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

December 11, 2015

TO: Mr. Scott Glenn
Interim Director, Office of Environmental Quality Control

FROM: Duane Y. Kashiwai
Public Works Administrator

SUBJECT: **Final Environmental Assessment for Kohala High School Proposed STEM/Science Facility, North Kohala District, Island of Hawai'i, TMKs (3) 5-4-008:021 and (3) 5-4-007:014**

The Hawai'i State Department of Education (DOE) hereby transmits the Final Environmental Assessment and Finding of No Significant Impact (FEA-FONSI) for the Kohala High School Proposed STEM/Science Facility, North Kohala District, Island of Hawai'i, TMKs (3) 5-4-008:021 and (3) 5-4-007:014 for publication in the next available edition of The Environmental Notice.

The DOE has received two comments during the 30-day public comment period on the Draft Environmental Assessment and Anticipated Finding of No Significant Impact (DEA-AFONSI).

Enclosed is a completed Office of Environmental Quality Control Publication Form, two copies of the FEA-FONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in MS Word.

Should you have any questions, please contact Arnold Fukunaga, AIA, Project Coordinator of the Facilities Development Branch at 586-0440 or via e-mail at arnold_fukunaga@notes.k12.hi.us.

DYK:dw
Enclosures

c: Arnold Fukunaga, Facilities Development Branch, Project Management Section

July 2015 Revision

AGENCY ACTION
SECTION 343-5(b), HRS
PUBLICATION FORM

Project Name: **Kohala High School - New STEM-Science Buildings**

HRS §343-5 Trigger(s): **Use of State Lands and Funds**

Island: **Hawaii**

District: **North Kohala**

TMK: **(3) 5-4-008:021 and (3) 5-4-007:014**

Permits: **To Be Determined**

Proposing/Determination Agency:
(*Address, Contact Person, Telephone*)

State of Hawaii, Department of Education
Facilities Development Branch
Project Management Section
Kalanimoku Building, Room 431
1151 Punchbowl Street
Honolulu, HI 96813
Contact: Arnold Fukunaga, AIA
Phone: (808) 586-0440

Accepting Authority:
(for EIS submittals only)

Consultant:
(*Address, Contact Person, Telephone*)

PlanPacific, Inc.
P.O. Box 892735
Mililani, HI 96789
Contact: Lisa Leonillo Imata
Phone: 521-9418

Status (check one only):

__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.

_x_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 for the Kohala High School campus is to replace a sub-standard science classroom with new single-story science, technology, engineering, and mathematics (STEM) buildings and renovate the existing science classroom to create a new faculty center. The proposed project is needed to modernize the high school campus and meet current Department of Education classroom standards. No significant adverse long-term or cumulative impacts are anticipated to be generated from the proposed project.

KOHALA HIGH SCHOOL
NEW STEM-SCIENCE BUILDINGS

FINAL ENVIRONMENTAL ASSESSMENT

State of Hawai'i Department of Education

DOE Job No. Q16001-12

Kohala, Hawai'i

TMKs: 5-4-7:008 and 014, 5-4-8:021, and 5-5-8:024

December 2015

KOHALA HIGH SCHOOL

NEW STEM-SCIENCE BUILDINGS

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Finding of No Significant Impact

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DOE Job No. Q16001-12

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TMKs: 5-4-7:008 and 014, 5-4-8:021, and 5-5-8:024

Prepared For Ferraro Choi Associates

Prepared By PlanPacific, Inc.

December 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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Appendix

LIST OF ACRONYMS

BMP	Best Management Practices
DLNR	Department of Land & Natural Resources, State of Hawaiʻi
DOE	Department of Education, State of Hawaiʻi
DOH	Department of Health, State of Hawaiʻi
EA	Environmental Assessment
ESPECS	Educational Specifications (Department of Education)
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	Hawaiʻi Administrative Rules
HELCO	Hawaiian Electric Light Company
HFD	Hawaiʻi Fire Department
HI-CHPS	Hawaiʻi Collaborative for High Performance Schools
HPD	Hawaiʻi Police Department
HRS	Hawaiʻi Revised Statutes
HVAC	Heating, Ventilation, and Air Conditioning
LEED	Leadership in Energy and Environment Design
NAAQS	National Ambient Air Quality Standards
NPDES	National Pollutant Discharge Elimination System
SHPD	State Historic Preservation Division
SMA	Special Management Area
STEM	Science, Technology, Engineering, and Mathematics
TMK	Tax Map Key

