DAVID Y. IGE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
HONOLULU, HAWAI`I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

April 7, 2015

Ms. Jessica Wooley, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Re: Draft Environmental Assessment for Proposed Gymnasium and Music Building for Roosevelt High School, Honolulu District, Island of Oahu, TMK (1)2-4-32:001

Dear Ms. Wooley:

The State of Hawaii Department of Education hereby transmits the enclosed Draft Environmental Assessment for the subject project and anticipates a Finding of No Significant Impact (DEA-AFONSI). Please publish notice in the next available edition of the Environmental Notice. Enclosed is a completed OEQC Publication Form, a hard copy of the DEA-AFONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in MS Word. Simultaneous with this letter, we have submitted the summary of the action in a text file by electronic mail to your office.

If you have any questions, please contact Janna Mihara of the Facilities Development Branch at 377-8314.

Sincerely,

Duane Y. Kashiwai
Public Works Administrator
Facilities Development Branch

DYK:jmb

AGENCY ACTIONS
SECTION 343-5(B), HRS
PUBLICATION FORM (FEBRUARY 2013 REVISION)

Project Name: **Theodore Roosevelt High School - New Gymnasium and Music Building**

Island: **Oahu**

District: **Honolulu**

TMK: **(1) 2-4-032:001**

Permits: **Punchbowl Special Design District Permit, Waiver Permits**

Proposing/Determination Agency: **State of Hawaii, Department of Education**
(*Address, Contact Person, Telephone*) **P.O. Box 2360**
Honolulu, HI 96804
Contact: Janna Mihara
Phone: 377-8314

Accepting Authority:
(for EIS submittals only)

Consultant: **PlanPacific, Inc.**
(*Address, Contact Person, Telephone*) **1001 Bishop Street, Suite 2755**
Honolulu, HI 96813
Contact: Lisa Leonillo Imata
Phone: 521-9418

Status (check one only):

_**X**_DEA-AFNSI	Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day comment period ensues upon publication in the periodic bulletin.
__FEA-FONSI	Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
__FEA-EISPN	Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day consultation period ensues upon publication in the periodic bulletin.
__Act 172-12 EISPN	Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov). NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
__DEIS	The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
__FEIS	The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the FEIS, a completed OEQC publication form, a distribution list,

along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.

__ Section 11-200-23 Determination

The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.

__Section 11-200-27 Determination

The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.

__Withdrawal (explain)

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page)**:**

The proposed project is to replace a sub-standard gymnasium with a new two-story gymnasium at the same location, construct a new music building in the middle of campus to address current needs, make improvements to the internal pedestrian circulation, and make improvements to vehicular access and parking. The proposed project is needed to modernize the Roosevelt High S chool campus and meet current standards. No significant adverse long-term or cumulative impacts are anticipated to be generated from the proposed project.

PRESIDENT THEODORE ROOSEVELT HIGH SCHOOL
NEW GYMNASIUM AND MUSIC BUILDING

DRAFT ENVIRONMENTAL ASSESSMENT

State of Hawai'i Department of Education

DOE Job No. Q22000-13

Honolulu, O'ahu

TMK 2-4-032:001

March 2015

PRESIDENT THEODORE ROOSEVELT HIGH SCHOOL

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Prepared By: PlanPacific, Inc.

March 2015

This document is prepared pursuant to:
The Hawai'i Environmental Policy Act, Chapter 343, Hawai'i Revised Statutes and
Title 11, Chapter 200, Hawai'i Department of Health Administrative Rules.

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Appendices

LIST OF ACRONYMS

BMP	Best Management Practices
DLNR	Department of Land & Natural Resources, State of Hawai'i
DOE	Department of Education, State of Hawai'i
DOH	Department of Health, State of Hawai'i
DP	Development Plan
DPP	Department of Planning and Permitting, City and County of Honolulu
EA	Environmental Assessment
EIS	Environmental Impact Statement
FADS	Facilities Assessment and Development Schedule (Department of Education)
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HAR	Hawai'i Administrative Rules
HECO	Hawaiian Electric Company
HFD	Honolulu Fire Department
HPD	Honolulu Police Department
HRS	Hawai'i Revised Statutes
LEED	Leadership in Energy and Environment Design
LUO	Land Use Ordinance
NAAQS	National Ambient Air Quality Standards
PUC	Primary Urban Center
ROH	Revised Ordinances of Honolulu
SCP	Sustainable Communities Plan
SHPD	State Historic Preservation Division
SMA	Special Management Area
TMK	Tax Map Key

1. PROJECT SUMMARY

Proposed Action:	1. Replace, in place, the existing gymnasium with a new two-story gymnasium. The new gymnasium will have semi-below-grade parking and improved vehicular access and circulation around it. 2. Construct a new two-story music building in the middle of campus near the existing athletic field. Create a plaza overlook should the existing music building be demolished. 3. Create a strong pedestrian corridor to improve pedestrian safety and circulation on campus; improve vehicular traffic flow between the campus and Mott Smith Drive; increase the number of parking on campus; and improve landscaping in select areas.
Property:	1120 Nehoa Street, Honolulu, 96822 TMK: 2-4-032:001 Area: 20.079 acres
Owner/Applicant:	State of Hawai'i, Department of Education
Approving Agency:	State of Hawai'i, Department of Education, Planning Section
State Land Uses:	Urban

Zoning Districts:	R-5 Residential
Special Design District:	Punchbowl Special Design District
Primary Urban Center Development Plan:	Institutional
Special Management Area:	Not applicable
Required Land Use Permits:	Special Design District Permit Waiver Permits
HRS, Chapter 343 Action:	Use of state lands and funds
Anticipated Determination:	Finding of No Significant Impact (FONSI)
Consulted Agencies:	City & County of Honolulu Department of Planning and Permitting Honolulu Fire Department Department of Environmental Services Board of Water Supply State of Hawai'i Department of Land and Natural Resources, Historic Preservation Division Other Hawaiian Electric Company

2. DESCRIPTION OF THE PROPOSED ACTION

2.1. OVERVIEW OF THE PROPOSED PROJECT & SITE BACKGROUND

President Theodore Roosevelt ("Roosevelt") High School is a public school named after the twenty-sixth United States President, Theodore Roosevelt. It was established in 1930 as the first English-standard secondary school in the (then) Territory of Hawai'i. Located in Honolulu, below the eastern flank of Punchbowl Crater, Roosevelt High School serves the highly urbanized and stable community areas of Pacific Heights, Nu'uanu, Pauoa, Papakolea, Round Top, Tantalus, Mānoa, and Makiki.

Roosevelt High School is bound by 'Auwaiolimu Street, Nehoa Street, and Mott Smith Drive. Its street address is 1120 Nehoa Street. The tax map key parcel on which Roosevelt High School is located is identified as (1)2-4-32:001. Roosevelt High School sits on a 20.079 acre parcel. See Figure 1.

Roosevelt High School is controlled and operated by the State of Hawai'i Department of Education (DOE) and provides education for the 9th, 10th, 11th, and 12th grades. Enrollment for the 2012-2013 school year was 1,440 students. The graduating class of 2013 consisted of 296 students. Estimates for future graduating classes show a growing trend and are as follows: 323 students for the year 2014, 367 students for 2015, 351 students for 2016, and 349 students for 2017.

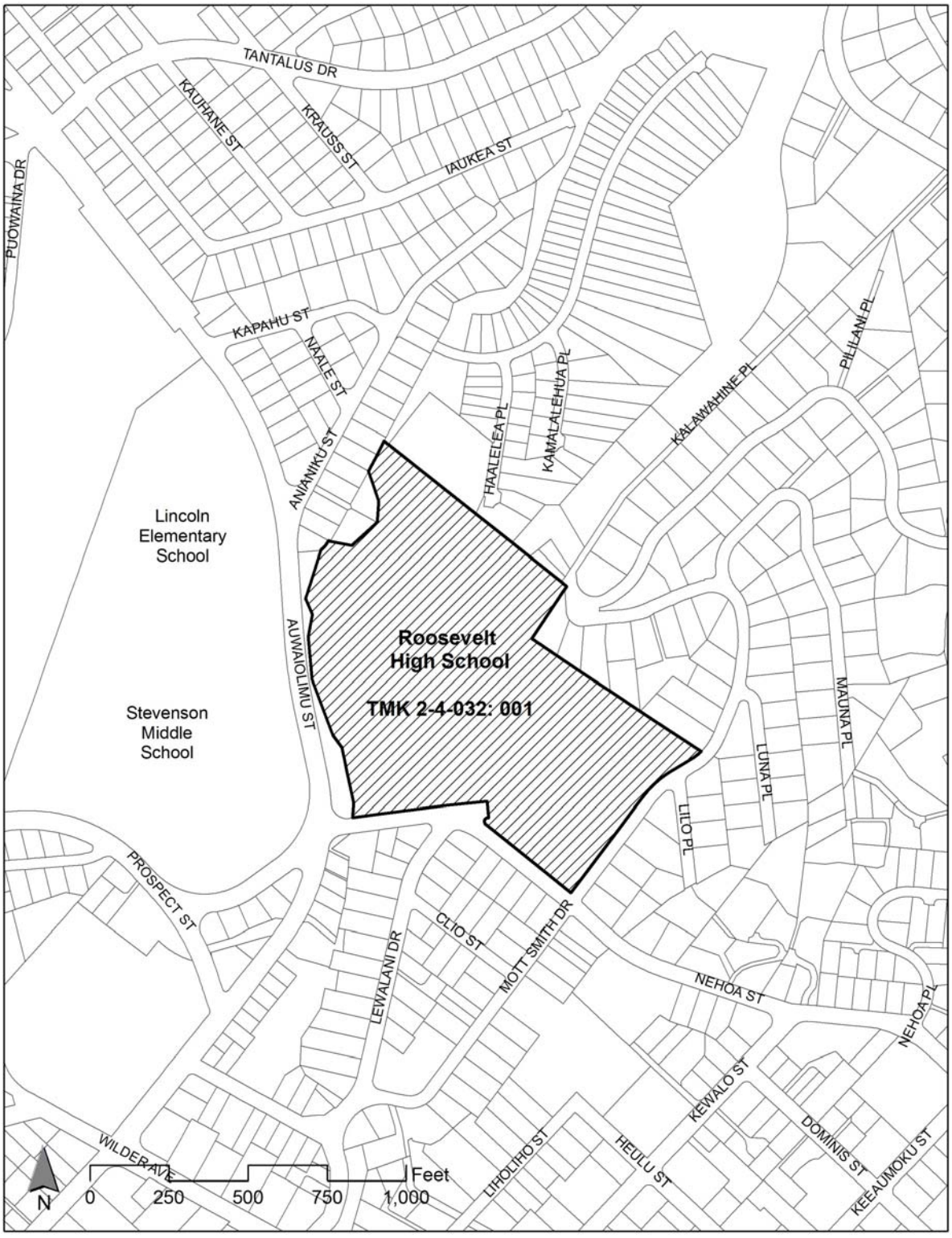


Figure 1: Location Map

Roosevelt High School is fed primarily from 3 middle schools in the Honolulu area as follows:

- Prince David Kawananakoa Middle School
- Robert Louis Stevenson Middle School
- President George Washington Middle School

Other schools within the Roosevelt complex include:

- Anuenue School (K-12 Hawaiian Immersion School)
- Education Lab Public Charter School
- Halau Ku Mana Public Charter School
- Lincoln Elementary School
- Maʻemaʻe Elementary School
- Mānoa Elementary School
- Noelani Elementary School
- Nuʻuanu Elementary School
- Pauoa Elementary School

The existing campus contains an Administration and Auditorium Building A, Gymnasium Building B, Classroom Building C, Music Building D, Classroom Building E, Shop Building F, Classroom Building G, Classroom Building N, Library, and an Athletic Complex consisting of a track and field and a pool. The campus also has a Rifle Range.

The existing gymnasium was built by adding a roof over an older existing open playcourt facility that was built in 1939. The roof was added in the early 1960s. The existing gym is approximately 16,000 gross square feet in size, which is small by today's Department of Education standards. The Facilities Assessment and Development Schedule (FADS) now calls for 25,000 square feet for a single-story gym. The gym is undersized and does not currently meet the school's needs.

Since the gymnasium was a product of re-purposing on older facility and it was not designed originally as a high school gym, there are many deficiencies by today's standards. For example, the existing gym court is 50 feet by 94 feet, which only allows one team to practice at a time during basketball season. The weight room is only 40 feet by 15 feet and is too small for the number of students that use it. The weights are thus stored outside of the room. There are no coaches offices for athletic teams. Some offices have been converted to needed storage for equipment and uniforms. The volleyball equipment is currently stored in an area used for pre-game or halftime meetings and must be moved constantly. Seating is inadequate as there are only 500 seats. The locker rooms are so small that teams cannot sit down in them during pre-game or halftime. The showers are in small, hard to clean stalls and some are inoperable. The public restrooms are small with only one toilet each for the women and men. The toilets tend to back up during heavy use such as during games. The wrestling and judo teams have no permanent meeting/practice place. A much larger and fully-functioning facility is sorely needed.

In recognition of the above, the DOE's Facilities Development Branch proposes to modernize the indoor athletic facilities by constructing a new two-story gymnasium building which will contain a lobby area, wrestling room, boys' junior varsity facilities, boys' varsity facilities, girls' junior varsity facilities, girls' varsity facilities, storage, first aid room, custodian closets, and mechanical/electrical rooms. See below for more detail.

