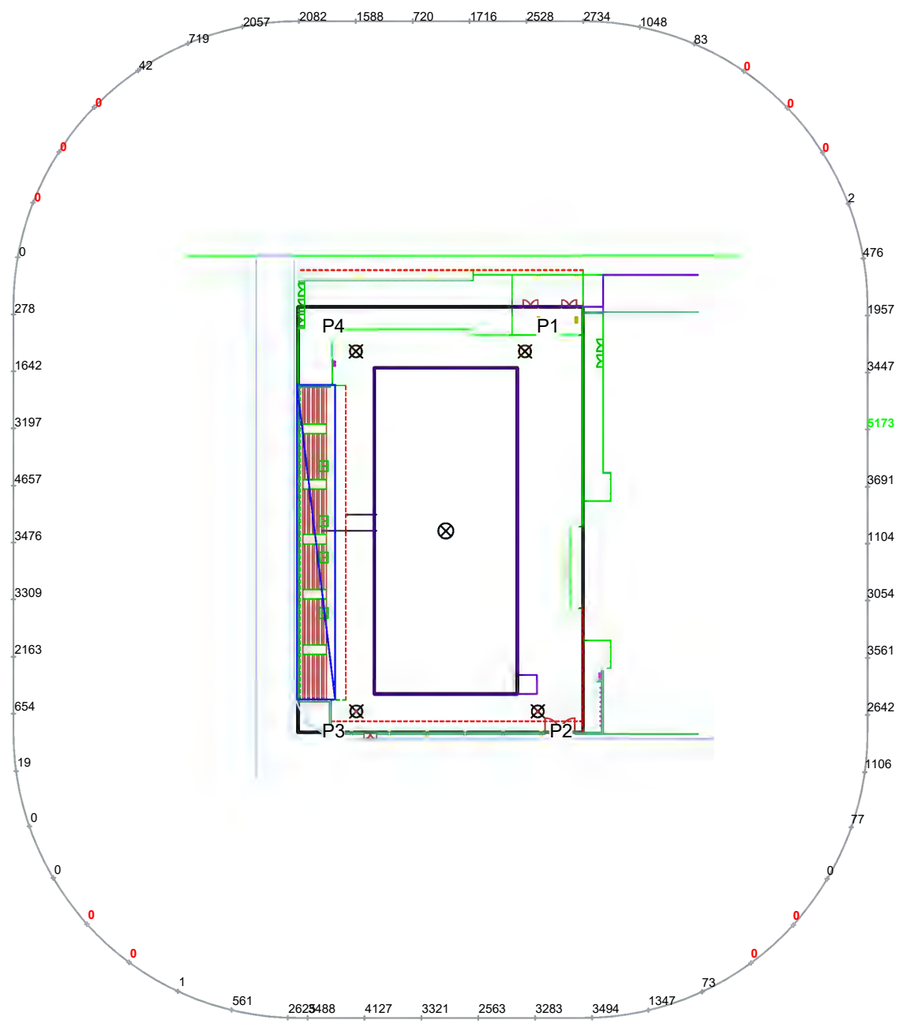
	INITIAL CANDELA (PER FIXTURE)
	Entire Grid
Scan Average	**1506.7423**
Maximum	5172.91
Minimum	0.00
CU	0.00
No. of Points	57
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 80

0' 80' 160'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) dimensions are relative to 0,0 reference point(s)

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MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA

Equipment List For Areas Shown

Pole					Luminaires			
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE	THIS GRID	OTHER GRIDS
4	P1-P4	60'	-	60'	TLC-LED-1200	3	3	0
4				Totals		12	12	0

*Above Grade level relative to the field

Grid Summary

Name	**Spill @ 5ft**
Spacing	30.0'
Height	5.0' above grade

Illumination Summary

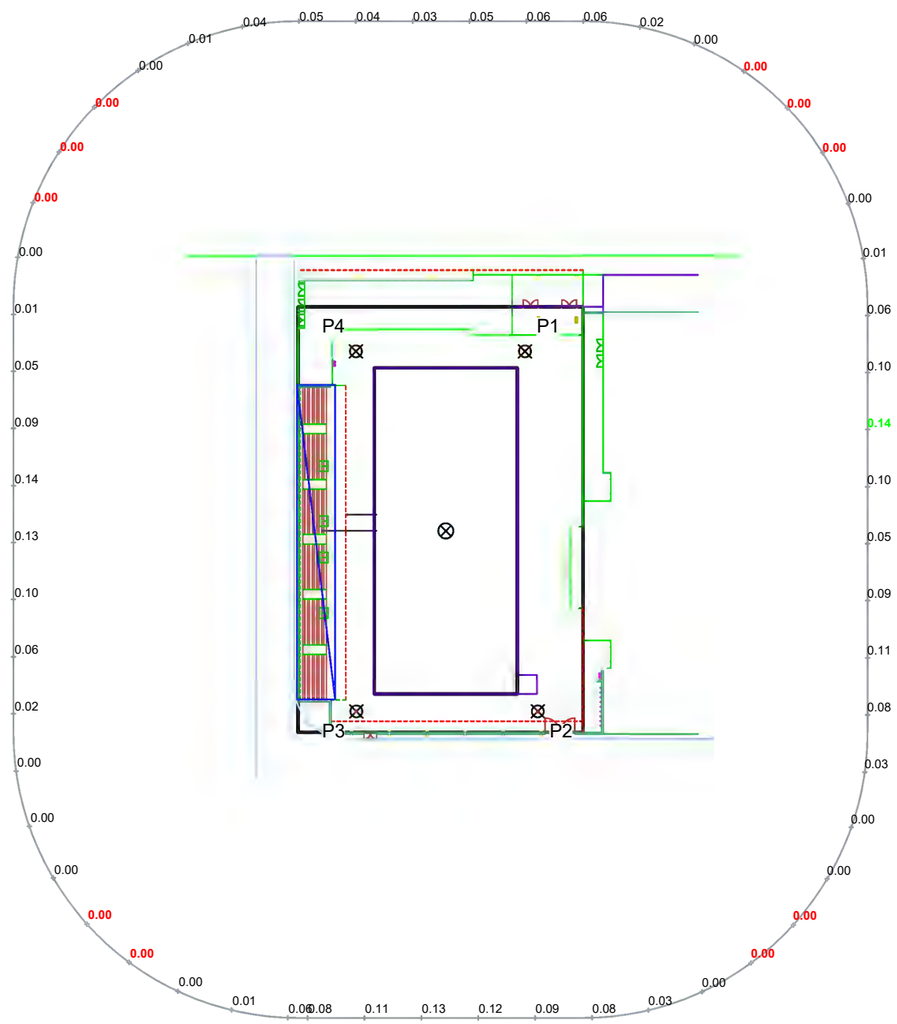
	INITIAL MAX VERTICAL FOOTCANDLES
	Entire Grid
Scan Average	**0.0430**
Maximum	0.14
Minimum	0.00
CU	0.00
No. of Points	57
LUMINAIRE INFORMATION	
Applied Circuits	A,B
No. of Luminaires	**12**
Total Load	14.04 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 80

0' 80' 160'

Pole location(s) dimensions are relative to 0,0 reference point(s)