1. PROJECT SUMMARY

Proposed Action: Modernize the Kohala High School campus by constructing a new facility properly equipped for science, technology, engineering, and mathematics (STEM) learning. The project is a new, 1-story cluster of buildings consisting of 4 classroom buildings connected by a covered walkway. The new classroom buildings include a physical science lab building, biochemistry lab building, natural resources building, and a general classroom building.

The project is to be located on school property, but on a lesser utilized lot across Honomakau Road from the main campus. The project is to be located on TMK (3) 5-4-008:021. The majority of the campus buildings and parking are located on TMK (3) 5-4-007:014. The overall Kohala High School campus is comprised of four parcels: TMKs (3) 5-4-007: 008 and 014, TMK (3) 5-4-008:021, and TMK (3) 5-5-008:024. The campus is bifurcated by Honomakau Road.

Property: 54-3611 Akoni Pule Hwy, Kapaau, HI 96755

TMKs: (3) 5-4-007: 008
(3) 5-4-007: 014
(3) 5-4-008:021
(3) 5-5-008:024

Total Area: 30.025 acres

Subject Property (parcel 21): 6.56 acres

Owner/Applicant:	State of Hawai‘i
Approving Agency:	State of Hawai‘i, Department of Education, Planning Section
State Land Uses:	Urban
Zoning Districts:	RS-15 Residential
General Plan **Land Use Pattern Allocation:**	Low Density Urban
Special Management Area:	Outside
Required Land Use Permits:	To Be Determined
HRS, Chapter 343 Action:	Use of State Lands and Funds
Anticipated Determination:	Finding of No Significant Impact (FONSI)
Consulted Agencies:	<u>County of Hawai‘i</u> Department of Public Works Department of Water Supply Fire Department Planning Department <u>Other</u> Hawai‘i Electric Light Co.

2. DESCRIPTION OF THE PROPOSED ACTION

2.1. OVERVIEW OF THE PROPOSED ACTION

Kohala High School is a public school that has its beginnings in the 1800s and originally consisted of a few small classrooms to serve the small sugar plantation communities along the northern most region of the island of Hawai'i. At the time, the school was called Honomakau School, after the area in which it was located. In 1926, the school was renamed Kohala High and Grammar School and later on, the school was again renamed Kohala High and Elementary School. In 1995, the school was split into two separate schools; Kohala Elementary School (grades K-5) and Kohala High and Intermediate School (grades 6-12). In 2001, Kohala High and Intermediate School further separated into two schools; Kohala High School (grades 9-12) and Kohala Middle School (grades 6-8).[1] Kohala Middle School was then relocated to another area a few miles away. Kohala High School is controlled and operated by the State of Hawai'i Department of Education (DOE). The campuses of Kohala High School and Kohala Elementary School adjoin each other and can be referred to as a singular campus, but for the purposes of this document and the project that is described, Kohala High School will be referenced as a separate entity.

Kohala High School is located along the north or makai side of Akoni Pule Highway, which runs east/west, at the intersection with Honomakau Road, which runs north/south. The campus is made up of 4 parcels that straddle Honomakau Road. The street address for Kohala High School is 54-3611 Akoni Pule Highway. The tax map key parcels on which the high school campus is located are identified as (3) 5-4-007: 008 and 014, (3) 5-4-008:021, and (3) 5-5-008:024. See Figure 1. The total acreage of the four parcels is 30.025.

[1] http://www.kohalael.k12.hi.us

The tax map key (TMK) of the parcel that is the main subject of this document is (3) 5-4-008:021 ("Subject Property"). The proposed new construction will be located on this parcel only, except for related utility lines. Improvements will also be made to the existing science classroom space in Building D on the main part of campus on parcel 5-4-007: 014 ("Parcel 14"). This space will be renovated and converted to a new faculty center.