<u>FADS Requirements for the Gym</u>

- Lobby Area
  - Office/Restroom & Shower
  - Conference Room
  - P.E. Equipment Room
  - Custodial Closet
  - Electrical Room
  - Communication Room
  - Men's Toilet (Public)
  - Women's Toilet (Public)

  - Concession Booth
  - Ticket Booth
  - Lobby

- Wrestling Room

- General Storage

- Boy's J.V. Facilities
  - Locker Room
  - Toilet
  - Varsity/J.V. Drying Room
  - Varsity/J.V. Shower Booth (ADA)
  - Varsity/J.V. Shower Room

- Boys' Varsity Facilities
  - Locker Room
  - Toilet area

- Girl's J.V. Facilities
  - Locker Room
  - Toilet area
  - Varsity/J.V. Drying Room
  - Varsity/J.V. Shower Booth (ADA)
  - Varsity/J.V. Shower Room

- Girls' Varsity Facilities
  - Locker Room
  - Toilet area

- Common Facilities
  - First-Aid Room
  - Electrical & Heater Room
  - Custodial Closet (Locker Area)

The new structure will add approximately 6,000 square feet or usable area and 1,000 more seats.

The existing music building was constructed in 1956 and has two main rooms in its 3,500 gross square feet size. One room is used for rehearsals for the school's band and orchestra, while the other room is used for instrument storage, a music library,

uniform storage, music booster item storage, and office space for the music director. The current facility has become too small and cannot hold all of the students for rehearsals. Room occupancy should be 85 persons, but there are 120 students in concert band, for example. Instrument lockers are also overcrowded with 7 students sharing one locker.

The FADS now calls for 7,100 square feet for a new music building. The new music building is to contain a choral room, a band room, and common facilities. See below for more detail.

EDSPECS Requirements for the Music Building

- Choral Room
  - Main Room
  - Office/Library
  - Storage

- Band Room
  - Main Room
  - Practice Rooms
  - Ensemble Room
  - Office/Library
  - Instrument Repair/Storage Room

- Common Facilities
  - Vestibule
  - Restrooms
  - Mechanical/Electrical Rooms
  - General Utility Room

2.2. PROJECT LOCATION AND SITE DESCRIPTION

The subject property, identified as TMK (1)2-4-32:001 is located at the intersection of Mott Smith Drive and Nehoa Street. See Figure 1. Mott Smith Drive, Nehoa Street, and ʻAuwaiolimu Street border the property. The main vehicular entrance is from Mott Smith Drive and a secondary access is from Nehoa Street.

The project area for the new gymnasium is in the same location as the existing gymnasium on the southeast part of the Roosevelt campus, along Mott Smith Drive. See Figure 2. The project area for the new music building is located at the heart of campus, between the existing Music Building D and the Administration Building A. See Figure 3.

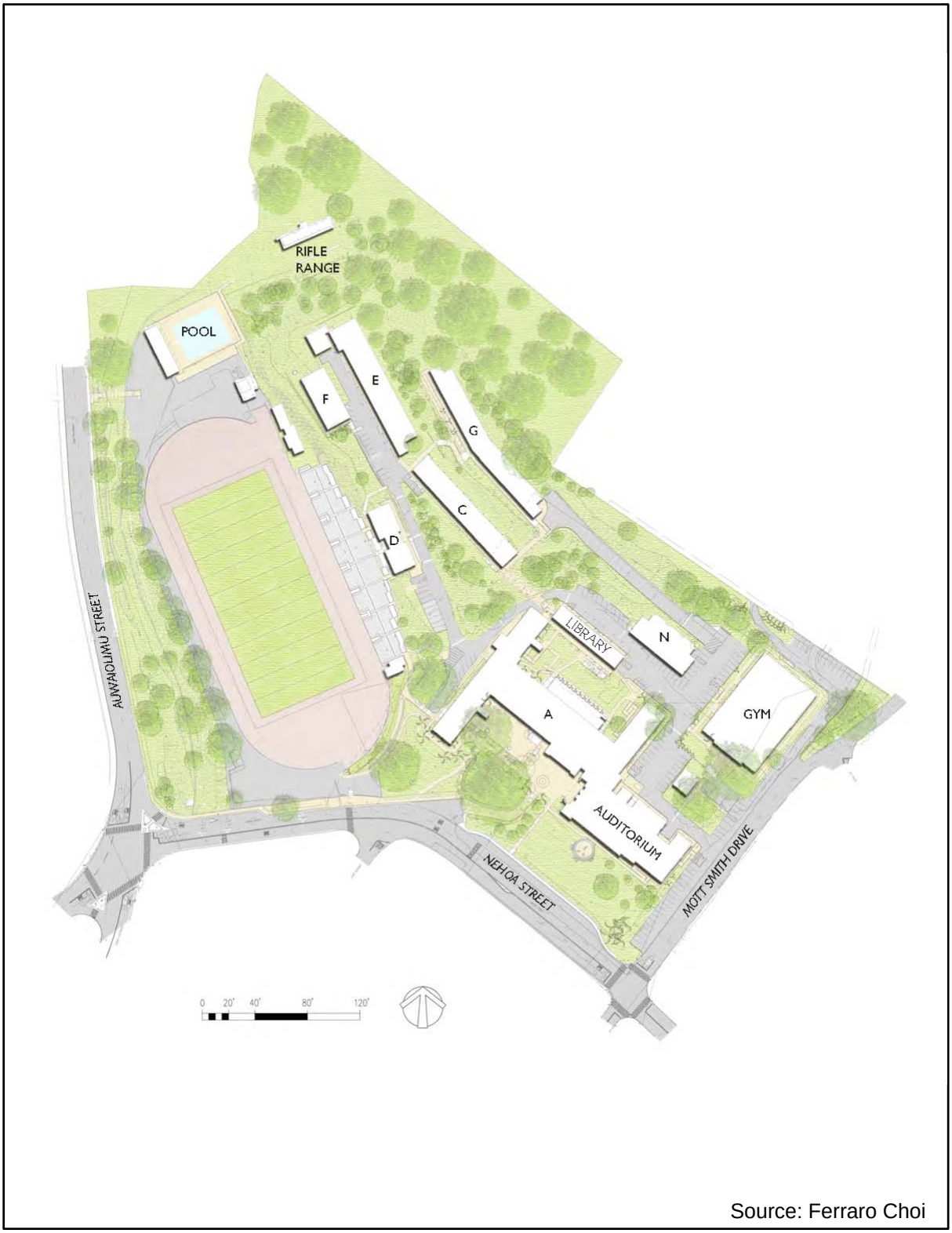
The campus is surrounded by single-family residential homes to the north, east, and south. To the west, are Lincoln Elementary and Stevenson Middle schools.

The subject property is in the Makiki/Lower Punchbowl/Tantalus Neighborhood Board area and in the Central portion of the City and County of Honolulu's Primary Urban Center Development Plan area.

2.3. PROJECT DESCRIPTION AND NEED

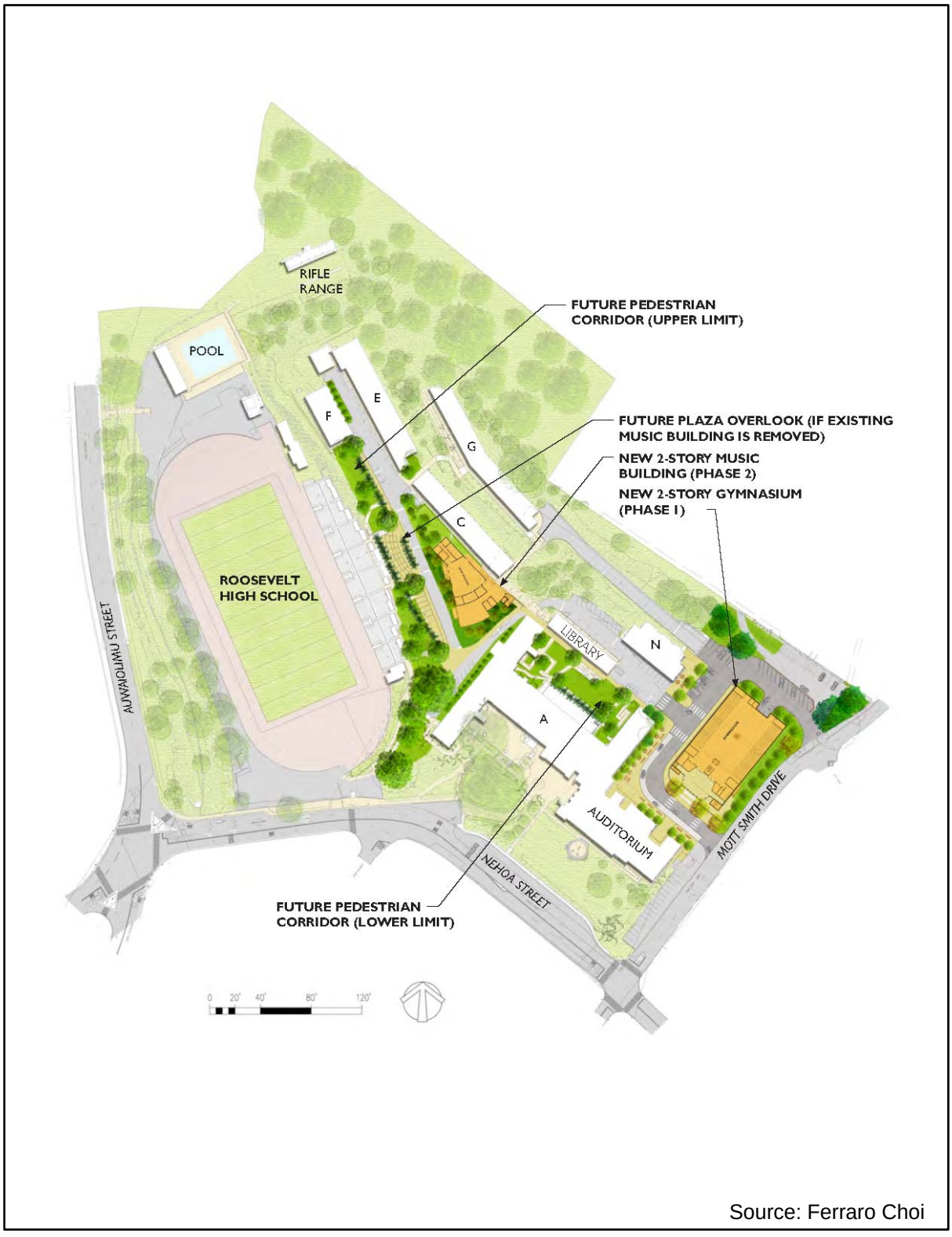
As detailed in Section 2.1, the proposed project replaces existing facilities that are no longer properly serving the school. Both the indoor athletics and music programs are robust, and spatial needs and safety standards of school programs such as these continue to change. These factors combined with the ages and conditions of the facilities call for larger replacement facilities.

The main components of the proposal are: 1) a new two-story gymnasium, 2) a new two-story music building, and 3) improved pedestrian circulation at the core of campus and improved vehicular circulation around the gymnasium. The new gymnasium will be sited in the same location as the existing gymnasium and the new music building will be sited in an existing open area south of the existing music building. The existing music building will be re-purposed or demolished to create a new plaza area. Pedestrian circulation will be improved by extending the current route between the upper and lower campus areas. Vehicular circulation near the gym will be improved by creating a multi-lane driveway entering from Mott Smith Drive



Source: Ferraro Choi

Figure 2: Existing Campus



Source: Ferraro Choi

Figure 3: Project Areas

that circles the gym and re-joins Mott Smith Drive near the Auditorium. This driveway will create a much needed longer and larger pick-up and drop-off area that will alleviate traffic back-ups on Mott Smith Drive, and it will connect to the below grade parking area that will be created under the new gym.

The proposed reconfiguration and parking area will create a net increase in parking by approximately 27 stalls. Other related site improvements for utilities connections and landscaping are also a part of the proposed project. Figure 3 shows the project areas and the locations of the main proposed facilities.

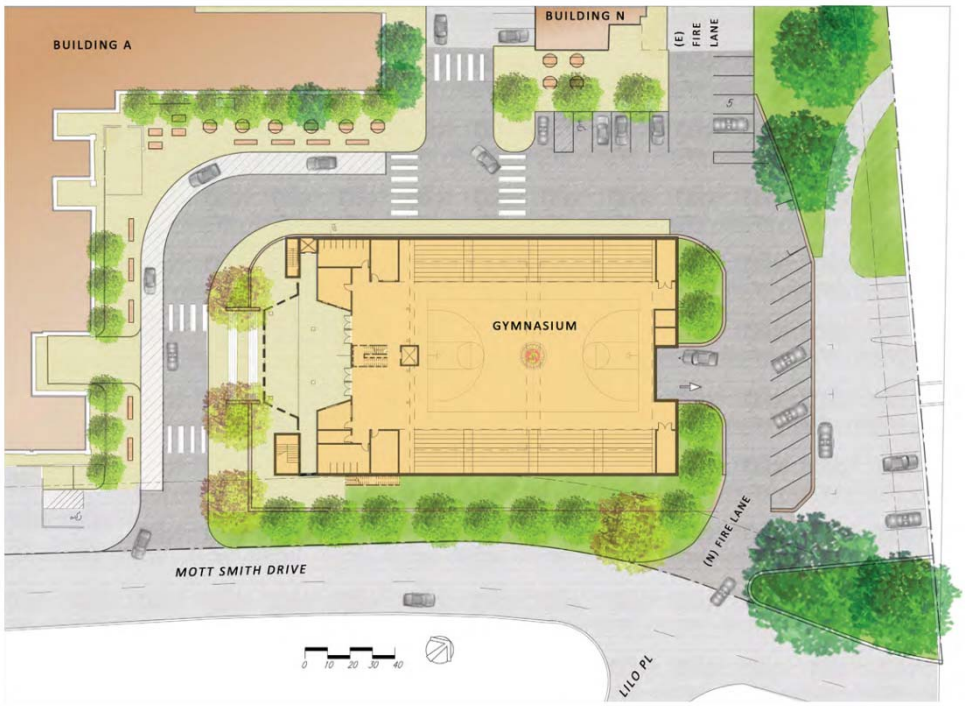
Gymnasium

The existing gym is approximately 50 years old. It currently has a multi-use playcourt that measures 94 feet by 50 feet.