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

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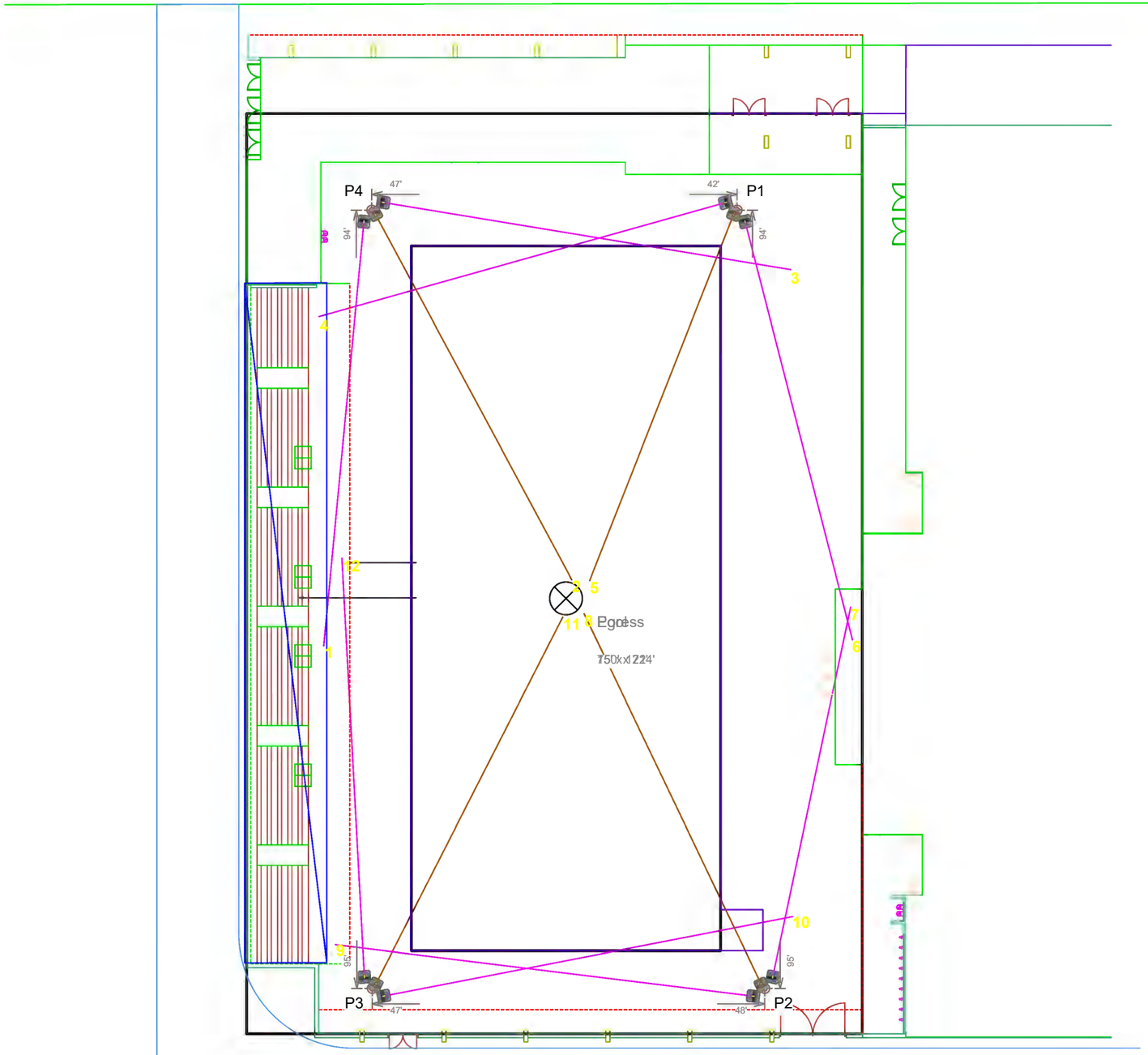
MILLIKAN HIGH SCHOOL AQUATIC CENTER

LONG BEACH, CA



Equipment Layout

INCLUDES:
· Egress
· Pool

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

Equipment List For Areas Shown

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	ABOVE GRADE LEVEL	LUMINAIRE TYPE	QTY/POLE
4	P1-P4	60'	-	60'	TLC-LED-1200	3
4	Totals					12

Single Luminaire Amperage Draw Chart

Driver Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0

SCALE IN FEET 1 : 30

0' 30' 60'

ENGINEERED DESIGN By: E.Fox • File #241863A • 20-Jan-25

Pole location(s) dimensions are relative to 0,0 reference point(s)

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Appendix B

Phase II Intensive Historic Resources Impact Assessment Report

Millikan High School Aquatic Center Project

PHASE II INTENSIVE HISTORIC RESOURCES IMPACT ASSESSMENT REPORT

Submitted to:

Long Beach Unified School District
1515 Hughes Way
Long Beach, CA 90810

Prepared for:

Terraphase Engineering Inc.
1300 Clay St, Suite 1000
Oakland, CA 94612

Prepared by:

Delcamp Preservation & Planning, 2647 Gateway Road, Suite 105 #228
Carlsbad, CA 92009

September 29, 2025

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ACRONYMS AND ABBREVIATIONS

CAB	Compliance Activity B
CAC	Compliance Activity C
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
District	Long Beach Unified School District
DP&P	Delcamp Preservation & Planning
HABS	Historic American Buildings Survey
HRAR	Historic Resource Impact Assessment Report
HRER	Historic Resource Evaluation Report
HS	High School
LBUSD	Long Beach Unified School District
NEPA	National Environmental Policy Act
NPS	National Park Service
NRHP	National Register of Historic Places
SCCIC	South Central Coastal Information Center
SOIS	Secretary of the Interior's Standards for the Treatment of Historic Properties

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MANAGEMENT SUMMARY

Delcamp Preservation & Planning (DP&P) was contracted by Terraphase Engineering Inc. (Terraphase) to provide historic resources services for the Long Beach Unified School District (District) proposed Millikan High School (HS) Aquatic Center Project (project). The project is the proposed demolition of the Millikan HS Industrial Building, formerly known as Building 700 and now known as Building 3000. Millikan HS was previously identified in 2017 and 2025 to be eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) as an excellent example of a Post-War Modern style school campus designed by prolific architect C. Hugh Gibbs with landscaping by Eckbo, Royston and Williams. The prior historical evaluations identified eight buildings in the original rectangular grouping and the site plan, for a total of nine contributing elements to the historic character of the school. Building 3000 is one of the eight contributing buildings, and is located at the northeast corner of the rectangular grouping of the contributing buildings.

The proposed improvements were generally identified in the District's 2017 *Cultural Resources Assessment for Long Beach Unified School District* as a major renovation that would not impact the school's historic eligibility. As a major renovation, the Study stipulated that the project is subject to Compliance Activities B and C (CAB and CAC), and potentially Compliance Activity D.[1] CAB requires a Phase II Intensive Historic Resources Assessment to document character-defining features, assess potential impacts, and identify design, treatment or mitigation recommendations to reduce potential impacts. CAC requires the historic preservation professional to provide preservation advice including review of plans throughout the design process, preparing written advice and attending meetings. In the event mitigation is required, Compliance Activity D would come into effect which may include but would not be limited to monitoring, documentation, salvage and interpretation activities. DP&P's scope is to provide services under CAB and CAC; Compliance Activity D is outside DP&P's current scope.

DP&P's Principal Architectural Historian reviewed available project plans, and completed a site visit in August 2025 and identified character-defining features of the school to assess the potential impacts of the project on Millikan HS. Based on a review of available project plans and the scope of the proposed project at the current design stage, the project will result in demolition of one contributing building and may result in significant modification of the character-defining features of Millikan HS. As such, the project may result in a substantial adverse change that would impair the historical significance of Millikan HS. Mitigation measures are recommended to reduce potential impacts of the project.