The proposed project replaces existing facilities that are no longer properly serving the school. Spatial needs that have changed due to new directions in teaching and safety standards that continue to change, combined with the age and conditions of the existing science classroom and faculty area, call for larger replacement facilities.

The main components of the proposed project are: 1) four new science, technology, engineering, and mathematics (STEM) buildings, and 2) renovation of the existing science classroom to create a new faculty area. The existing faculty area will remain to be used as office space.

This environmental assessment is required because the project involves State of Hawai'i-owned lands and funding.

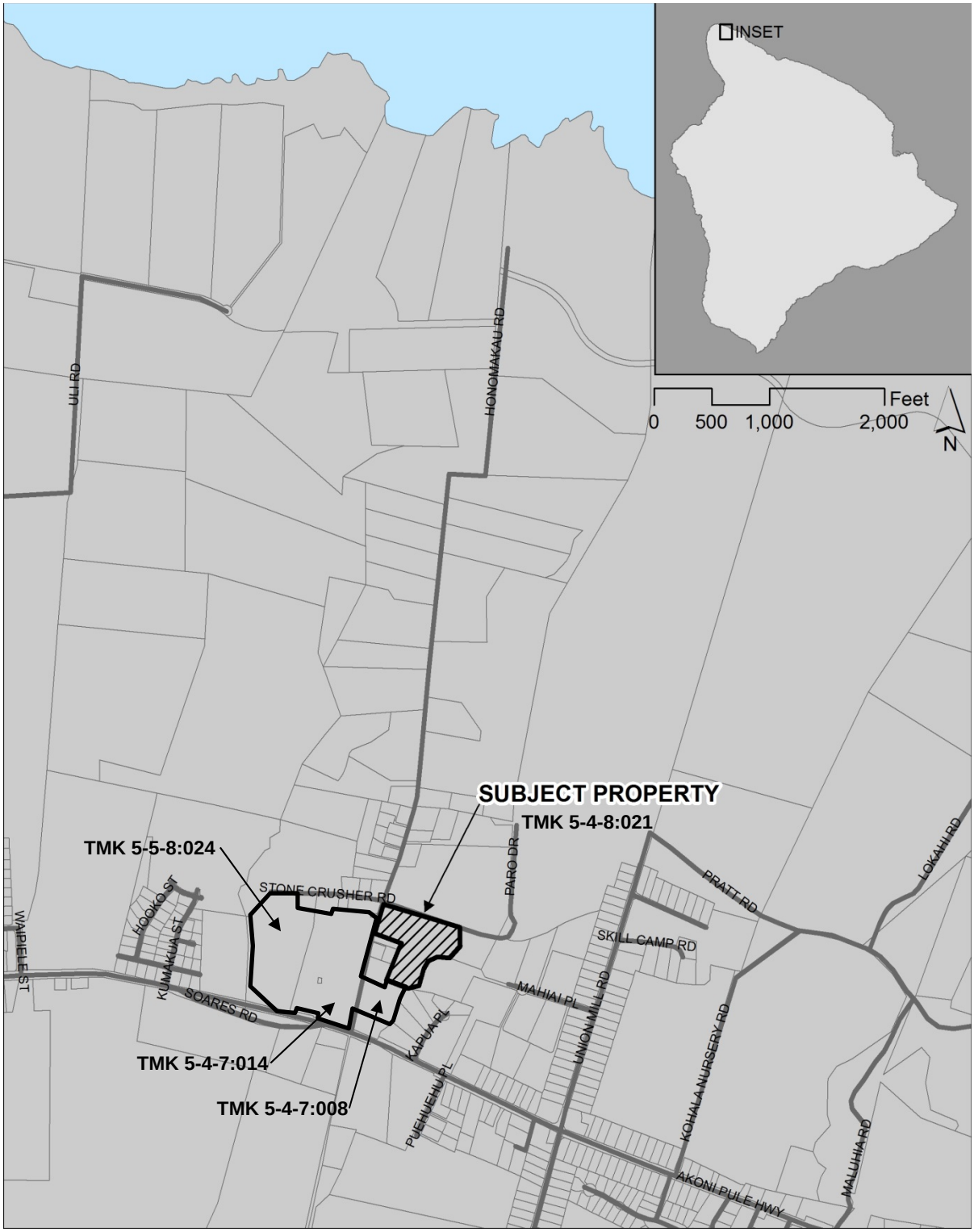


Figure 1: Location Map

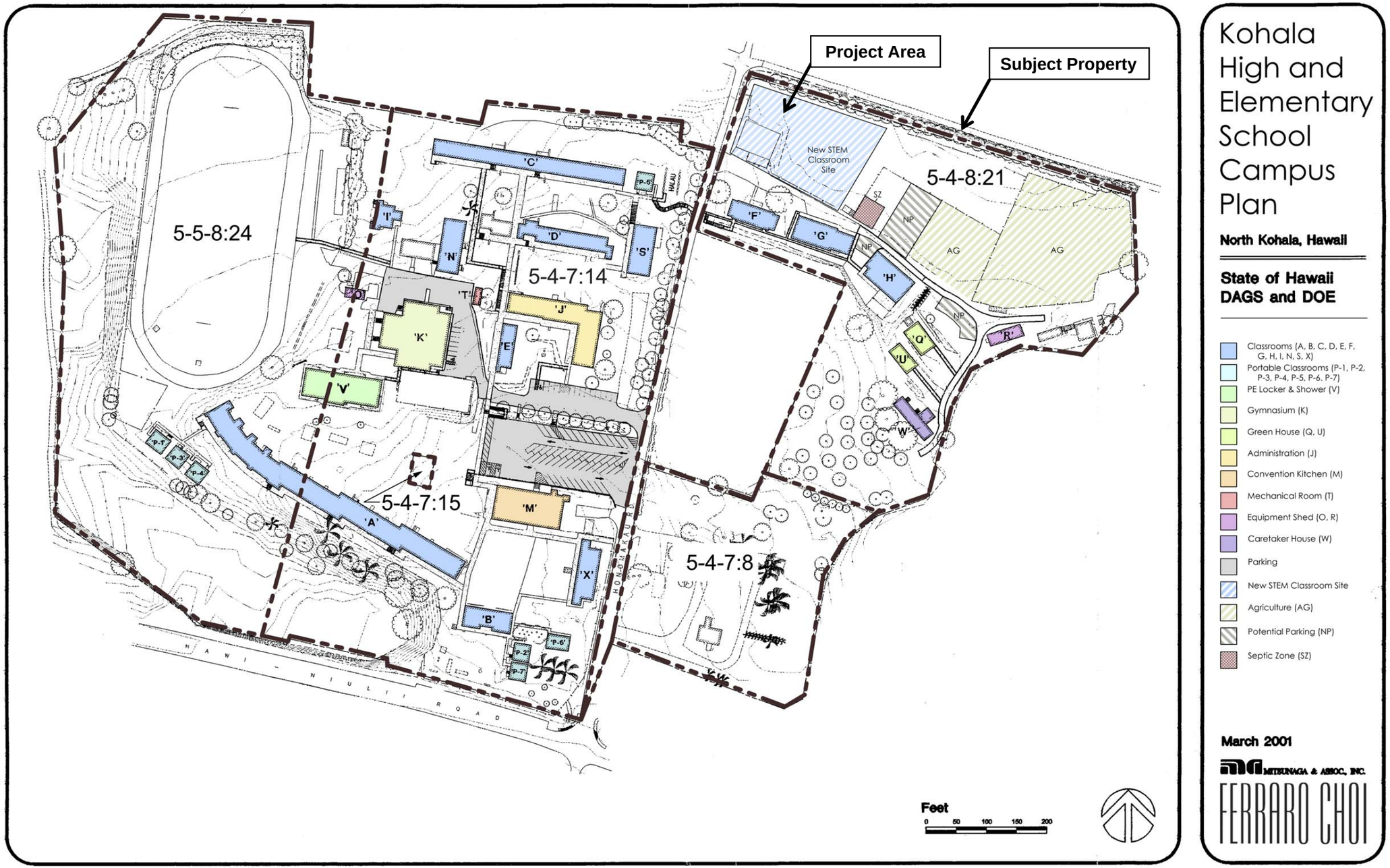


Figure 2: TMK, Campus, and Proposed Project Area Map

2.2. PROJECT LOCATION AND SITE DESCRIPTION

The Subject Property, identified as TMK (3) 5-4-008:021, is located on the northernmost area of the Island of Hawai'i, in North Kohala, between the Kumakua and Kapua Gulches. It is roughly 1.30 miles from the northern coastal cliffs and roughly 0.70 mile east of Hawi. The Subject Property is located at the southeast corner of the intersection of Honomakau Road and Paro Drive. Paro Drive is parallel to and near Akoni Pule Highway, which runs east/west.

The project area for the new Science, Technology, Engineering, and Mathematics (STEM) buildings is in the northern portion of the Subject Property between Paro Drive and the existing classroom buildings F and G. See Figure 2. Vehicular access to the Subject Property is from Honomakau Road. The project area is unimproved and covered with vegetation except for a remnant foundation slab which will be removed.