The proposed new gym will be designed to meet current Department of Education high school FADS standards (refer to previous Section 2.1). It will have 1,500 seats and will be two-stories. The first floor will house most of the required spaces; the play courts, lobby, junior varsity and varsity facilities; and the second floor will house the wrestling room, lockers, and additional restrooms. A new main entry will be created on the west side of the building, facing the Auditorium of Building A. The new main entry will feature a grand staircase, accessible ramp system, and a covered entry lanai. The entry way for vehicles to access the basement parking area will be on the opposite side of the gym, facing east. See Figure 4.

The proposed new driveway will circle the gym and enter and exit from Mott Smith Drive at two separate points. Entry will be across from, and align with, Lilo Place. The exit will be near the Auditorium. The driveway will be one-way only and will have a loading lane that can stack up to 24 vehicles. The through lanes will be able to stack

Existing Gymnasium - To Be Demolished



Proposed Gymnasium - G5 (first floor shown)

Source: Ferraro Choi

Figure 4: Gymnasium, Existing and Proposed

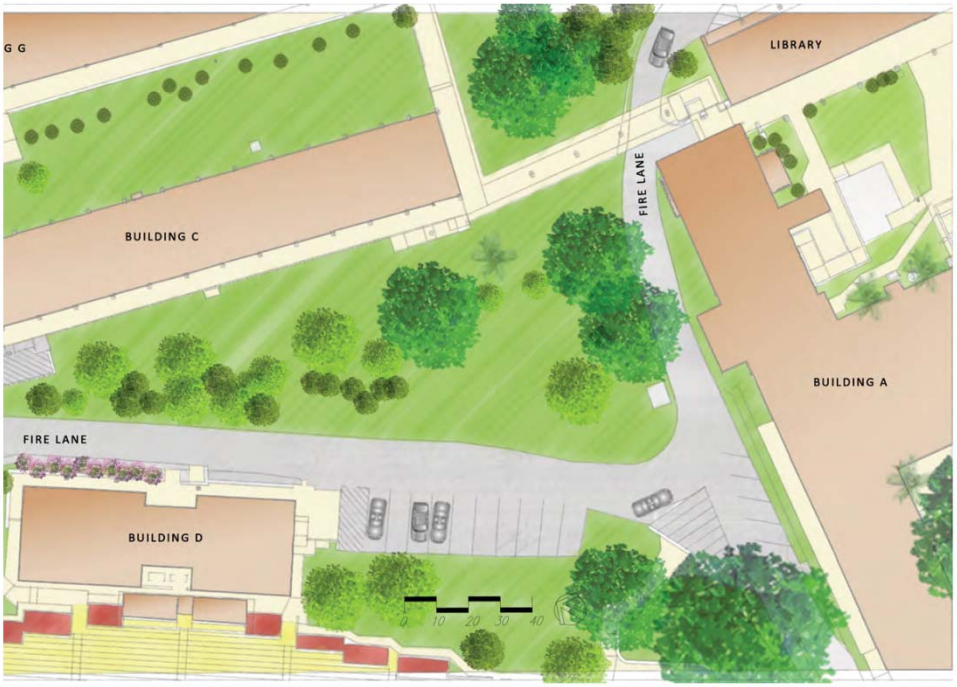
up to 50 vehicles. The area adjacent to the loading lane will be widened to create a landscaped seating area for students or visitors waiting to be picked up.

Along the driveway opposite the gym and near Building N, six wheelchair accessible parking stalls will be created. This location is optimal because it connects to the school's existing wheelchair accessible paths.

During the early planning stages, various locations were considered for the new gym, along with refurbishment of the gym. After several initial meetings, a site investigation, and preliminary consultations with City agencies, six possible options were created and considered. Five of the six options kept the gym in its existing location. The other location that was considered was on the other side of the campus at the existing pool.

Music Building

The existing music building is located in Building D at the top of the stadium stairs in the middle of campus, see Figure 2. This location is convenient for marching band practices held at the track and field and for field performances during athletic events. The existing building was constructed in 1956 and is 3,500 gross square feet in size. The proposed new music building will be designed to meet current Department of Education high school FADS standards and will be approximately 7,100 gross square feet in size. The EDSPECS for high schools describes music buildings to contain a choral room, band room, and common facilities. See previous Section 2.1. Roosevelt High School has a concert band, symphonic band, marching band, and symphony orchestra. The proposed new music building will be located in an open area near the existing music building. See Figure 5.



Existing Music Building - To Be Re-Purposed (or Demolished)

Proposed Music Building - M3 (first floor shown)

Source: Ferraro Choi

Figure 5: Music Building, Existing (Building D) and Proposed

The proposed project is needed because the current facilities are aged, outdated, inadequate in size, inadequate in functionality, and lack proper equipment. The proposed project will help modernize the campus and bring them up to current DOE standards, as well as provide much needed parking and improved vehicular access.

2.4. PROJECT SCHEDULE AND COST

A rough-order of magnitude cost estimate for construction of the new facilities is $28.5 million. The cost estimate is broken down into $18.5 million for the gymnasium, and $10 million for the music building, including re-purposing or demolition of the existing music building to create a student plaza. Final design is anticipated to be completed in 2016 for the gym, and in 2018 for the music building, depending on funding. Also dependent upon funding, construction of the gymnasium may begin in 2017 and construction of the music building may begin in 2019. The project is funded by the State of Hawai'i Department of Education.

2.5. PERMITS AND APPROVALS REQUIRED

Several approvals and permits will be or may be required from various agencies within the City and County of Honolulu, the State of Hawai'i, and/or federal government to implement the proposed project. A summary listing is as follows:

State of Hawai'i

- Department of Health
  - Construction Permits
  - Noise Permit

City and County of Honolulu

- Department of Planning and Permitting
  - Punchbowl Special Design District Permit
  - Waiver Permits
  - Construction and Building Permits

  - Grading, Grubbing and Stockpiling Permits
  - Utility Connection Permits
  - Sewer Connection Application
  - Industrial Wastewater Discharge Permit

- Board of Water Supply
  - Construction/Connection Permit

3. DESCRIPTION OF THE AFFECTED ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

3.1. CLIMATE

Existing Condition

Oʻahu's subtropical location and topography are the primary influences on local climate. In general, prevailing northeasterly trade winds occur approximately 70 percent of the year with higher percentages in the summer months than winter, which give way to light, variable wind conditions. Warm ocean air flowing over the Koʻolau mountain range is the primary cause for local precipitation.

The average annual rainfall for the project area is 38.8 inches, which is slightly higher than most of urban Honolulu at 20 inches. During the winter months, the average monthly rainfall is 4.33 inches. During the summer months, the average monthly rainfall is 2 inches.

The project sites are in open areas and are thus exposed to morning, midday, and afternoon sun. During the winter months, average temperature highs and lows are 81 and 65 degrees Fahrenheit. During the warmer summer months, average temperature highs and lows are 88 and 74 degrees Fahrenheit.

Potential Impacts and Mitigative Measures

The proposed gymnasium and music building are to be constructed on an existing built campus, with the gym replacing an existing structure in the same location. The ground preparation for the new gym and new music building will involve removing a few trees, but new trees and landscaping will be installed. New landscaping also will be added along a more strongly defined pedestrian corridor. As such, no significant impacts to local temperature, rainfall, or wind patterns are anticipated for either the short-term or long-term. Similarly, the new music building will be replacing grass areas and require grading activities, but no significant impacts to local temperature,

rainfall, or wind patterns are anticipated for either the short-term or long-term. As such, no mitigation measures are required.

3.2. TOPOGRAPHY AND SOILS

Existing Condition

The Roosevelt High School campus is located at the foothills of Mount Tantalus and below the eastern flank of Punchbowl Crater. The elevation on campus ranges from 90 feet above mean sea level on the southwestern corner of the campus, where ʻAuwaiolimu Street intersects Nehoa Street, to approximately 265 feet above mean sea level at the northeast corner, near Kalāwahine Place. The proposed project area for the gym is on the south and lower portion of the property, and construction would be occurring around the 150-foot elevation level. The proposed project area for the music building is in the center of the property, and construction would be occurring around the 160-foot elevation level.

Soils information for the project area was obtained from a soil survey prepared by the U.S. Department of Agriculture, December 2013[1]. According to the survey, the soil association for the property is a combination of Fill Land, Mixed (FL), Tantalus Silty Clay Loam 15 to 40% slopes (TCE), and Tantalus Silty Clay Loam 8 to 15% slopes (TCC). The gym and music building project components would occur on the FL and TCE soil types. See Figure 6.

The FL soil consists of dredged material from the ocean or transported material from nearby areas, garbage, or other general materials from other sources. Lands of this soil type are used for urban development including airports, housing areas, and industrial facilities. FL soil is nearly level with 0 to 3% slope and described as well drained with low water capacity (5.4").

[1] http://websoilsurvey.nrcs.usda.gov

The Tantalus soil series, of which the TCE type is a part, are found on uplands with slopes of 8 to 70 percent. These soils are moderately deep and well-drained and formed by weathered volcanic ash and cinders. Tantalus soils are used for watershed, recreation, and urban development. Runoff is medium to rapid and permeability is moderately rapid.[2]

Potential Impacts and Mitigative Measures

The proposed project will involve grading and site preparation for the new structures, but the work areas will be limited. Minor changes in topography will occur. For the gym, excavation will occur to create the semi-below grade parking area. For the music building, the natural slope between the existing music building and Building A will be altered to provide a level surface for the proposed new building. The soil type will remain unchanged at the sites of the new gym and music building.

Short-term construction related impacts may include minor soil loss or erosion, but construction activities will employ Best Management Practices (BMPs) to minimize or prevent such occurrences. BMPs will include silt fences, periodic watering to minimize airborne dirt particles, and stabilized construction road access. Runoff will be controlled in compliance with the City and County of Honolulu's "Rules Relating to Soil Erosion Standards and Guidelines" and grading work shall be done in accordance to Revised Ordinances of Honolulu (ROH) Chapter 14, Articles 13-16 as related to Grading, Soil Erosion and Sediment Control.

Permanent erosion control measures such as planting or hardscape will be used once construction is completed.

[2] https://soilseries.sc.egov.usda.gov/OSD_Docs/T/TANTALUS.html

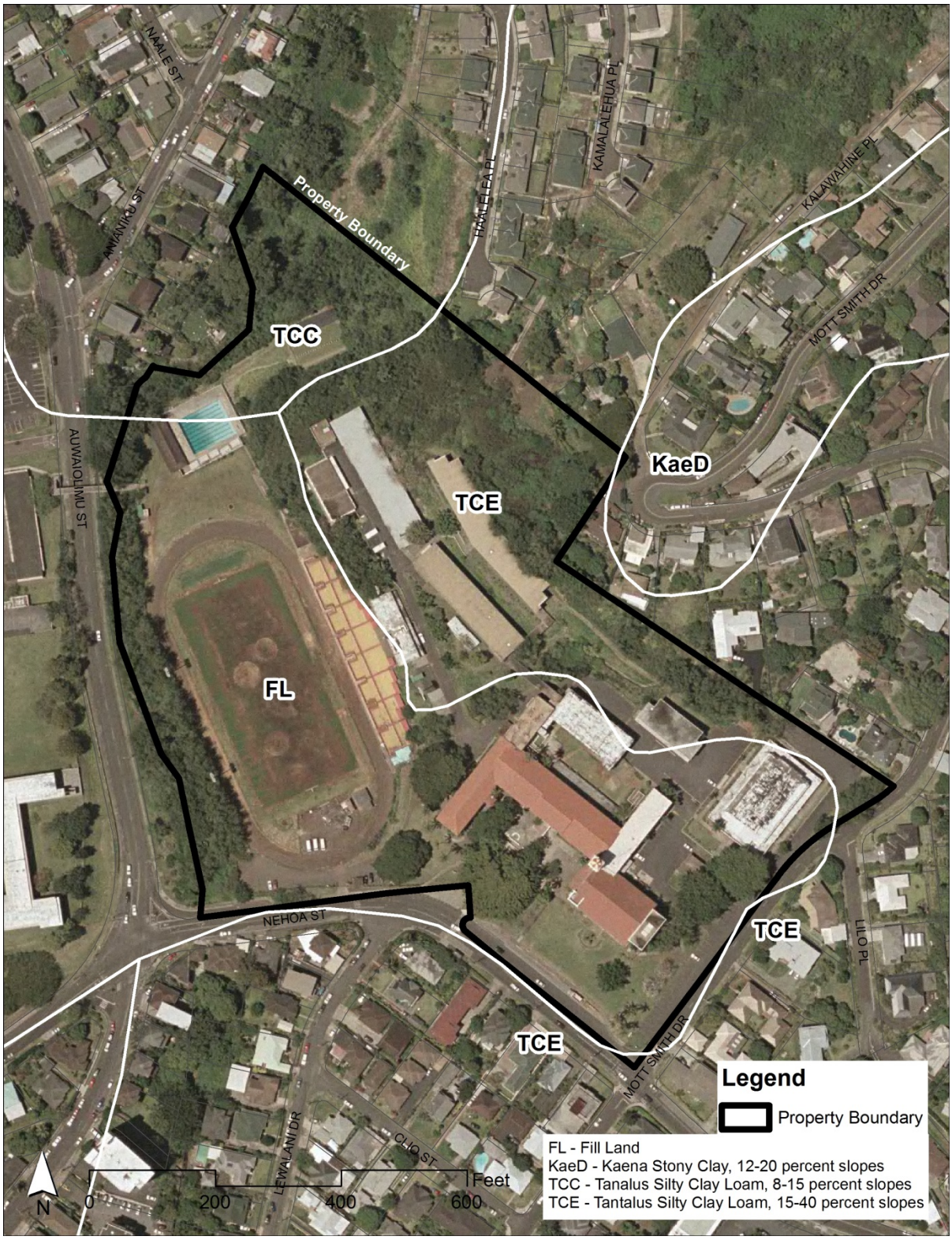


Figure 6: Soil Survey

3.3. HYDROLOGY

Existing Condition

There is one stream, Kanaha Stream, which runs through the western edge of the campus and parallels ʻAuwaiolimu Street. Kanaha stream is far from the proposed project areas. It is approximately 800 - 850 feet from the gym location and 450 - 500 feet from the proposed music building location. There are no wetlands on the campus. The nearest shoreline is at Ala Moana Beach, which is approximately 2 miles away.