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[1] PCR Services Inc., *Cultural Resources Assessment for Long Beach Unified School District*, 2017, Appendix G, Table 12.

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PHASE II HISTORIC RESOURCES IMPACT ASSESSMENT

This Phase II intensive historic resources impact assessment report (HRAR) has been prepared in accordance with Compliance Activity B as stipulated by the *Cultural Resources Assessment for Long Beach Unified School District* (Study) prepared by PCR Services Inc. in 2017. Further coordination as a result of this HRAR will occur with District personnel as part of Compliance Activity C and may result in an update to this HRAR.

One of the purposes of the Study was to identify and preliminarily evaluate schools that were found potentially eligible for listing as historic resources in the National Register of Historic Resources (NRHP) and/or California Register of Historical Resources (CRHR). Another important purpose of the Study was to provide guidance and practical approaches to assist the District in ensuring projects affecting eligible historic resources comply with the California Environmental Quality Act (CEQA). As part of the Study, Robert A. Millikan High School (Millikan HS) was found to be eligible for listing in the NRHP and CRHR as an excellent example of a Post-War Modern style school campus designed by locally prolific architect C. Hugh Gibbs with landscaping by Eckbo, Royston and Williams. The planned project for Millikan HS was categorized at that time as a major renovation that would not impact the school's historic eligibility, yet would not be exempt from review under CEQA.

The 2017 Study stipulated that the following Compliance Activities need to be completed for Major Renovation projects at eligible historic resource campuses:

1. <u>Compliance Activity B. Perform Phase II Intensive Historic Resources Assessments</u>
   Document character-defining features; review detailed scopes of work w/Architect; provide written guidance in accordance w/ the Secretary of the Interior's Standards for the Treatment of Historic Properties; assessment of potential impacts for CEQA/NEPA [National Environmental Policy Act] compliance.

2. <u>Compliance Activity C. Preservation Advice</u>
   Attend meetings with Architect and/or District as required; review plans at concept, preliminary, and final design; prepare CEQA Compliance Letter; attend pre-construction meetings/critical stage construction review.

As part of the current undertaking, DP&P recommends that the Cafeteria Building is additionally eligible as a contributor to the Millikan HS historic resource. Furthermore, DP&P recommends that Building 900, previously identified and confirmed as a contributor in 2017 and 2025, is not eligible as a contributor based on its later construction date after Millikan HS' period of significance of 1954-1957. Additionally, DP&P has identified and clarified changes that have occurred to some of the school's buildings and site plan character-defining features. Following a summary of the project, potential impacts associated with the project are analyzed. Mitigation measures as well as management considerations and recommendations are presented. For the District's consideration. The preparer's qualifications and references are included in the concluding sections of the report.

MILLIKAN HIGH SCHOOL

Character-Defining Features of Millikan High School

The prior evaluations completed by PCR Services and Kleinfelder in 2017 and 2025, respectively, concluded that Millikan HS is an eligible historic resource with several contributing elements. The prior studies identified and/or confirmed that eight buildings and the entire site plan are contributors to the historic significance of the Millikan HS campus: Buildings 100 (now 1000) – Administration, 200 (now 2000) – Social Studies, 300 (now 12000) – Commerce and Science, 400 (now 7000) – Arts and Home Economics, 500 (now 8000) – Auditorium, 600 (now 4000) – Physical Education, 700 (now 3000) – Industrial Arts, and 900 – David Radford Hall. The "entire site plan" was stated in 2025 to be an additional contributor without any other description. For the purpose of this report, the "entire site plan" is interpreted to mean the layout of the school's core original buildings including any intact site features remaining from the period of significance. As contributors, the buildings and core site plan elements are not individually significant, but together they contribute to the significance of the resource as a whole.

Cafeteria and Building 900

The list of previously identified contributors did not include the Cafeteria building. Current research in conjunction with the site visit indicates that the Cafeteria is an original building that was overlooked as a contributor in prior evaluations. This building appears in Gibbs' 1952 concept rendering of the Millikan HS campus and appears complete in the earliest available historic aerial of the campus while still under construction in 1956 (see Figures 1 and 2).

The research conducted for this report indicates that Building 900, which was identified in 2017 and 2025 as a contributor, is not one of the original buildings. The plans for its construction were approved by the State of California in October 1961, indicating it was built circa 1962, which is outside the school's period of significance. Moreover, the design of the building includes only the access lobby and stairway on the ground floor and all classrooms on the second floor with no interior access to adjacent Building 4000. Building 900 exhibits different exterior construction and finishing details and bulky cylindrical pylons supporting the building. The combination of these features expresses a distinctly different design vocabulary than the original buildings. Additionally, Building 900 interrupted the original execution of the quad area's intentional design plan, which is discussed further in the next section (see Figures 1 and 3).