Currently, surface runoff either sheet flows downslope in a westerly direction across the site or becomes absorbed into the ground. The collected flow conveys to Kanaha Stream via a 6-inch drainage culvert. Some of the school's flow goes to the existing City and County of Honolulu drainage system along Nehoa Street on the south side of the school.

Potential Impacts and Mitigative Measures

Over the long-term, the construction of the new structures will slightly increase the amount of impervious surface on the property and slightly increase the amount of runoff from the school property. Small detention areas within the landscaping will be created to store any increase in runoff. The proposed improvements will have negligible impact on surface or groundwater resources. The proposed gym's footprint will be close in size to the existing gym's footprint[3] and will have negligible drainage impact to the school. If a landscaped courtyard is built on the roof of the proposed gym, that could easily negate the increase in runoff generated by the proposed music building and be a potential mitigation measure for the increase in storm water runoff.

BMPs for construction activities to mitigate short-term construction-related impacts will include silt fences, dust fences, catch basin protection, drain inlet protection, and

[3] Note: Although the total proposed floor area will be greater than the existing floor area, the proposed gym's footprint is still close in size to the existing footprint because the proposed gym adds a second floor.

stabilized construction vehicle access ways. BMPs will be followed during construction to minimize soil erosion and runoff, which will also serve to protect water resources. Storm Water Quality requirements are not applicable because of the project's size.

The contractor will comply with Hawai'i Administrative Rules (HAR) regarding clean water and consult with the Clean Water Branch of the State of Hawai'i Department of Health, to ensure acceptable construction methodology and materials. The contractor will also secure permits, if required, prior to construction activities.

3.4. AIR QUALITY

Existing Condition

National Ambient Air Quality Standards (NAAQS) have been established for seven major air pollutants: carbon monoxide (CO), nitrogen oxides (NOx), ozone (O3), particulate matter smaller than 10 microns (PM10), particulate matter smaller than 2.5 microns (PM2.5), sulfur oxides (SOx), and lead. Air pollutant levels are monitored by the State Department of Health (DOH) at a network of sampling stations statewide. Based on ambient air monitoring data, the U.S. Environmental Protection Agency has classified the island of O'ahu and the entire State of Hawai'i as being in attainment of the federal standards.

Potential Impacts and Mitigative Measures

Air quality impacts attributed to the proposed project would be short-term and include exhaust emissions and dust generated by construction activities. Proposed mitigation measures include the installation of dust screen barriers, periodic watering to minimize airborne dirt particles, and proper maintenance of construction vehicles. Construction activities will be conducted in accordance with State air pollution control regulations as outlined in HAR, Chapter 11-60.1-33, Fugitive Dust.

3.5. NOISE

Existing Condition

Noise levels in the vicinity of the project areas are relatively low, consistent with the character of the school and surrounding residential uses. The primary source of noise near the music building project area is associated with school activities and vehicular traffic, including TheBus traffic, along ʻAuwaiolimu Street and Nehoa Street. The primary source of noise near the gym is school activities and vehicular traffic along Mott Smith Drive. Since the gym is located close to the street, the noise level from traffic is higher.

Potential Impacts and Mitigative Measures

The greater impacts on noise levels due to the proposed project will be mostly due to construction activities over the short-term. The operation of construction vehicles, machinery, tools, and the increased activity due to construction will increase noise levels above the existing level. Additional noise will be mitigated by limiting the hours and days of construction activities. Construction noise is regulated by the DOH and construction activities will be in compliance with HAR Chapter 11-46, Community Noise Control. Under current procedures, noisy construction activities require a permit and are restricted to daylight hours between 7:00 AM and 6:00 PM, Monday through Friday, excluding certain holidays, and 9:00 AM and 6:00 PM on Saturdays. Construction is not permitted on Sundays.

Long-term impacts on noise will be due to the activities that will occur in the gym and the music building, as well as some insignificant operational noise from the new air conditioning system that will be installed in the music building. Noise generation in general will be limited to the hours of 8 am to 5 pm. Sound attenuation features proposed for the music building, as well as its location in the middle of campus, will lessen noise impacts to nearby residences. Occasional after school events at the gym will generate some noise impacts, especially to adjacent residences. However, since the proposed gym is replacing one that already exists, the noise impact is not expected

to increase significantly over the existing. Additionally, sound absorbing materials and acoustic insulation will be incorporated into the design of the gym.

3.6. FLOOD HAZARD

Existing Condition

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Roosevelt High School is in Zone X, outside the flood prone areas. See Figure 7.

Based on evacuation maps prepared for the O'ahu Civil Defense Agency, the project site is outside the tsunami evacuation area. Roosevelt High School is a designated public emergency shelter for the area, as is Stevenson Middle School, located across the street.

Potential Impacts and Mitigative Measures

The project area is not within a flood prone area or the tsunami evacuation area. The proposed project will not increase flood hazard to the surrounding area. No mitigation measures are required.

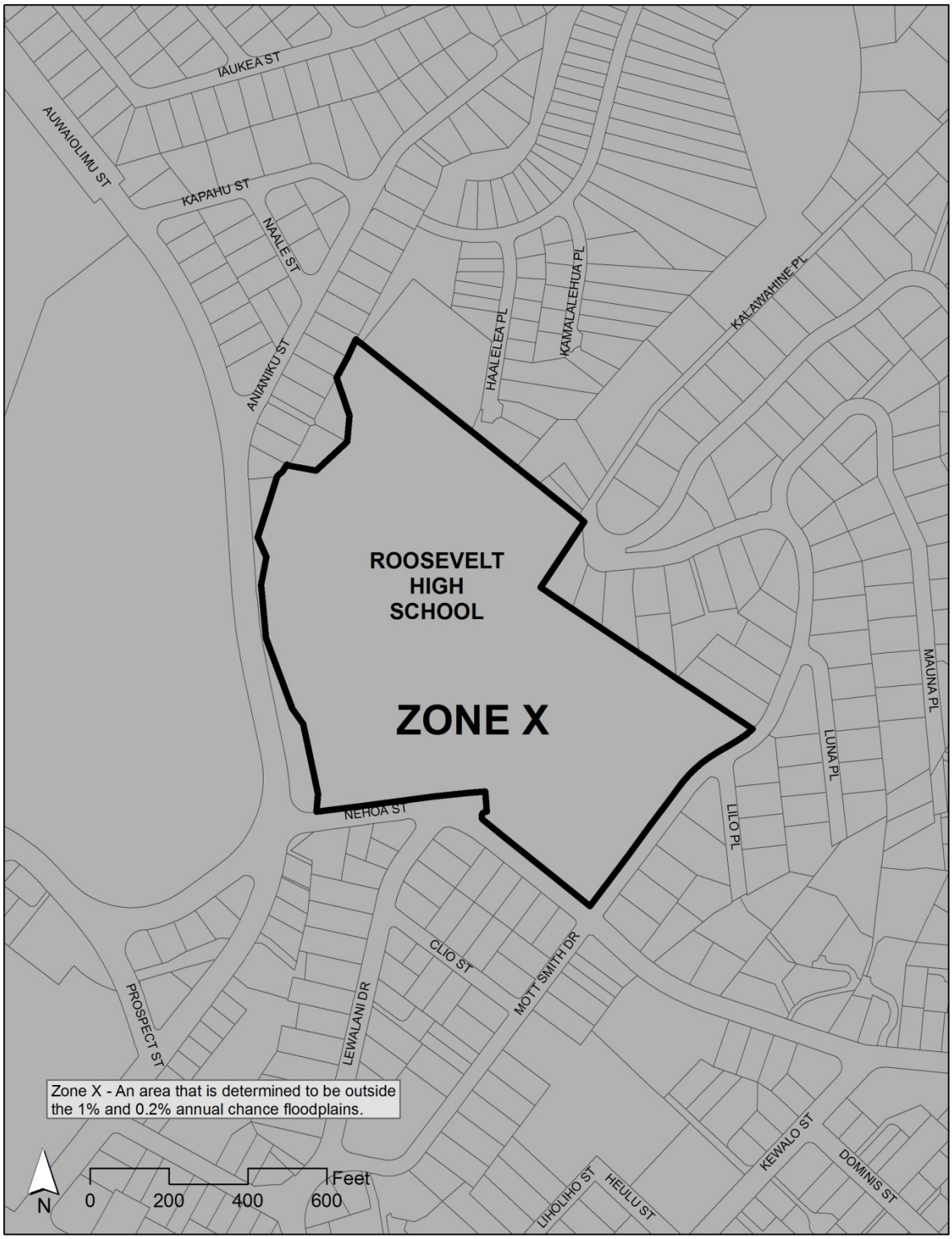


Figure 7: Flood Zones

3.7. FLORA AND FAUNA

Existing Condition

The Roosevelt High School campus is located in an urbanized area and as such, the natural biota was disturbed long ago. Most of the vegetation today consists of landscaping and non-native species. Fauna that would likely be found within the project area include mammals that typically inhabit urban residential areas in this region of O'ahu, including feral cats, rats, mice, and mongoose. Avifauna found on the project site also would include alien species common to urban environments, such as the Common Mynah, Java Sparrow, and Zebra Dove. No threatened or endangered species of plants or animals are associated with the project areas.

Potential Impacts and Mitigative Measures

There will be no significant impact to the composition of the existing flora or fauna or habitats. Under the County's Punchbowl Special District regulations (refer to Section 4.2.3), the removal of any tree that is visible from the street and has a trunk size of at least six inches in diameter must be mitigated by the replacement of that tree (in an appropriate location relative to the proposed facilities) with another that is at least two inches in trunk diameter. Two Ficus trees located near the south west corner of the gym will need to be replaced. Detailed landscape plans will be submitted prior to building permit applications.

3.8. HISTORICAL, CULTURAL, AND ARCHAEOLOGICAL RESOURCES

Existing Condition

Within the larger area, there are two notable historic and cultural sites; Punchbowl Crater and Roosevelt High School itself. Punchbowl Crater is a volcanic crater that is currently home to the National Memorial Cemetery of the Pacific. The cemetery is in the interior and the vehicular entrance is on the same side of the crater as Roosevelt High School, but far above at the rim of the crater. Punchbowl Crater was known

historically as Pūowaina, defined by Pukui and Elbert[4] as "hill of placing", where human sacrifices were offered.

The campus of Roosevelt High School is listed on the Hawai'i and National Registers of Historic Places, but it is the Administration Building A, with its notable Spanish Revival architectural style of the early 1930s, that is of historical significance. Administration Building A, which was designed by architects Guy Rothwell and Marcus Lester, was built in 1932 and is one of the few remaining examples of the Spanish Revival architecture style that was popular for public buildings in Hawai'i in the 1920s to early 1930s. Additionally, the dome tower of Building A was used as a look-out tower by the U.S. Army during World War II.

Roosevelt High School is also significant in that when it was built, it was the only public English-standard secondary school in the, then, Territory of Hawai'i. The English-standard system assisted in the Americanization process of Hawai'i youth.

Potential Impacts and Mitigative Measures

Construction of the proposed gymnasium and music room facilities, utility connections, and improvements will involve ground disturbance in the form of grading and excavation. These activities will not involve or significantly impact Building A. Because the project areas are located on fill land, it is anticipated that no subsurface cultural or historical resources are present. However, should subsurface remains, artifacts, or other historical deposits be discovered during excavation activities, all work shall cease and the appropriate agencies and authorities, including the State Historic Preservation Division (SHPD), will be notified.

[4] Pukui, Mary Kawena and Elbert, Samuel H., *Place Names of Hawai'i*, 1974, University of Hawai'i Press

Proposed activities will have no effect on the existing public use of any uplands, beach, or ocean waters, or traditional or customary gathering activities. No mitigation is proposed.

3.9. RECREATIONAL RESOURCES

Existing Condition

Roosevelt High School's campus does not contain, nor is it located near any, trail, public right-of-way, or public park.

Potential Impacts and Mitigative Measures

The proposed project will not impact existing public recreational resources; therefore, no mitigation is proposed.

3.10. VISUAL RESOURCES

Existing Condition

The nearby Punchbowl Crater is a well-known landform, landmark, and national monument. Its natural appearance has been recognized by the City and County of Honolulu as a significant scenic resource and regulations are in place "to preserve and protect the public views of Punchbowl, and the appearance of its slopes and surrounding areas"[5]. As such, the City and County of Honolulu has designated the greater area as the Punchbowl Special Design District. The objectives of the Punchbowl Special District are to:

(a) Preserve and enhance Punchbowl's form and character as a significant landmark.

(b) Preserve and enhance the park-like character of the immediate slopes of Punchbowl and its major streets.

[5] City and County of Honolulu, Department of Planning and Permitting, *Land Use Ordinance*, Section 21-9.50.

(c) Preserve and enhance significant public views to and from Punchbowl, especially those from the Punchbowl lookouts and long-range views of Punchbowl, by modifying construction projects that would diminish those views.

(d) Provide landscaping and open space which will enhance views and the general character of the Punchbowl area.

(e) Preserve, enhance and restore to the extent possible, the serene and scenic qualities within the national cemetery.

The special district includes the Roosevelt High School property and beyond. See Figure 8. The City and County of Honolulu has also recognized, in its Primary Urban Center Development Plan of 2002, that views from and towards Punchbowl Crater from afar, such as from the shoreline and from major streets, are also important resources.

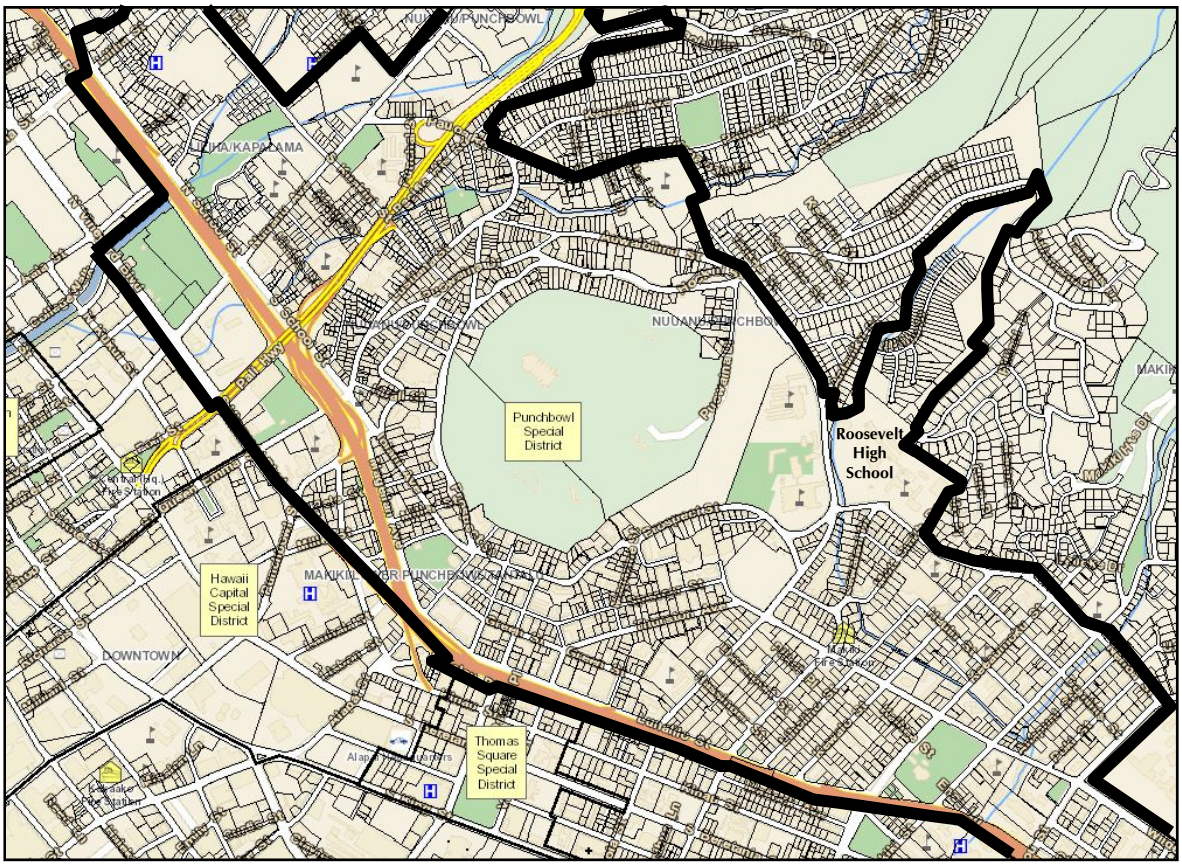


Figure 8: Punchbowl Special Design District

Potential Impacts and Mitigative Measures

The proposed project, over the short-term and long-term, will not alter the slope of Punchbowl Crater or its natural appearance.

Both the proposed gymnasium and the music building will be two-stories, but the gymnasium will be approximately 40 feet tall and the music building will be approximately 30 feet tall. Designs for both buildings are still conceptual and therefore exact heights are not yet available. Still, the proposed new buildings will not appear taller than the existing buildings on campus. The gymnasium will be visually shorter than the auditorium of Administration Building A, even with the parking level added underneath and being situated upslope of Building A. Similarly, the music building will be downslope and shorter than nearby Building C. Views to Punchbowl Crater from public streets and vantage points will not be affected. Views from Punchbowl Crater will not be significantly changed.

3.11. ROADS AND TRAFFIC

Existing Condition

Roosevelt High School is bordered by Mott Smith Drive, and Nehoa and ʻAuwaiolimu streets. The school's vehicular entry connects to Mott Smith Drive, while the frontage and a secondary vehicular access are along Nehoa Street. Mott Smith Drive intersects Nehoa Street at a right angle. Nehoa Street continues around the school to the west for roughly 500 feet, then intersects with the terminus of ʻAuwaiolimu Street and the terminus of Pensacola Street. ʻAuwaiolimu Street and Mott Smith Drive provide one lane of traffic in each direction. Nehoa Street primarily has one lane of traffic in each direction with the exception of a portion directly along the Roosevelt property frontage where there are two lanes headed west. All streets are under the jurisdiction of the City and County of Honolulu.

Public transportation in the form of TheBus system is provided along ʻAuwaiolimu and Nehoa streets. TheBus routes 15 and 17 travel over these roads, but originate and terminate elsewhere.

Potential Impacts and Mitigative Measures

The project components will have short-term construction impacts on local traffic, but since the proposed gymnasium and music building are accessory uses to the school and not increasing overall school enrollment, no long-term significant increase in traffic over what exists is anticipated. Therefore, a traffic impact assessment report is not warranted.

The short-term impacts to local traffic may be increases in commute times passing the campus due to slower moving construction vehicles. This would also affect public transit (TheBus) and paratransit vehicles that travel through the area. This impact would be mitigated by the timing of the construction vehicle movement, so that they avoid the busiest times of morning and afternoon rush hours. The City and County of Honolulu regulates this timing and other construction activities. These regulations will be followed by the contractor and the contractor shall notify the Honolulu Department of Transportation Services, Public Transit Division and Oahu Transit Services, Inc. at least 2 weeks prior to the start of construction.

There are no street or sidewalk closures planned for the adjacent or nearby streets due to the proposed project. If any sidewalk area is used to access the project site, it will be restored to its original condition or better upon the completion of the project.

3.12. UTILITIES

Wastewater

Existing Condition

The existing wastewater system consists of two 6-inch sewer mains and one 8-inch sewer main that that connects to the City and County of Honolulu system within Mott Smith Drive on the southeast side of the school, Nehoa Street on the south side of the school, and ʻAuwaiolimu Street on the west side of the school, accordingly.

Potential Impacts and Mitigative Measures

Wastewater generation is calculated using enrollment numbers. Since the proposed project is not increasing overall enrollment, but addressing current deficiencies, there will be no significant change in wastewater or wastewater facilities demand. The existing wastewater system capacity is adequate. However, a new sewer line will need to be installed and connected to the existing sewer system near the existing gym in order to service the new music building. Noise from construction and installation of the new line and connections will be mitigated by the timing of the activities. Potential dust generation will be mitigated by use of best management practices.

Water

Existing Condition

The subject property is serviced by a 6-inch water line from an existing Board of Water Supply (BWS) meter that connects to an 8-inch water main within Mott Smith Drive on the southeast side of the school. The school is also serviced by another 6-inch water line and meter that connects to a 16-inch water main within Nehoa Street on the south side of the school and a 4-inch water line and meter that connects to a 16-inch water main within ʻAuwaiolimu Street on the west side of the school.

The school has no on-site fire hydrants.

Potential Impacts and Mitigative Measures

Water generation is calculated using fixture unit counts and enrollment numbers. Since the proposed project is not increasing overall enrollment and the proposed music and gym is not expected to add a lot of fixtures, there should be a negligible impact on the existing water system. The existing water meter capacities should be adequate, but that will need to be verified during the project's design phase. However, a new water line will need to be installed and connected to the existing water system closest to the proposed facilities to provide potable water service and to install a fire hydrant to provide adequate fire protection coverage.

Electrical

Existing Condition

Electrical power for Roosevelt High School is currently provided by Hawaiian Electric Company (HECO). There are three existing HECO services to the campus; one each at the Auditorium, Building A, and the athletic field area.

Potential Impacts and Mitigative Measures

The new facilities will require new electrical systems. The estimated electrical demand load is 85 kilovolt-amperes (KVA) for the proposed new music building and 50 KVA for the new gymnasium. The existing HECO services should have sufficient capacity to handle these additional loads. No mitigation is required.

Telecommunications, Data, Cable TV, and Security Systems

Existing Condition

Roosevelt High School currently has telephone, internet, cable television, and security services provided by various companies. Telephone service is provided by HawaiianTelcom. Internet and cable television service is provided by Oceanic Time Warner Cable. The security monitoring and alarm system is provided by Alert Alarm and APN.

Potential Impacts and Mitigative Measures

The proposed new facilities will receive telephone, internet, cable television, and security services and connect to existing lines. The impacts to the existing service will be negligible. No mitigation is proposed.

3.13. PUBLIC SERVICES

Existing Condition

Roosevelt High School is located in the Honolulu Police Department's District No. 1, Sector 2. The nearest fire station is the Makiki Fire Station. Roosevelt High School serves as a public emergency shelter.

Potential Impacts and Mitigative Measures

The proposed project will not significantly increase the demand on public services, including law enforcement, fire protection, refuse collection, and educational, medical, and recreation facilities. As such, no mitigation is proposed.

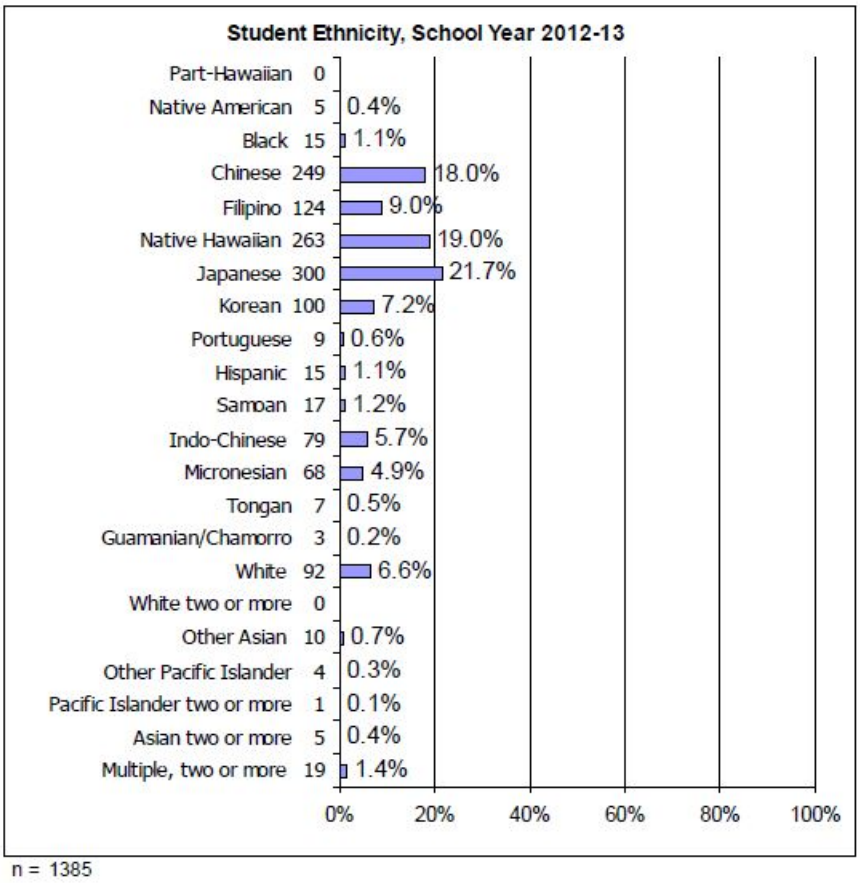
3.14. SOCIO-ECONOMIC CHARACTERISTICS

Existing Condition

Roosevelt High School is situated in a well-established and mature community area. There is a mix of socio-economic groups and ethnicities served by the school. The school serves Papakōlea Hawaiian Homestead, a State Department of Hawaiian Homelands community comprised of lower to lower-middle income Native Hawaiian and part-Hawaiian families. The school also serves Makiki Heights that is dominated by Asian middle-income families.