Figure 1. Rendering of Millikan HS, AIA 1952

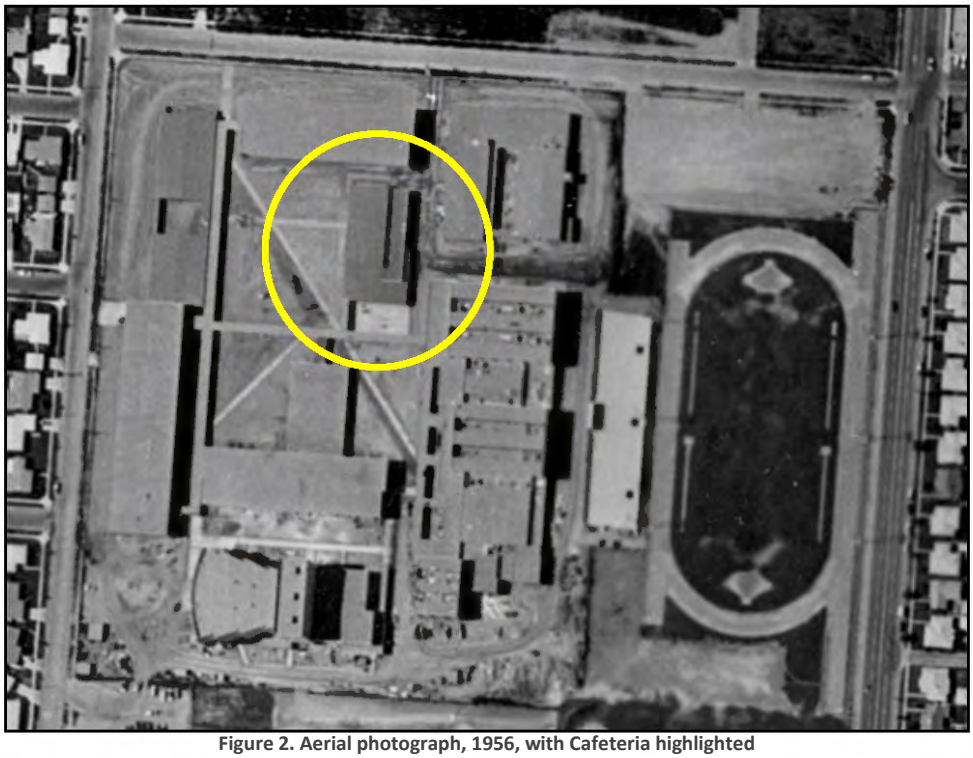

Figure 2. Aerial photograph, 1956, with Cafeteria highlighted

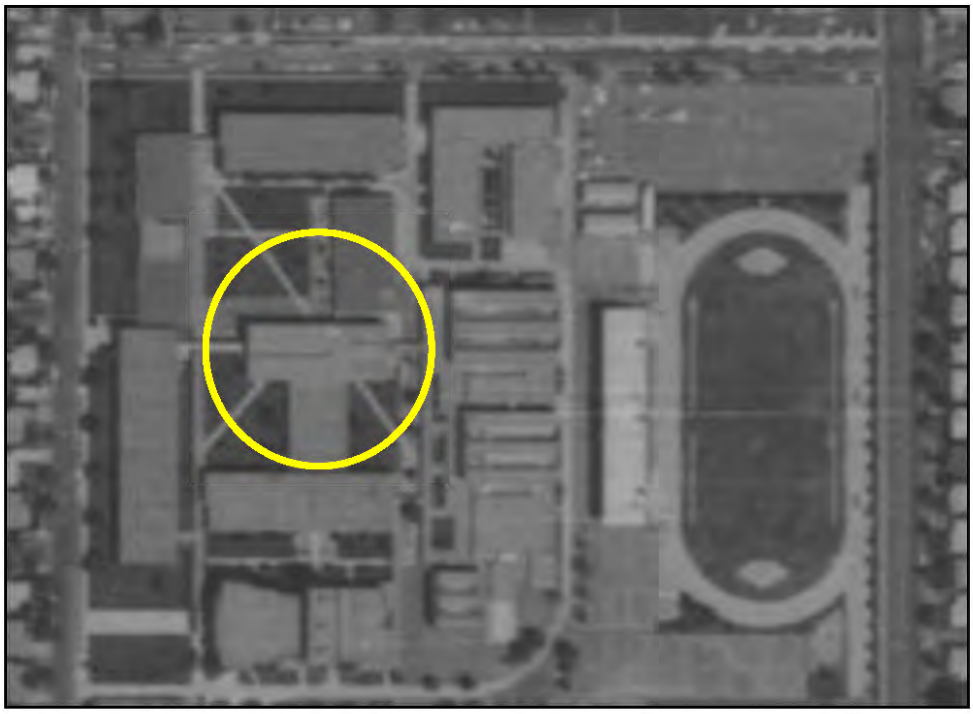

Figure 3. Aerial photograph, 1968, with the addition of Building 900 highlighted

Campus Site Plan

As noted above, the identification of the "entire site plan" as a contributing element to Millikan HS is interpreted to mean the layout of the school's core original buildings and any intact site features remaining from the period of significance. The character-defining features of the campus and site plan are presented below, noting where character-defining features have been altered or are not original.

Character-defining features:

- Loosely rectangular plan of core original buildings surrounding an interior open area ("quad").
- Northern portion of quad bracketed by Buildings 1000, 2000 and Cafeteria.
- Southern portion of quad flanked by Buildings 4000 and 12000, and partially intersected by northerly projection of Building 7000 (but excluding non-original Building 900).
- One- and two-story building volumes. The original design planned for potential capacity expansion by adding a floor to one-story buildings.
- Core quad buildings that exhibit Post War Modern architecture featuring an abundance of brick walls, brick veneer cladding, instances of metal panel accents, and expansive glazing.
- Prominent auditorium located at southern end of site plan with entrance facing Snowden Avenue for easy public access.
- Open walkways through quad, connecting buildings. Original walkway connecting Building 1000 and the Cafeteria is intact. (Two others that were altered by the addition of Building 900 are remnants of sidewalks that originally connected Buildings 1000 and 4000 and an intersecting sidewalk that extended to Building 12000).

- Buildings 3000 and 4000 located east of the core quad-facing buildings, with athletic facilities and parking areas located beyond the historic resource site plan to the rear (east) and south perimeters of the school campus.

Alterations:

- An addition to Building 1000 was constructed circa 1962 filled in an original landscaped patio between the library and administrative office sections of the building; a narrow landscaped walkway remains.
- Building 900 was constructed as an addition to Building 7000 (then Building 400) circa 1964.
- Covered walkway between Building 4000 and 12000 was interrupted by the addition of Building 900.
- Original, angled, redwood-topped concrete benches were removed between 1977 and 1988.
- An allée of trees was added between public sidewalk and facades of Buildings 2000 and 3000 along E. Belen Street between 1977 and 1988.
- Original walkway and trees between Buildings 2000 and 3000 were removed and replaced with wider fire lane.
- Some coverings over walkways have been removed.

Contributing Building 3000

As discussed above, Building 3000 (formerly Building 700) was built as part of the original plan for Millikan HS. Building 3000 was the Industrial Arts building. The building exhibits a more functional plan and exterior appearance than the general classroom buildings, as needed based on its original purpose. The original floor plan notes large rooms dedicated to a metal shop, electrical shop, automotive shop and wood shop. There were also smaller rooms for industrial drafting, architectural drafting, blue prints/models, visual aids, graphic arts, dark room, journalism, and typewriting. The building also features offices, storage rooms and restrooms. The primary access to all of the main rooms is from the courtyard; every room has secondary access either directly to the exterior or via a corridor to the exterior. These shop rooms are not interconnected, while some of the smaller rooms connect to others with related purposes. Based on the site visit, the floor plan has not changed, but the use of the shops and rooms has changed over time.

Character-Defining Features

- Post War Modern style
- U-shaped plan around internal courtyard and rectangular massing
- One-story
- Flat roof
- Rectangular continuous cantilevered concrete overhang supported by *pilotis* covering internal courtyard walkways
- Painted concrete surfaces
- Aluminum-frame single-pane fixed and awning windows (some windows painted over, alteration)
- Internal courtyard partially-landscaped with asphalt and concrete paving/walkways (benches replaced, alteration).

- Freestanding brick wall with *pilotis* supporting cantilevered overhang that "encloses" south end of internal courtyard between walkway entrances; overhang fascia exhibits original "Industrial Arts" sign lettering
- Interiors contain some original cabinetry and fixtures, including metal, circular, communal handwashing fixture in original automotive shop

Other Contributing Buildings

The character-defining features of the other contributing buildings previously evaluated in 2017 and 2025, and the Cafeteria, are identified below.

Character-Defining Features

Building 1000 (Formerly Building 100 – Administration and Library)

- Post War Modern style
- Rectangular plan and massing
- One-story
- Asymmetrical façade
- Original low-pitched side-gable roofs with wide, boxed overhang at north and south ends; infilled central section is flat-roofed (later addition)
- Brick veneer and stucco exterior wall cladding
- Extension of brick walls beyond building façade
- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Building 2000 (Formerly Building 200 – Social Studies)

- Post War Modern style
- Rectangular plan and massing
- Two-story
- Asymmetrical façade
- Flat roof with cantilevered concrete roof overhang, and cantilevered concrete overhang above the first story
- Brick veneer and stucco exterior wall cladding with colored metal panels below ribbon windows
- Extension of brick walls beyond building façade
- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Building 4000 (Formerly Building 600 – Physical Education)

- Post War Modern style
- Asymmetrical shaped plan and rectangular massing
- One- and two-story
- Flat roofs with varied roof heights
- Painted concrete wall surfaces with minimal area of brick veneer cladding

- Primary entry under a cantilevered canopy supported by *pilotis*; covered walkways extend to secondary entrances
- Clerestory aluminum-frame single-pane windows on exterior and at roof projections to light interiors (some windows painted over, alteration)