The latest available data for Roosevelt's student population shows that the student population reflects the community population. The highest percentage of students by ethnicity group is 21.7 percent. This represents the Japanese ethnicity. This is followed closely by Native Hawaiian at 19 percent and Chinese at 18 percent. All other ethnic groups each represent less than 10 percent of the student population.

The school's data for the school year 2012-2013[6] shows that the population of the community that is serves is 61,209 persons. The number of families in the area is 14,214.



[6] State of Hawai'i Department of Education, System Evaluation and Reporting Section, Systems Accountability Office, Office of the Superintendent. School Status and Improvement Report: Roosevelt High School. Honolulu, HI. Updated January 3, 2014.

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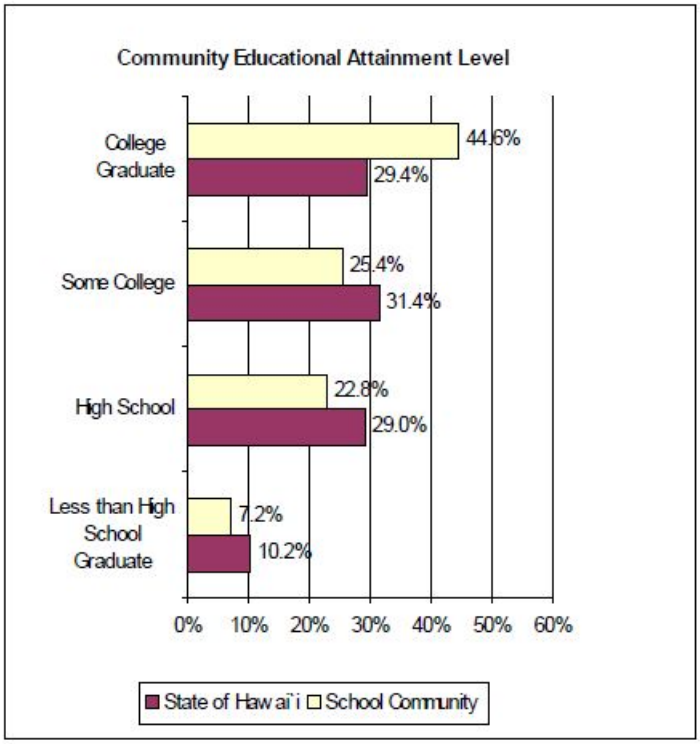
Based on the 2010 U.S. Census

Roosevelt HSC Complex	School Community	State of Hawai`i
Total population	61,209	1,360,301
Percentage of population aged 5-19	13.2%	18.4%
Median age of population	44.3	38.6
Number of family households	14,214	313,907
Median household income	$78,049	$66,420



Potential Impacts and Mitigative Measures

The proposed project is intended primarily to serve the existing school population and immediate community. The new facilities will have many positive impacts, including strengthening the music and athletic programs, renewing pride in the school, and attracting community investment into the aging school. No change to enrollment is

expected due to the new facilities. The new facilities are for accessory uses to the core academic school uses.

In addition, the proposed project would create new short-term employment related to construction. The proposed project is not expected to affect resident population or demographics because the surrounding communities are already built up and matured. No mitigation is proposed as the socio-economic impact of the proposed project will be negligible, but positive.

4. RELATIONSHIP TO LAND USE POLICIES AND CONTROLS

4.1. STATE OF HAWAIʻI

Hawaiʻi State Plan

The Hawaiʻi State Plan (Chapter 226, HRS) establishes a statewide planning system with goals, objectives, policies, and priorities to guide future long-range development of the state toward a desired future.

The proposed project components are consistent with the Hawaiʻi State Plan objectives and policies for socio-cultural advancement--education (§226-21), which states:

> (a) Planning for the State's socio-cultural advancement with regard to education shall be directed towards achievement of the objective of the provision of a variety of educational opportunities to enable individuals to fulfill their needs, responsibilities, and aspirations.
>
> (b) To achieve the education objective, it shall be the policy of this State to:
>
> (1) Support educational programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.
>
> (2) Ensure the provision of adequate and accessible educational services and facilities that are designed to meet individual and community needs.
>
> (3) Provide appropriate educational opportunities for groups with special needs.
>
> (4) Promote educational programs which enhance understanding of Hawaii's cultural heritage.
>
> (5) Provide higher educational opportunities that enable Hawaii's people to adapt to changing employment demands.
>
> (6) Assist individuals, especially those experiencing critical employment problems or barriers, or undergoing employment transitions, by providing appropriate employment training programs and other related educational opportunities.
>
> (7) Promote programs and activities that facilitate the acquisition of basic skills, such as reading, writing, computing, listening, speaking, and reasoning.
>
> (8) Emphasize quality educational programs in Hawaii's institutions to promote academic excellence.

(9) Support research programs and activities that enhance the education programs of the State.

The new gymnasium and music building will help achieve the objectives and policies above, especially policies 1 and 2.

State Land Use Classification

State Land Use Districts are established by the State Land Use Commission in accordance with Chapter 205, HRS. The purpose of the districts is to regulate the use of lands within the state to accommodate population growth and development as needed, and to protect important agricultural and natural resources areas. There are four classifications of land under this districting system: Urban, Rural, Agricultural, and Conservation. Roosevelt High School is within the Urban district. The Urban district is regulated by the counties. The following sections describe the county (City and County of Honolulu) regulations.

4.2. CITY AND COUNTY OF HONOLULU

General Plan

The General Plan for the City and County of Honolulu is a collection of broad objectives and policies supported by the City and County of Honolulu government to guide the future of O'ahu toward a desirable and attainable future.

The proposed project for construction of a gymnasium and a music building is consistent with the objectives and policies of the General Plan, particularly the following:

VII. Physical Development and Urban Design

Objective A: To coordinate changes in the physical environment of Oahu to ensure that all new developments are timely, well-designed, and appropriate for the areas in which they will be located.

Policy 1:

Plan for the construction of new public facilities and utilities in the various parts of the Island according to the following order of priority: first, in the primary urban center; second, in the secondary urban center at Kapolei; and third, in the urban- fringe and rural areas.

Objective E: To create and maintain attractive, meaningful, and stimulating environments throughout Oahu.

Policy 5:

Require new developments in stable, established communities and rural areas to be compatible with the existing communities and areas.

Policy 9:

Design public structures to meet high aesthetic and functional standards and to complement the physical character of the communities they will serve.

Objective F: To promote and enhance the social and physical character of Oahu's older towns and neighborhoods.

Policy 2:

Encourage, wherever desirable, the rehabilitation of existing substandard structures.

Policy 3:

Provide and maintain roads, public facilities, and utilities without damaging the character of older communities.

IX. Health and Education

Objective B: To provide a wide range of educational opportunities for the people of Oahu.

Policy 1:

Support education programs that encourage the development of employable skills.

Policy 3:

Encourage the after-hours use of school buildings, grounds, and facilities.

Policy 4:

Encourage the construction of school facilities that are designed for flexibility and high levels of use.

Policy 5:

Facilitate the appropriate location of learning institutions from the preschool through the university levels.

The proposed project components comply with the objectives and policies of the General Plan by building upon and improving the public facility that already exists in a stable older community, without changing the character of the diverse community. It supports investment first within the Primary Urban Center and can be accommodated by existing infrastructure and utilities.

The design and construction of the facilities will meet high aesthetic and functional standards as per the Punchbowl Special Design District. It will take into consideration the impacts to the surrounding neighborhoods, natural environment, and important views of Punchbowl Crater. The designs also incorporate energy efficiency measures.

Furthermore, the proposed project will expand educational opportunities for the students and possibly for the surrounding communities should community groups share use of the gymnasium. The buildings will be well used as the music and athletic programs will use the spaces in the after school hours.

Primary Urban Center Development Plan

The City and County of Honolulu's Development Plans (DPs) and Sustainable Communities Plans (SCPs) further refine the General Plan for the eight regions of Oʻahu. The region in which the proposed project is located is the Primary Urban Center (PUC). The PUC spans from Pearl City to Waiʻalae-Kāhala and contains almost half of the island's population. The PUC DP puts forth policies and guidelines to guide future activities and development in the PUC area.

The proposed project components comply with the following PUC DP policies and guidelines:

Section 3.1 Protecting and Enhancing Natural, Cultural, and Scenic Resources

Policies:

• Preserve historic and cultural sites. Preserve and protect sites that have high preservation value because of their good condition or unique features. Protection includes planning and design of adjacent uses to avoid conflicts or abrupt contrasts that detract from or destroy the physical integrity and historic or cultural value of the site. Retain, whenever possible, significant vistas associated with historic, natural and man-made features. Allow adaptive reuse of historic buildings to serve a new function and/or enhance interpretive value without destroying the historic value of a site.

• Preserve and protect natural resource and constraint areas. Establish an Urban Community Boundary to define the area for urban development. Place large contiguous areas of natural resource and constraint areas designated for Preservation, including all lands within the State Conservation District, outside of the Urban Community Boundary.

• Preserve panoramic views of natural landmarks and the urban skyline. Preserve views of the Koolau and Waianae Mountain Ranges, Punchbowl, Diamond Head, Pearl Harbor and other natural landmarks. Maintain important view corridors within and across urban Honolulu and keep Downtown as the most prominent feature of the urban skyline. Views along the Pearl Harbor shoreline and the Pearl Harbor Historic Trail toward the mountains, shoreline, significant landmarks, and adjacent communities should be created and maximized wherever possible and appropriate.

Guidelines:

3.1.3.3 Urban Skyline and Mauka-Makai Views

• Maintain the visual prominence of important districts by allowing a greater height and massing of buildings, such as in the Downtown area.

• Apart from Downtown and other central Honolulu locations, promote mid-rise or low-rise scale for new buildings.

• Preserve the following panoramic views indicated schematically in Figure 3.1 by establishing building height limits and setbacks that are based on viewplane analyses to determine the sight lines and desired view dimensions and characteristics:

- From Ala Wai Canal Promenade toward the Koolau Range
- From Ala Moana Beach Park toward the Koolau Range
- From Kewalo Basin toward the Koolau Range and Punchbowl
- From Kakaako Waterfront Park toward Punchbowl and the Koolau Range
- From Punchbowl Lookout toward Diamond Head

• Preserve and enhance significant mauka or makai view corridors along major collector streets indicated in Figure 3.1 through a combination of zoning controls and streetscape improvements.

• Increase line-of-sight opportunities towards Pearl Harbor – particularly the U.S.S. Missouri and the U.S.S. Arizona memorials.

The proposed project is consistent with the above regarding scenic resources because the views of Punchbowl Crater from the major streets as identified in the PUC DP's Figure 3.1 (shown below) will not be significantly changed. Views from Punchbowl Lookout toward Diamond Head also will not be noticeably altered. The project is not located on the slopes of Punchbowl Crater.

The proposed project components will be barely noticeable within the view corridors and from major streets described in the PUC DP. Historic and cultural sites will not be affected.

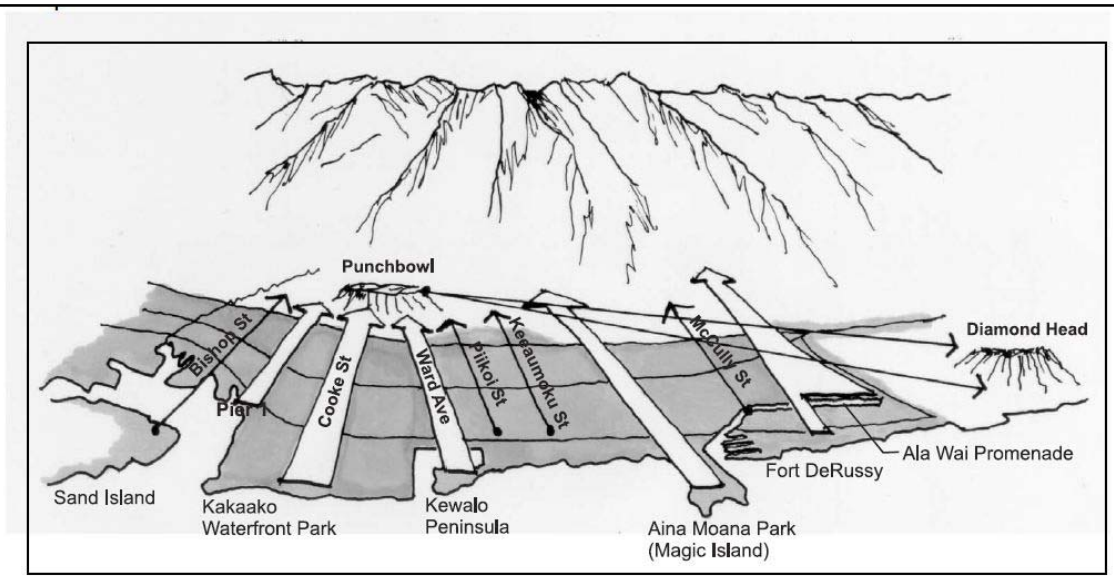


FIGURE 3.1: VIEW CORRIDORS. A diagram of *mauka* views from the shoreline and the view toward Diamond Head from Punchbowl Lookout.

Section 4.7 School and Library Facilities

Policies:

• Support the development of a high quality educational system of schools and post-secondary institutions that increase the attractiveness of the Primary Urban Center as a place to live and work.

• Work with the Department of Education to develop innovative shared-use facilities, particularly on City-owned school properties.

Guidelines:

• Identify ways for the City and the general community to improve conditions within and near school and college campuses. For example, the City could take a lead role in enhancing street appearance, security, and traffic and pedestrian safety near campuses.