Building 7000 (Formerly Building 400 – Arts and Home Economics), Excluding Building 900

- Post War Modern style
- T-shaped plan and rectangular massing
- One- and two-story
- Asymmetrical façade
- Flat roof with cantilevered concrete roof overhangs, and cantilevered concrete overhang above the first story at two-story volume
- Brick veneer wall cladding with colored metal panels below ribbon windows; brick accent walls
- Extension of brick accent walls beyond building façade
- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Building 8000 (Formerly Building 500 – Auditorium)

- Post War Modern style
- Irregular plan and massing
- One- and two-story with mezzanine balcony and central projecting flyloft element
- Asymmetrical façade on sides and rear; symmetrical primary (west) elevation
- Flat, low-pitched gable, and low-pitched shed roof forms
- Primary elevation clad in panels of concrete with exposed pebble aggregate finish above brick veneer walls; all other secondary surfaces are painted concrete
- Secondary elevations exhibit large expanses of blank walls; one aluminum-frame single-pane fixed and awning ribbon window occurs on the south elevation of the two-story façade (east)
- Pairs of aluminum-frame single-pane main entrance doors below transoms elevated above concrete steps and set under concrete, low-pitched gable canopy
- Extension of painted concrete walls beyond front building façade

Building 12000 (Formerly Building 300 – Commerce and Science)

- Post War Modern style
- Rectangular plan and massing
- Two-story
- Asymmetrical façade
- Flat roof with cantilevered concrete roof overhang, and cantilevered concrete overhang above the first story
- Brick veneer and stucco exterior wall cladding with colored metal panels below ribbon windows
- Main entrance breezeway into the campus at north end set underneath cantilevered second story
- Extension of brick walls beyond building façade

- Aluminum-frame single-pane fixed and awning ribbon windows; windows set flush with the exterior wall

Cafeteria

- Post War Modern style
- Rectangular plan and massing
- One-story
- Asymmetrical façade
- Flat roof with cantilevered, wide boxed roof overhang facing quad supported by *pilotis*
- Painted concrete exterior
- Large aluminum-frame, single-pane fixed windows below transoms; windows set flush with the exterior wall
- Original "Cafeteria" wall sign lettering and adjacent analog wall clock with accents

As demonstrated in Figures 1 and 2, the Cafeteria was part of the original design and construction. Photographs were included in the prior 2017 and 2025 evaluations and are supplemented in Figures 4 and 5 below.

Figure 4. Cafeteria, west elevation facing quad

Figure 5. Cafeteria original wall sign and clock

Updated Historic Resource Contributors

Based on the above discussion and identification of character-defining features, the following list updates the list of contributors to the Millikan HS eligible historic resource:

Contributors

- Building 1000 – Administration and Library
- Building 2000 – Social Studies
- Building 7000 (excluding non-contributing Building 900) – Arts and Home Economics
- Building 8000 – Auditorium
- Building 12000 – Commerce and Science
- Cafeteria
- Building 3000 – Industrial Arts
- Building 4000 – Physical Education
- Rectangular site plan of quad area surrounded by above buildings

Non-Contributor

- Building 900

POTENTIAL EFFECTS

The evaluation of the project's potential effects on the eligible historic resource must center on whether the loss of one contributor and the construction of the new aquatic center will result in Millikan HS no longer being eligible for listing in the NRHP or CRHR. After describing the project, this evaluation considers the project's consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) and the potential for the project to cause a substantial adverse change in the significance of the resource in accordance with CEQA.

Project Description

The project proposes to demolish existing Building 3000 and related hardscape and landscape elements and adjacent portable buildings, and construct a new Aquatic Center in its place for use by swim and water polo teams, physical education to accommodate up to 100 students, students with special needs, Special Olympics, and community learn-to-swim programs. The aquatic center will comprise two buildings, Building 3000A to the east oriented perpendicular to E. Belen and Building 3000B adjacent and parallel to E. Belen, along with a swimming pool, plunge pool, bleachers under a shade structure, hardscape decking and walkways, designated fire lanes on the west and south side of the aquatic center, and landscaping between the buildings and the public sidewalk along E. Belen. Building walls will be CMU block in precision, burnished and projected block finishes accented with regularly spaced CMU pilasters, and limited wall areas clad in ceramic tile. Roofs will be metal. The main public entrance gate will be located on E. Belen, with a flat roofed canopy supported by CMU columns, adjacent to the ticket booth.

A more detailed description of the new Aquatic Center scope follows:

Pool and Pool Deck

1. A 51.5-meter modular pool by Myrtha Pools 25-yards wide.
2. A 30-foot pool deck surrounding the pool.
3. Bleachers to seat 500 with a shade cover structure above.
4. Equipment storage enclosure/room.
5. Musco stadium lights and LED scoreboard with integrated sound system throughout the complex.
6. Perimeter walls for security and privacy and surveillance cameras.

Aquatic Center Buildings

1. 500-square foot (sf) snack bar/ticket booth.
2. Gender neutral locker room facility with up to 60 changing stalls, 10 shower stalls and approximately 200 lockers.
3. Two team rooms.
4. Office with up to four working spaces.
5. Pool attendant office including a restroom and shower.
6. Equipment storage enclosure/room(s).
7. Laundry room, chemical storage rooms, and mechanical and electrical rooms.

8. Outdoor shower heads.

Secretary of the Interior's Standards (SOIS)

Projects that are consistent with the SOIS generally avoid adverse impacts to historic resources (CEQA Guidelines Section 15064.5(b)(3)) and may qualify for a categorical exemption. Therefore, an analysis of a project's consistency with the SOIS is the first step in identifying potential adverse impacts associated with the Millikan HS Aquatic Center project. This section outlines the appropriate SOIS treatment approach, identifies elements of the project design that are consistent with the SOIS, and identifies design elements that are inconsistent with the SOIS. In the event that elements of the project are identified as inconsistent with the SOIS, the project would not qualify for a categorical exemption under CEQA Section 15331, and may cause a significant adverse impact and material impairment to the resource as defined by CEQA Guidelines Section 15064.5(b).

There are four treatment approaches defined in the SOIS: Preservation, Restoration, Reconstruction and Rehabilitation. Preservation involves preserving the existing form, materials and spaces of a historic resource. Restoration is the process of returning the form and features of a resource to a particular time in its history. Reconstruction involves new construction that recreates the appearance of a historic resource that is no longer present due to prior natural or manmade acts. Finally, Rehabilitation makes possible new uses at a historic resource through alterations or additions while preserving the buildings, structures and/or elements sufficiently to convey the resource's historical significance. Of these four treatment approaches, Rehabilitation is the most flexible treatment approach. Rehabilitation is the appropriate treatment for the proposed project because it makes possible the creation of a space for the new use of a free-standing aquatic center as an addition to the set of buildings and site plan that contribute to the school's eligibility as a historic resource. To accomplish this outcome, one of the nine contributing elements will be demolished.

Consistency with the SOIS

There are ten standards under the SOIS Rehabilitation treatment approach. Table 1 below provides an analysis of the project's consistency with the standards.