• The City Department of Parks and Recreation should coordinate with the DOE regarding the development and use of athletic facilities such as playgrounds, playfields and courts, swimming pools, and gymnasiums, where joint use of such facilities would maximize use and reduce duplication of function without compromising the schools' athletic programs.

The proposed new facilities are consistent with the above policies as they will replace aged facilities and equipment, as well as improve the overall quality of the school. In addition, the new gym may create new opportunities for shared-use arrangements. The PUC DP Land Use Maps illustrate the long-range vision of the future of the PUC area. The Roosevelt High School Complex can be found in the PUC-Central Land Use Map. This map shows that the area is intended for institutional use, specifically high school use. See Appendix A. The proposed new gymnasium and music building for the high school is consistent with the PUC DP Land Use Map.

Land Use Ordinance

The purpose of the Land Use Ordinance (LUO) of the City and County of Honolulu is "to regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, including the [General Plan] and development plans…" Its intent is to provide "reasonable development and design standards for the location, height, bulk and size of structures, yard areas, off-street parking facilities, and open spaces, and the use of structures and land for agriculture, industry, business, residences or other purposes."

The LUO designates and defines categories or zoning districts of land use as well as the allowable developments and design criteria within each category or zoning district. The subject property for the proposed project is located within the R-5 Residential zoning district. The proposed project is consistent with this district since school use is

permitted in the residential district. Exceedance over the Punchbowl Special District height limit may be allowed via waiver. A waiver permit will be sought in association with the proposed project.

Punchbowl Special District Guidelines

In addition to defining regulatory zones, the LUO also identifies areas of significant cultural, scenic, environmental, or historical value and designates these areas as Special Districts. The Punchbowl area is one of the identified Special Districts in the LUO. The proposed project components are located outside of the "core area" of the Punchbowl Special District. Refer to previous Figure 8 and Figure 9 below for the Punchbowl Special District and core area boundaries.

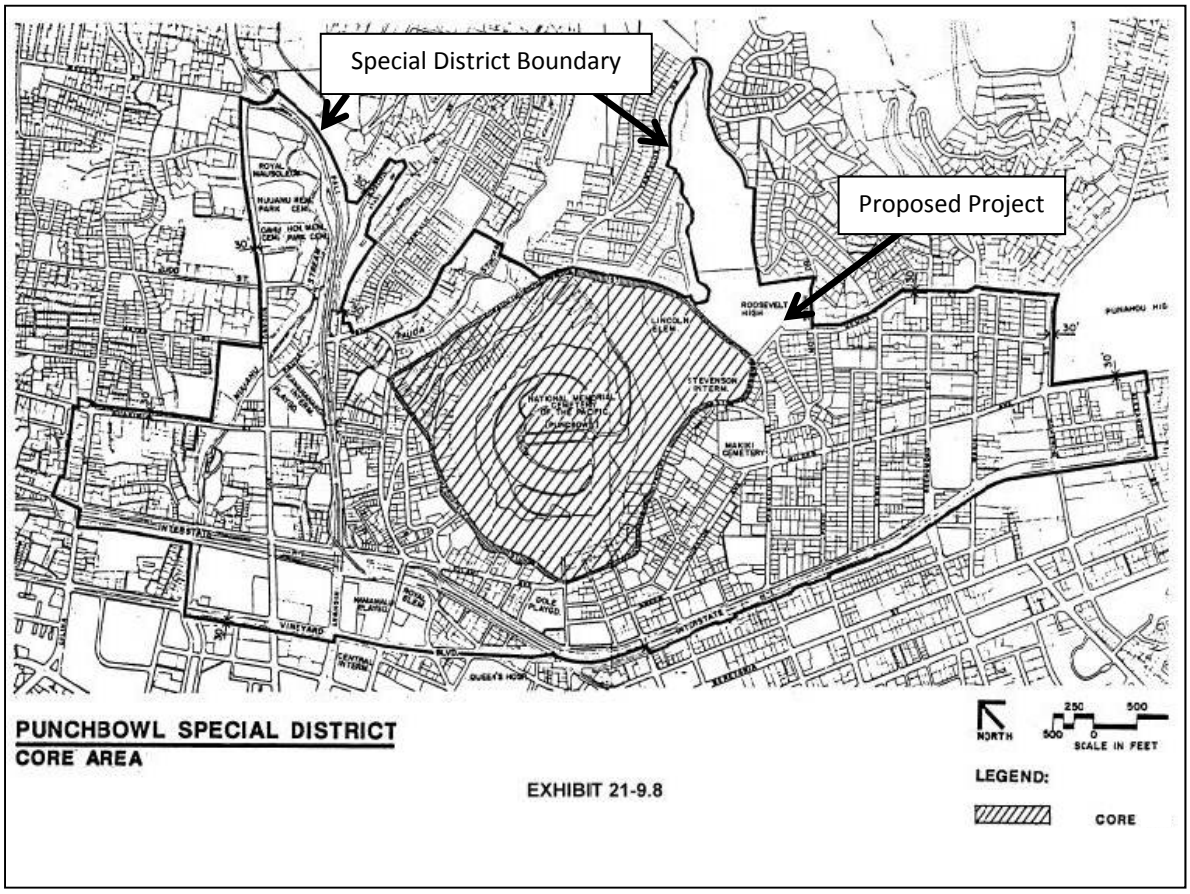


Figure 9: Punchbowl Special District Core Area

The Punchbowl Special District regulations (Section 21-9.50-4 of the LUO) further control height, maximum building area, architectural appearance and character, yard requirements, landscaping requirements, fences and walls, and tree plantings.

The proposed project is consistent with the general objectives of the Punchbowl Special District as the impacts on the form and character of Punchbowl Crater are insignificant. As discussed in previous sections, views of the crater's slopes and views from the crater toward Diamond Head, the coastline, or mauka, will not be significantly altered since the new buildings are replacing older ones and will be limited to two-stories. The new gym is to replace the existing gym at its current location, and the new music building will be located between other existing buildings.

The proposed project components are compliant with the design controls of LUO Section 21-9.50-4 as it will meet all requirements with the possible exceptions of height limit and/or height setback, whereby a waiver will be requested. The height limit is set by the special district rules at 25 feet. However, the existing gym, which stands at 32 feet, already exceeds the height limit by 7 feet. The proposed gym will likely exceed the height by an additional 8 feet, for a total of 15 feet. The proposed music building is anticipated to exceed the height limit by 5 feet.

In addition, a few trees will need to be removed in order to construct the gymnasium and the music building. The two trees to be removed that are visible from the street will be replaced with trees that have minimum trunk sizes of two-inches in accordance with the prescribed actions put forth in LUO Section 21-9.50-4 (also see previous Section 3.7).

The proposed project is consistent with the Punchbowl Special Design District Guidelines as follows:

Site Planning

Structures should be oriented to minimize intrusion into mauka/makai views to and from Punchbowl. Greater front yard setbacks, as delineated on the District Map, are required along major streets to expand view channels and provide opportunities for landscaping.

Views of parking, service areas and driveways, mechanical equipment and other obtrusive uses and structures should be minimized or screened to preserve the park-like mauka/makai views.

The proposed project minimizes intrusion into mauka/makai views by replacing an existing building (the gymnasium) and by being located in the center of campus and set back far from the surrounding streets (the music building). See Sections 3.10 and 4.2 Primary Urban Center Development Plan for more discussion. The required front yard setback is 20 feet, but the proposed gymnasium is to be situated with a 30-foot setback.

The vehicular entrance to the parking under the gym is oriented such that it does not face the street and surface parking is screened by being located behind the gym.

Architectural Character - Building bulk and Façade Treatment

Building bulks and facades should not visually detract from views of Punchbowl. Large, plain or smooth surface walls perpendicular to views to and from Punchbowl are inappropriate.

Building facades should be articulated to break up building mass and reduce visual impact. The use of recessed windows, lanais, projecting eyebrows, and offsets in wall planes are some ways to achieve desired articulation.

Structures shall be designed to blend with Punchbowl's olive and earth tone fluted slopes. Rear elevations and roof treatment are critical to the reverse view of buildings. Imposing masses, unarticulated or exotic forms, or designs which would otherwise detract from or block views are inappropriate.

Appropriate architectural character involves balance of variety and restraint. Offset wall planes, recessed and/or projected windows, eyebrows and lanais can provide necessary shade, shadow and architectural scale.

The visible portion of the proposed project components is limited to the two-story buildings, with the gym being more visible from public streets than the music building. The designs of the new gym and music building will be consistent with the existing school first; and then the desired architectural character of the Punchbowl Special District. The exterior walls perpendicular to the views to and from Punchbowl Crater

will not be large, plain, or smooth. The building masses will be broken up by landscaping and architectural details and color.

The overall designs will be simple and restrained and will not detract from Punchbowl Crater. The building designs will be sensitive to the purpose of the Punchbowl Special District.

Additional architectural renderings and photo analyses will be included in the land use permit applications. The DPP Urban Design Branch will review the plans during the design phase and ensure consistency with the Punchbowl Special District design guidelines.

Lighting – Materials and Color

Building should be of subdued earth or olive tones to blend with the crater slopes.

Finishes can be dominating. Garish, iridescent colors or highly reflective materials such as roofing, reflective glass films and polished metals that are exposed to public view are not acceptable because they are distractive, cause reflections and glare and undermine views to and from Punchbowl.

Lighting should be generally subdued and shielded so as not to detract from the ambiance of the District. Incandescent light fixtures are recommended. High intensity light sources, such as sodium and fluorescent lamps, detract from the park-like setting and are discouraged.

Lighting in parking garages should be concealed or shielded to minimize glare and spillage onto passing vehicular and pedestrian traffic.

Exterior materials and finishes will be selected to be appropriate to the school and surroundings. Materials and finishes will also comply with the Punchbowl Special District guidelines.

Exterior lighting will be indirect and not pointed to nearby residences. To promote energy efficiency, night time exterior lighting will be limited to those required only for security purposes, except for school event nights where lighting will be used for safety purposes.

Landscaping

…In order to enhance the appearance of the District, all yards are required to be landscaped, and street trees are required along all streets. Existing trees over 6-inch caliper shall be retained unless there are no possible development alternatives. The planting of large, canopy-form trees, such as Monkeypod and Formosan Koa, is encouraged….

As previously mentioned, the proposed project is consistent with the landscaping requirements of the zoning district and the Special District. The removal of two Ficus trees is necessary because they are in the way of the proposed gymnasium. Replacement trees will be planted as required by LUO Section 21-9.50-4(e).

Parking and Mechanical Equipment

…Structures should be oriented to minimize intrusion into mauka/makai views to and from Punchbowl. Greater front yard setbacks as delineated on the District map are required along major streets, to enhance views and/or contribute to the park-like setting of the District.

Views of Parking, service areas and driveways, mechanical equipment and other obtrusive uses and structures, should be minimized or screened to preserve the park-like environment.

The proposed new parking structure will be underneath the gymnasium and be partially below grade. Its entry will be perpendicular to the street and will not be directly facing the street. As such, it will not be obvious and intrusive from Mott Smith Drive and other adjacent areas. The parking will not detract from existing mauka/makai views to and from Punchbowl. Other new parking will be at grade and screened from surrounding views by being behind the gym. Generous landscaping will be installed to preserve and enhance the park-like setting of the District.

5. ALTERNATIVES TO THE PROPOSED ACTION

The following sections describe the alternatives to the proposed project.

5.1. NO ACTION

Under the No-Action alternative, none of the proposed project components – new gymnasium, new music building, and improved pedestrian and vehicular circulation – will be realized. The Roosevelt High School students, teachers, and coaches will continue to use the aged, ill-equipped, and sub-standard existing facilities.

The school's current needs will not be served, nor will future needs be served. Existing room and playcourt sizes do not meet current DOE standards. As such, under the No-Action alternative, the Roosevelt High School indoor athletics and music programs will lack the advantages that similar programs held in newer schools built with more modern facilities and equipment, and the facilities will remain sub-standard. The DOE and the school will likely still need to fund repairs to these facilities as they further age. The No-Action alternative could hamper Roosevelt High School in achieving their educational goals, maintaining enrollment, and securing community investment.

5.2. ALTERNATIVES CONSIDERED

Stakeholder meetings began in November 2013 to define the project, identify existing conditions, identify opportunities, and draft and evaluate alternatives. Several sites were considered for the ultimate location of the new gym and the new music building. For the music building, five building/site alternatives were developed. For the gym, six alternatives were developed. Designs of the buildings were based on each site.

For the music building, the five alternatives considered are summarized as follows:

ALTERNATIVE M1: Demolish the existing single-story music building, located above the stadium seats, and replace it with a new single-story building. Some grading of the

hillside would be required and some existing parking stalls would be lost. This location would limit the design of the building to be a long and thin rectangle, which would result in sub-optimal room configurations. This alternative would have a 2,500 sq. ft. main music room, a 1,440 sq. ft. choral room, and other smaller rooms.

ALTERNATIVE M2: Construct a new single-story building at the south end of the running track, at track level. Excavation of the hillside would be required as the building would be built into the hillside and would curve to follow the track. This alternative generally would have the same rooms and room sizes as the M1 alternative.

ALTERNATIVE M3: Construct a new multi-story building below Building C. The new building would be built into the hillside and would require grading and excavation. This alternative is good for student and vehicular access, but has more of a visual impact than the other alternatives.

ALTERNATIVE M4: Construct a new multi-story building behind the existing library and into the hillside. Grading and excavation would be required. This building would curve due to site constraints. This alternative is good for student and vehicular access, as well as minimal visual impact.