Table 1
PROJECT CONSISTENCY WITH SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

Standard for Rehabilitation	SOIS Consistency Determination
Standard 1: A property will be used as it was historically or be given a new use that requires minimal change	**Consistent.** The existing property (high school) will remain and continue to be used as it was historically. The demolition and replacement of existing Building 3000 with a new aquatic center represents a new use of the space within the historic resource boundary, but is consistent with the property's use as a high school.
Standard 2: The historic character of a property will be retained and preserved	**Not Consistent.** The property's historic character is conveyed by the entire site plan and eight buildings that are contributing elements within an identified boundary. Neither the entire site plan nor any of the contributing buildings are individually significant, but together make up the overall historic character of the school. Millikan HS is eligible for listing in the NRHP and CRHR under Criteria 1/A for its architecture. Four of the eight contributing buildings (Buildings 1000, 2000, 7000 and 12000) exhibit a consistent design vocabulary featuring brick cladding and expansive glazing in one- and/or two-story volumes. Moreover, these four buildings bracket the central quad, along with the Cafeteria. Buildings 3000 and 4000 do not express the same design vocabulary as the prior four buildings, but their lack of unique features and bland designs are consistent with the use of each building. The Auditorium and Cafeteria exhibit use-specific design elements consistent with their functions. Although the rest of the contributors would not be affected by the project, demolition of contributing Building 3000 represents a loss of historic integrity and a negative effect on the historic character of the property.
Standard 3: Each property will be recognized as a physical record of its time, place, and use.	**Consistent.** Millikan HS will continue to exist and be used in its original location as a high school. Building 3000 will be replaced with a new structure and use in the northeast corner of the rectangular site plan layout (which is a character-defining feature of a contributor to the historic resource). Although the demolition of Building 3000 will represent a loss of integrity and historic character, the overall historic resource that is Millikan HS will continue to be recognized as a physical record of its time, place and use.

Standard for Rehabilitation	SOIS Consistency Determination
Standard 4: Changes to a property that have acquired historic significance will be retained and preserved.	**Consistent.** The project does not propose alterations to changed areas of the property that have been identified as historically significant (i.e., changes to buildings that occurred within the Millikan HS period of significance), so the project is considered to be consistent with this standard.
Standard 5: Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.	**Not Consistent.** The demolition of the Building 3000 results in a complete loss of the building including its distinctive materials, features, finishes, construction techniques and any examples of craftsmanship. Although the building is not individually historically significant, it contributes in equal measure with the other contributors to convey the significance of Millikan HS which has been determined to be eligible for its Post War Modern architecture. Therefore, the demolition of contributing Building 3000 does not preserve important elements that help characterize the property.
Standard 6: Deteriorated historic features will be repaired rather than replaced.	**Not Consistent.** Any deteriorated historic features of the Building 3000 will not be repaired because the building will be demolished.
Standard 7: Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible.	**Not Applicable.** The project does not propose chemical or physical treatments of building features so this standard is not applicable.
Standard 8: Archaeological resources will be protected and preserved in place.	**Consistent.** The site is almost entirely paved over. Any measures for protecting and preserving archaeological resources will be addressed by another discipline and are not a part of this scope. For the purpose of this analysis, the project is presumed to be consistent with this standard.
Standard 9: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.	**Consistent**. For the purpose of this standard, the analysis encompasses the proposed new Aquatic Center structure that will replace Building 3000 as “related new construction” in relation to the rest of the contributing elements that make up the overall resource. As discussed under Standard 3 above, one of the character-defining features of the contributing site plan is its rectangular layout. The demolition of the Building 3000 would leave a void in the northeast corner of the site plan along the E. Belen Street frontage, absent a replacement structure. The project proposes a replacement structure in that location, thus allowing the site plan to continue to convey the school’s rectangular layout and

Standard for Rehabilitation	SOIS Consistency Determination
Standard 9 (cont'd)	street-facing characteristics. Because Building 3000 does not directly face onto the quad, the integrity of viewers' experience within the quad will not be affected by the project. The Aquatic Center structure will be slightly larger than the footprint of Building 3000. The new structure's volume will be slightly closer to Building 2000, but the design will preserve a significant separation between the two buildings for the required fire lane access. The Aquatic Center footprint will also place its volume closer to E. Belen Street to accommodate a ticket booth and public entrance. A line of existing mature trees along that frontage will be removed and replaced with low level landscape and paving, consistent with its proposed use as a public access and entrance space for events. The original landscape plan created by Eckbo, Royston and Williams did not include any trees within this frontage, and review of historic aerials confirms that the trees were added much later, outside the historic resource's period of significance. Lastly, the project's proposed design is compatible with the massing, size, and scale of the property's existing buildings. At the same time, the design of features and the proposed materials are compatible and yet differentiated from the rest of the contributing buildings, so as to be clearly modern and to not create a false sense of history that might otherwise confuse the general public.
Standard 10: New additions and adjacent new construction shall be undertaken such that, if removed in the future, the essential form/integrity of historic property would be unimpaired.	**Not Consistent**. The existing Building 3000 will be demolished and replaced with the new Aquatic Center. Any future removal of the Aquatic Center would create a void in that area of the campus, which would impair the essential form/integrity of the historic property.

The above analysis has determined that the project is not consistent with SOIS Standards 2, 5, 6 and 10. Because the property comprises several contributing buildings and a contributing site plan layout that will remain to ensure its continued use as a high school, the project is consistent with Standards 1 and 3. The project design, as an addition to the school as the historic resource, will be differentiated yet compatible with the massing, size, scale, and architectural features of the rest of the contributing buildings. The project is deemed and presumed to be consistent with Standards 4 and 8, respectively, and Standard 7 is not applicable to the project.

Effects under CEQA

While a finding that a project is consistent with the SOIS is sufficient to determine that a project can be exempt under CEQA, the reverse (that a project is not, or not entirely, consistent with the SOIS) does not necessarily follow. Under CEQA, a determination must be made about whether a proposed project will result in a "substantial adverse change" in the significance of a historic resource. A project that is not consistent with the SOIS could still be found to not result in a substantial adverse change under CEQA. A substantial adverse change in the significance of a historic resource would result when a project would so materially alter a resource's physical characteristics, which convey its significance and justify its eligibility for listing in the NRHP or CRHR, that the resource is no longer eligible.

The demolition of a historic resource is a significant impact under CEQA, as demonstrated by case law (for example, *Friends of the Juana Briones House* (2010) and *League for Protection of Oakland's Architectural and Historic Resources* (1997)). With eight buildings on the campus that equally help convey the school's historic significance under Criteria A/1 and justify its NRHP and CRHR eligiblity, the loss of contributing Building 3000 would so materially alter the school's physical characteristics that the resource would no longer be considered eligible as a historic resource under CEQA.

Impacts Conclusion

The Millikan HS eligible historic resource comprises nine contributing elements, including eight buildings and the site plan. The contributing elements are not historically significant in and of themselves but together convey the significance of the resource as a whole. The project proposes the demolition of Building 3000. As such, the project is not consistent with SOIS Standards 2, 5, 6 and 10. Based on the above impacts analysis, the project would result in alterations to the historic resource that would affect its ability to convey the historic significance that led to the determination that the resource is eligible for listing in the CRHR. Therefore, the project does not qualify for a categorical exemption under Section 15331 of the CEQA Guidelines. Furthermore, since all of the contributors are equally important, the demolition of contributing Building 3000 would materially alter the school's physical characteristics to such an extent that the resource would no longer be considered eligible as a historic resource under CEQA. Therefore, the project is expected to cause a significant adverse impact and material impairment to the resource as defined by CEQA Guidelines Section 15064.5(b). The development of design alternatives and/or mitigation measures may or may not sufficiently reduce significant adverse impacts.