ALTERNATIVE M5: Construct a new single-story building with parking below at the site of the existing gym. This would create a new gateway building for the school and would require less grading and excavation than the other alternatives. This alternative would also create generous open space areas for student and staff use.

The main criteria used for evaluation of the music building and site alternatives were:

- cost of construction,
- phasing
- fire access,
- vehicular access,
- student access,
- music complex potential,

- visual/historic impact,
- fit on the site, and
- open space.

For the gymnasium, the six alternatives that were considered are summarized as follows:

ALTERNATIVE G1: Demolish the existing gym and replace it with a new single-story gym with parking below. Create a new one-way access drive and drop-off/pick-up area in the makai side of the gym.

ALTERNATIVE G2: Demolish the existing gym and replace it with new single-story gym with parking below. Create a new one-way access drive and drop-off/pick-up area in the mauka side of the gym. This alternative creates a centralized drop-off/pick-up area adjacent to Building N and a desirable pedestrian area at the entrance to the gym.

ALTERNATIVE G3: Demolish the existing gym and replace it with new multi-story gym with parking below. Create a new one-way access drive and drop-off/pick-up area in the makai side of the gym. This alternative adds the most number of parking stalls to the campus.

ALTERNATIVE G4: Demolish the existing gym and replace it with new multi-story gym with parking below. Create a new one-way access drive and drop-off/pick-up area in the mauka side of the gym adjacent to Building N. Similar to Alternative G2, this alternative creates a centralized drop-off/pick-up area adjacent to Building N and a desirable pedestrian area at the entrance to the gym.

ALTERNATIVE G5: Demolish the existing gym and replace it with new multi-story gym with parking below. Create a new one-way access drive circling the gym and a drop-

off/pick-up area in the makai side of the gym. Create a new campus entry point across from Lilo Place and replace all existing parking fronting Mott Smith Drive adjacent to the existing gym with landscaping. This alternative provides favorable pedestrian and vehicular circulation into and around the gym.

ALTERNATIVE G6: Construct a new elevated multi-story gym with parking below. The gym would be built on the north side of the campus between the existing pool and running track. The building would be built into the hillside and would involve grading and excavation. This alternative places the gym near the other athletic facilities, thereby creating an athletic complex.

The main criteria used for evaluation of the gym and site alternatives were:

- cost of construction
- phasing
- fire access
- vehicle access
- student access
- athletic complex potential,
- visual/historic impact,
- fit on the site, and
- open space.

5.3. PREFERRED ALTERNATIVE

The preferred alternative is a combination of Alternative M3 and Alternative G5 as described above. The project was further refined with sub-options and other considerations into what is currently proposed.

6. FINDINGS AND ANTICIPATED DETERMINATION

6.1. ANTICIPATED DETERMINATION

Based on the findings of this Environmental Assessment (EA), it is anticipated that the approving agency, the State of Hawai'i Department of Education, will determine that the proposed project will not have a significant environmental impact, and an Environmental Impact Statement (EIS) will not be required. Therefore, a Finding of No Significant Impact (FONSI) is anticipated.

6.2. REASONS SUPPORTING THE ANTICIPATED DETERMINATION

The Department of Health Administrative Rules Section 11-200-12 provides thirteen "Significance Criteria" for determining if an action will have a significant impact on the environment. This includes all phases of a project, its expected consequences both primary and secondary, its cumulative impact with other projects, and its short and long-term effects. According to the Rules, an action shall be determined to have a significant impact on the environment if it meets any one of the criteria listed below.

1. Involves an irrevocable commitment to loss or destruction of any natural cultural resources.

The project will not result in an irrevocable commitment to loss or destruction of any natural or cultural resources. Although the Roosevelt High School campus is on the National and Hawai'i Registers of Historic Places, the Administration Building A, which is the qualifying structure of importance, will not be modified or affected. The State of Hawai'i Historic Preservation Division was consulted and was involved in the early stages of alternatives development and evaluation.

The proposed project is located near the foot of Punchbowl Crater, but it does not involve the crater itself. The National Memorial Cemetery of the Pacific and its functions are contained within the crater and will not be affected.

There is a possibility of encountering sub-surface archaeological resources during the construction of the project, but mitigative measures will be in place and in accordance with the State Historic Preservation Division.

2. Curtails the range of beneficial uses of the environment.

The proposed project will not curtail the range of beneficial uses of the environment. The subject campus is already fully developed and has served the surrounding community for decades. The underlying Urban land use classification and R-5 residential zoning commits the subject property to residential development and use, which includes community facilities that service the residences, such as a public high school.

3. Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders.

The proposed project is consistent with the environmental policies established in HRS, Chapter 344. The proposed project will not alter the area's existing natural processes or resources and will not lower the quality of life for Hawai'i residents. Construction will produce some short-term impacts to air quality and noise, but these impacts are minor and will be mitigated in accordance with Department of Health regulations.

4. Substantially affects the economic or social welfare of the community or state.

The proposed project will not significantly affect the socio-economic welfare of the community or state, although it will contribute to the improvement of young adult music and physical education. Positive effects on the community are anticipated with the upgrading of the existing public facility and provision of better opportunities for

learning, team building, and school competitions, but the project is still quite limited in scale.

5. Substantially affects public health.

The proposed project will not substantially affect public health. As mentioned above, construction of the music building and gymnasium, along with landscaping improvements and utility connection work, will produce some short-term impacts to air quality and noise, but these impacts are minor and will be mitigated in accordance with Department of Health regulations. The project may help improve public health in that the high school students can learn physical skills that may lead to a more active and healthier adult lifestyle.

6. Involves substantial secondary impacts, such as population changes or effects on public facilities.

The proposed project is part of a public facility and will have positive secondary impacts to the existing Roosevelt High School campus. The modernizing of the music and indoor athletics facilities are means to provide a better education for the students, attract more students, and renew school and community pride. Substantial secondary impact on resident population is not expected since the surrounding community is matured and has grown with the school in place. Demand on other public facilities, including utilities, will not increase significantly due to the proposed new facilities and improvements.

7. Involves a substantial degradation of environmental quality.

The proposed project will not further degrade overall environmental quality. Minor impacts to air quality as the result of construction will be short-term. The proposed

project will fit into an existing campus and will not substantially change or disturb the existing natural processes occurring in the area.

8. Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions.

The proposed project is individually limited, will itself have an insignificant effect on the environment, and does not involve a commitment of larger actions. The proposed new buildings are for the Roosevelt High School campus only, but the gym has the potential to serve also as a community facility.

9. Substantially affect a rare, threatened or endangered species or its habitat.

There are no rare, threatened, or endangered plants or animal species on the subject property. The project area and vicinity are urbanized and developed. The Roosevelt High School campus is located in a region that the City and County of Honolulu has designated for the island's highest built density.

10. Detrimentally affects air or water quality or ambient noise levels.

As previously discussed, construction will produce temporary impacts to air quality, water quality, and noise levels. These impacts are short-term and will be mitigated by using Best Management Practice in compliance with City and County of Honolulu and State of Hawai'i rules and regulations regarding construction and related activities. Long-term impacts to air and water quality, and ambient noise levels will be negligible. The gym will be built with noise attenuating features including sound absorbent materials and acoustic insulation.

11. Affects or is likely to suffer damage by being located in an environmentally sensitive area, such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal water.

The project area is not in an environmentally sensitive area. It is far from the coastline and outside of flood prone areas. Although it is located next to a volcanic crater, it is not on geologically hazardous land as the volcanoes of O'ahu are extinct.

12. Substantially affects scenic vistas and view planes identified in county or state plans or studies.

As discussed in the previous Section 4.0, views of Punchbowl Crater's natural slopes and views from the crater toward Diamond Head, the coastline, or mauka, will not be significantly altered since the proposed building music building will not exceed 30 feet tall and the proposed gym will not exceed 40 feet tall. The project is consistent with the preservation of scenic vistas and views as identified by government plans and studies.

13. Requires substantial energy consumption.

Although the proposed new buildings will be larger than the buildings they are replacing, they are not expected to require substantial energy consumption in comparison to similar facilities in other newer schools. The buildings will integrate energy conservation features including high efficiency VFD air conditioning at the music building and high efficiency lighting at both buildings.

7. CONSULTATION

7.1. EARLY CONSULTATION

The following agencies were consulted in the early stages of the master plan development.

City & County of Honolulu

Department of Planning and Permitting
Fire Department
Department of Environmental Services
Board of Water Supply

State of Hawai'i
Department of Education
Department of Land and Natural Resources, Historic Preservation Division
Department of Land and Natural Resources, Land Division

Other
Hawaiian Electric Company

References

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City and County of Honolulu, Planning Department. 1992. *General Plan for City and County of Honolulu.*

Pukui, Mary Kawena and Samuel H. Elbert. 1974. *Place Names of Hawai'i*, Honolulu: University of Hawai'i Press.

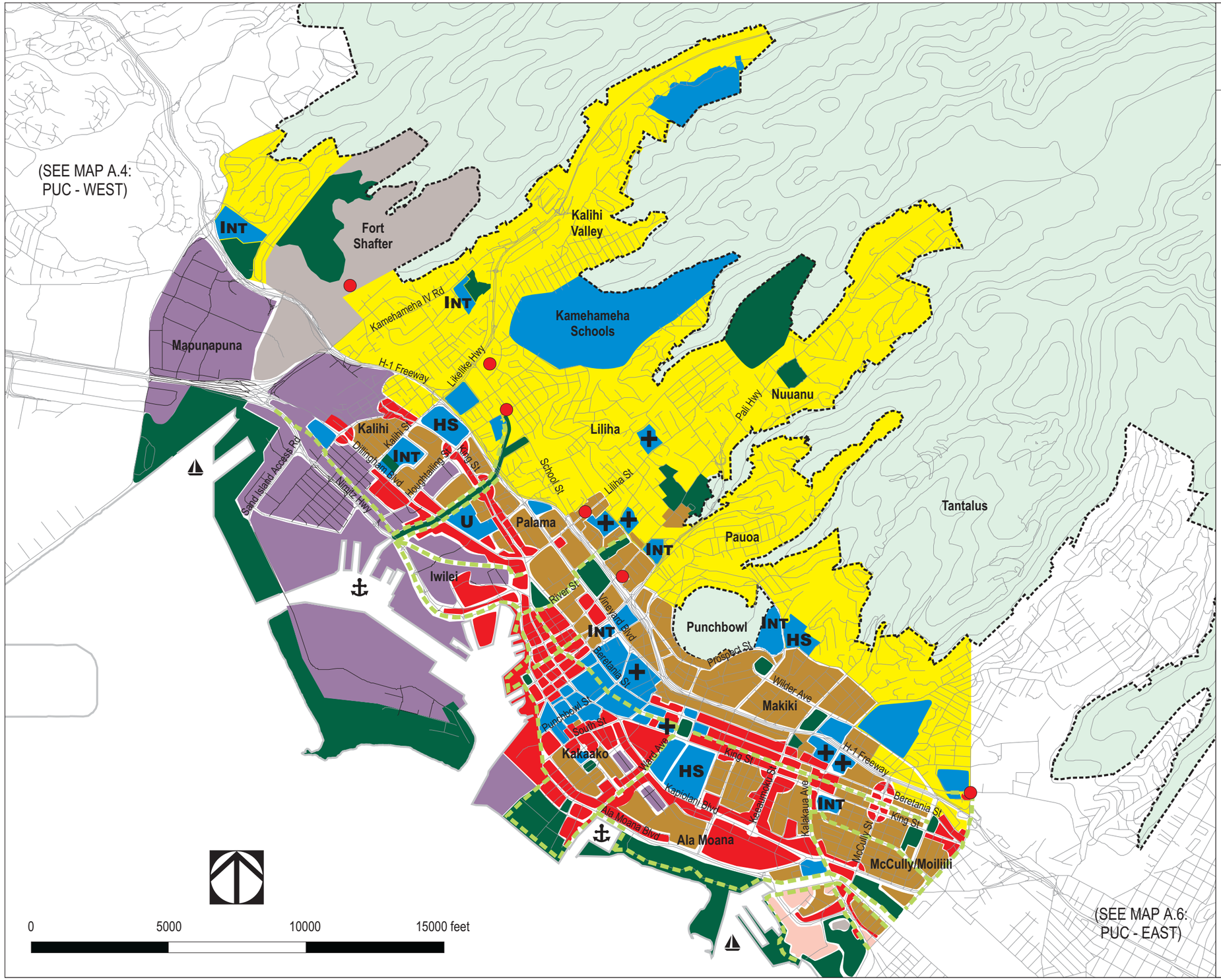
State of Hawai'i Department of Education, System Evaluation and Reporting Section, Systems Accountability Office, Office of the Superintendent. *School Status and Improvement Report: Roosevelt High School. Updated January 3, 2014.*

U.S. Department of Agriculture, Natural Resources Conservation Service, *Web Soil Survey*, http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

APPENDIX

PRIMARY URBAN CENTER DEVELOPMENT PLAN

A.5: Land Use Map
PUC - Central



- Lower-Density Residential
- Medium and Higher-Density Residential/Mixed Use
- Community/Neighborhood Commercial
- District Commercial
- Industrial
- Resort
- Institutional
- Major Parks and Open Space
- Preservation
- Military
- Urban Community Boundary
- Pedestrian Network
- U — College/University
- \+ — Hospital/Medical Center
- INT — Intermediate School (State)
- HS — High School (State)
- Small Boat Marina
- Harbor
- Airport

Department of Planning & Permitting
City & County of Honolulu
June 2004