MITIGATION MEASURES

CUL-1: Historic American Buildings Survey Documentation

Prior to the commencement of demolition, the Long Beach Unified School District (LBUSD) shall record Building 3000 (Industrial Arts building) through a documentation report based on Historic American Buildings Survey (HABS) standards. The report will be completed by an architectural historian, historian or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards and will be based on the National Park Service (NPS) HABS Level I standards for format and content requirements. The

HABS report will include a full set of measured drawings; photographs with large-format negatives of exterior and interior views, and photocopies with large-format negatives of select, existing drawings and/or historic views; and a written history and description of the building. A copy shall be submitted to the Library of Congress, and to the state library if accepted. A hard copy and digital copy of the HABS report will be filed with LBUSD, and additional copies may be deposited in the collections of the Long Beach Public Library and Long Beach Heritage Museum, if requested. A digital copy will also be deposited in the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC).

CUL-2: Salvage and Use of Salvaged Materials

Prior to the commencement of demolition, the Long Beach Unified School District (LBUSD) shall coordinate with an architectural historian, historian or historic architect who meets the applicable Secretary of the Interior's Professional Qualification Standards, the project architect, and the demolition contractor, to develop a list of materials that would be salvaged during demolition of Building 3000 (Industrial Arts building), as well as a salvage plan which may include architectural history monitoring during demolition. Materials to be salvaged should include the original exterior building signage letters, the circular communal handwashing fixture, and any interior fixtures, cabinetry and/or fittings deemed to be of historical/salvage value. Salvaged items may be reused as a part of the Aquatic Center project or elsewhere within the Millikan High School site or other LBUSD location. Salvaged items may also be incorporated into interpretive displays within the school (if displayed in an appropriate, archival manner) or donated to museums, historical societies or other appropriate organizations or architectural salvage company.

CUL-3: Interpretive Exhibit

The Long Beach Unified School District (LBUSD) shall coordinate with an architectural historian or historian who meets the applicable Secretary of the Interior's Professional Qualification Standards to create an exhibit about Millikan High School's historic significance and the Industrial Arts building (Building 3000). LBUSD shall ensure fabrication of the exhibit in permanent materials, and shall display it near the public entrance of the new Aquatic Center, or in the Millikan High School library, administration office, or other well-visited location on the school campus. The exhibit shall consist of one permanent panel, measuring at minimum 24" by 36," or equivalent size depending on the medium. The exhibit must include a representation of Building 3000, ideally in context with the other historic resource contributing elements, and consist of historic photo, architectural rendering, plans, and/or artistic representation, along with information about Millikan High School's history and significance.

MANAGEMENT CONSIDERATIONS AND RECOMMENDATIONS

The District may wish to consider additional historical evaluation of Millikan HS. The prior evaluations were district-wide, and school evaluations were detailed but not to the level of an individual historic resource evaluation report (HRER). The evaluations of Millikan HS concluded the school is a single historic resource with several contributing elements, and did not consider or identify the school as a historic district. While the City of Long Beach describes historic districts as "neighborhoods that contain groups of older, unaltered

houses that preserve the visual qualities and ambience of the past,"[2] historic districts can include other types of resources. An eligible historic resource with several contributors is typically a geographic historic district, a cultural landscape area, or a complex of buildings that is historically significant as a whole.

Additionally, in evaluations of similar types of resources, there is often a delineation between primary and secondary contributors. The prior evaluations did not provide an analysis of the relative importance of the school's contributors. On occasion, but not always, such a delineation can result in different impacts conclusions if secondary contributors are determined to be of less importance. One factor that could play into such an analysis is that the architect's original design of a central quad connecting and surrounded by buildings that share an architectural design vocabulary and materials was a main feature of the overall design. The relegation of some of the contributors, and the differing design and materials, may warrant a more nuanced consideration of the contributors' status since the school's significance is related to its architecture.

However, even if such an analysis is undertaken, the significant adverse impact conclusions regarding this project may not change. Demolition of a lesser contributor may still represent a loss of integrity and character. The application of mitigation measures cannot replace the structure and may not restore the resource's integrity, but may only reduce the severity of the significant impact.

PREPARER'S QUALIFICATIONS

Teri Delcamp, M.A., served as project manager and author of this technical report. She has more than 35 years of experience and expertise in municipal planning, historic preservation planning, training, preservation project management, public history, development process planning, and environmental review. Her extensive experience includes preparation of historic building evaluations, historic surveys, CEQA and NEPA analyses, and peer reviews of these documents prepared by others. Ms. Delcamp meets and exceeds the Secretary of the Interior's Professional Qualification Standards for Architectural History and History; her resume is included in Appendix A.

[2] City of Long Beach, "Historic Districts," https://www.longbeach.gov/lbcd/planning/preservation/districts/.

REFERENCES

City of Long Beach. "Historic Districts." Community Development Department website. https://www.longbeach.gov/lbcd/planning/preservation/districts/. Accessed 9/22/2025.

Kleinfelder. "District-Wide Cultural Resources Assessment Report Update for Long Beach Unified School District, Los Angeles County, California." Prepared for Long Beach Unified School District. Long Beach, CA, 2025.

PCR Services. "District-Wide Historical Resources Assessment for Long Beach Unified School District." Prepared for Long Beach Unified School District. Long Beach, CA, 2017.

Appendix A

DELCAMP PRESERVATION & PLANNING

TERI DELCAMP, M.A., Founding Principal, is a Historian, Architectural Historian, Preservation Planner and Urban Planner with more than 35 years of experience and expertise in municipal planning, historic preservation planning, training, preservation project management, public history, development process planning, long-range planning, and environmental review. Her extensive experience includes preparation of historic building evaluations, historic surveys, CEQA and NEPA analyses, and peer reviews of these documents prepared by others. Ms. Delcamp has been involved in the development and implementation of historic preservation incentive programs including the Mills Act as well as preservation training sessions at several Southern California cities and conferences. She was part of the effort to obtain Certified Local Government (CLG) status at one city and served as qualified CLG staff at three cities in Southern California. She regularly conducts consistency reviews for projects under the Secretary of the Interior's Standards and Guidelines. She has served as staff to Historic Preservation Commissions and Planning Commissions and made hundreds of presentations to Commissions and City Councils as well as the general public. Ms. Delcamp has also supervised preservation, development and customer services sections of city planning departments, and processed straightforward to the most complex projects across a broad spectrum of development types so is well-versed in CEQA in general and especially as it relates to cultural, historical and Tribal resources. Ms. Delcamp meets or exceeds the Secretary of the Interior's Professional Qualifications Standards for History and Architectural History.

EDUCATION

- M.A., History, California State University San Marcos
- B.A., Liberal Studies – History Concentration, California State University Long Beach
- Historic Preservation Summer Program, University of Southern California School of Architecture

EMPLOYMENT HISTORY

- Delcamp Preservation & Planning, Founder/Principal – 2020 through present
- HELIX Environmental Planning Inc., As-Needed Senior Architectural Historian – 2021 through present
- IS Architecture – Limited Term Architectural Historian – 2022 - 2023
- City of Carlsbad Principal Planner – 2015-2020
- City of Riverside Senior Historic Preservation Planner – 2011-2015
- City of San Juan Capistrano Historic Preservation Manager – 2005-2011
- City of Oceanside Senior Planner – 2004-2005
- City of San Diego Senior Historic Preservation Planner – 2002-2004
- City of San Clemente Senior Planner – 1990-2002

SELECT REPRESENTATIVE PROJECTS AND ACTIVITIES

- Historic Resource Evaluation Report, 1350 Front Street/345 W. Ash St/1301 State Street Redevelopment Project, San Diego, CA. Work performed for HELIX.
- Historic Built Environment Study, Old Juvenile Hall Demolition Project, Martinez, CA. Work performed for HELIX.
- Historic Resource Evaluation, Oak Grove Mental Health Facility, Concord, CA. Work performed for HELIX (combined cultural/historic resources evaluation report).
- Built Environment Assessment, Granite Grammar School, Folsom, CA. Work performed for HELIX.
- Developed Carlsbad Mills Act Program. Work performed by DP&P for City of Carlsbad.
- Historical Resources Technical Report co-author, Copper Basin Dam Valve Replacement Project, San Bernardino County, CA. Work performed for HELIX.

- Historic Evaluation Section QA/QC and Revisions, 43 Middle Rincon Road Project Cultural Resources Assessment and Evaluation, Santa Rosa, CA. Work performed for HELIX.
- Historic Background and Significance Evaluation Sections/DPR Form Recordation, Tijuana River Valley Regional Park Brown Fill Restoration Project Cultural Resources Survey and Assessment, San Diego, CA. Work performed for HELIX.
- Historic Background and Significance Evaluation Sections, Shady View Residential Project Cultural Resources Survey and Historical Evaluation, Chino Hills, CA. Work performed for HELIX.
- Historic Background and Significance Evaluation Sections, Mid-Coachella Canal Storage Project Cultural Resources Technical Report, Imperial County, CA. Work performed for HELIX.
- Historic Context Section, Marysville Parks & Open Space Master Plan Draft Historic Resources Evaluation Report, Marysville, CA. Work performed for HELIX.
- Historic Resource Evaluation DPR Form, 2066 MacKinnon Avenue, Cardiff, CA.
- Historic Resource Evaluation DPR Form, 130 Athena Street, Encinitas, CA.
- Historic Resource Evaluation Report, 2956-2958 State Street, Carlsbad, CA.
- Historic Built Environment Assessment Letter Report for the San Marcos Industrial Park Project, San Marcos, CA. Work performed for HELIX.
- Built Environment Survey in Cultural Resources Study, SMB Mixed-Use Development (former Sears building), San Marcos, CA. Work performed for HELIX.
- Historic Resource Evaluation Report for Bethel Baptist Church, Escondido, CA. Work performed for HELIX.
- Historic Built Environment Assessment for the Modera Neptune Mixed Use Redevelopment Project, Oceanside, CA. Work performed for HELIX.
- Historic Resource Evaluation Report, 3408 Madison Street, Carlsbad, CA. Work performed for IS Architecture.
- Historic Designation Report, Las Hermanas Women's Cultural Center (LGBTQ History), San Diego, CA. Work performed for IS Architecture.
- City of Carlsbad Tribal, Cultural & Paleontological Resources Guidelines – Contract & project manager/contributor/editor/tribal consultation. Work performed for City of Carlsbad.
- City of Carlsbad Archaeological and Historic Sensitivity Map Updates – Contract & project manager. Work performed for City of Carlsbad.
- Cultural Resources Report and Evaluation of Impacts, Relocation of the Cooper House, Riverside, CA. Work performed for City of Riverside.
- Historic Evaluation/DPR Form Recordation, Structure of Merit Designation of 4135 Market Street, Riverside, CA. Work performed for City of Riverside.
- Historic Evaluation & DPR Form Recordation, Landmark Designation of the James & Jessie Shaw Residence, 8410 Cleveland Avenue, Riverside, CA. Work performed for City of Riverside.
- Cultural Resources Report and Evaluation of Impacts, Demolition of 11134 and 11144 Pierce Street, Riverside, CA. Work performed for City of Riverside.
- Facilitation Plan, Trujillo Adobe Reconstruction Strategy, Riverside, CA. Work performed for City of Riverside.
- Historic Evaluation Report, Nick's Café, 26755 Verdugo Street, San Juan Capistrano, CA. Work performed for City of San Juan Capistrano.
- RFP, Design, Bid and/or Construction Project Manager for 11 city-owned historic resource buildings. Work performed for City of San Juan Capistrano.
- Secretary of the Interior's Standards Consistency Evaluations, Naval Training Center Re-Use/Liberty Station Construction Drawings, San Diego, CA. Work performed for City of San Diego.
- Section 106 Programmatic Agreement Compliance Reviews, Marine Corps Recruit Depot & FAA Quieter Home Program, Lindbergh Field, San Diego, CA. Work performed for City of San Diego.
- Historic Surveys/Districts, La Jolla Intensive Survey, Burlingame Historic District, Islenair Historic District, East Village Survey, African-American Historic Survey – work performed for City of San Diego. Historic Town Center Historic Survey - work performed for City of San Juan Capistrano. Mid-Century Modern Building Survey, Japanese American Historical Context DPR Forms - work performed for City of Riverside.
- Historic Preservation Program Update, Survey and Historic Context - Research, Outreach and Training (with Heumann & Associates). Work performed for City of San Clemente.
- Mills Act Program Development, Adoption and Implementation. Work performed for City of San Clemente.

- Metrolink Station addition to National Register Ole Hanson Beach Club Site, Entitlement Project Manager (with OCTA/Fluor Daniel). Work performed for City of San Clemente.
- Certificates of Appropriateness for 100+ historic structures/districts. Work performed for cities of San Diego, San Juan Capistrano, Riverside and San Clemente.
- Mills Act Program Implementation/Oversight. Work performed for cities of San Diego, San Juan Capistrano, Riverside and San Clemente.
- Managed complex discretionary entitlements and approved administrative permits including mixed-use, industrial, commercial, retail, hotel, institutional, theme park, infrastructure and 1,000+ residential dwelling units for cities of San Diego, Carlsbad, Riverside, San Juan Capistrano, Oceanside and San Clemente.
- Served as staff meeting Secretary of the Interior's Professional Qualifications Standards for Historian and Architectural Historian for cities of San Diego, Carlsbad, Riverside, San Juan Capistrano and San Clemente.

- Moderator: *Rising to the Occasion: Rehabilitation of Challenging Buildings*, California Preservation Foundation State Conference (online).
- Presenter: *The Mills Act*, Historic Preservation Commission, City of Carlsbad.
- Speaker: *Climate Action Planning Tips: Resilient Planning to Meet Resiliency Purpose*, American Planning Association State Conference, San Diego.
- Presenter: *Tribal, Cultural & Paleontological Resources Guidelines*, City of Carlsbad Commissions and City Council.
- Presenter: *Carlsbad Development*, Carlsbad by the Sea, Carlsbad.
- Presenter*: Share-worthy Digital History and Storytelling Resources* mobile app, Cultural Heritage Board, City of Riverside.
- Speaker: *Preservation A to Z,* California Preservation Foundation State Conference, Palm Springs.
- Speaker: *The Mills Act*, California Preservation Foundation Workshop, San Clemente.
- Presenter: *Historic Preservation in San Juan Capistrano*, Orange County Historical Society, Tustin.
- Speaker: San Juan Capistrano Annual Historic Preservation Week Lectures.
- Presenter: Historical Resources Board Training Retreats, City of San Diego.
- Speaker: *Historic Preservation Mini-Track*, American Planning Association State Conference, Orange.