Administration Building J, where the current faculty area is housed, and Classroom Building D, where the current science classroom can be found, are located near each other on the northern half of parcel 5-4-7:014.

Overall, the existing campus consists of 9 single-story classroom buildings (Buildings C, D, E, F, G, H, I, N, and S) and portable classroom building P-5. The campus also has an Administration Building J, as mentioned above, a Gymnasium Building K, a Lockers and Showers Building V, a Kitchen Building M, a Green House Q, Equipment Shed Buildings O and R, a Mechanical Room Building T, and a Caretaker's Home W. See Figure 2. Buildings A, B, and X and portables P-1, P-2, P-3, P-4, P-6, and P-7 serve the Kohala Elementary School.

The campus is immediately surrounded by large lots with single-family residential homes to the north, east, and west. To the south across Akoni Pule Highway are large lots of agricultural land. Further north, east, and west are also large lots of agricultural

land. In general, the area is characterized by low-rise, low-density buildings in a small town, rural agrarian setting.

Immediately surrounding the Subject Property is Paro Drive and open undeveloped land to the north, open undeveloped land to the east, campus land to the south, and Honomakau Road and the main campus area to the west.

The Subject Property is in the North Kohala portion of the Hawai'i County General Plan area.

2.3. PROJECT DESCRIPTION

The existing science classroom in Building D is undersized, per the Hawai'i Department of Education's (DOE) current standards, and it lacks modern science teaching equipment. This project proposes to modernize the Kohala High School's science classroom and equipment by constructing a new facility that will be properly equipped for science, technology, engineering, and mathematics (STEM) learning. The new facility will be a 1-story cluster of buildings consisting of 4 classroom buildings connected by a covered walkway. The STEM buildings will be designed to meet current DOE educational specifications (ESPECS) for high school science and general classrooms and the DOE facilities assessment and development schedule (FADS). See the following section for more detail.

This project also proposes to re-purpose the existing science classroom to a new faculty center. The faculty center will provide a work/meeting room, lounge, storage, and 2 restrooms. The existing faculty area is currently located in the Administration Building J and is also undersized per current DOE standards. See below for more detail.

New STEM Buildings

The proposed new STEM buildings will consist of 4 single-story classroom buildings connected by a covered plaza and walkway. The classroom buildings each will be rectangular in footprint and arranged somewhat parallel to each other in a fan shape. The building closest to the intersection of Honomakau Road and Paro Drive will be the general classrooms building. Next to the general classrooms building will be the biochemistry building and then the physical science building. Furthest from Honomakau Road will be the natural resources classroom building. The general classroom building will be roughly 3,491 square feet (sf), the biochemistry lab building will be roughly 2,664 sf, the physical science lab building will be roughly 2,664 sf, and the natural resources lab building will be roughly 2,664 sf. Between the existing Building F and the new STEM buildings, a new paved driveway is proposed. A new walkway connecting the existing main campus with the new STEM buildings will be installed west of Building F and angle to the right to connect to the proposed new covered plaza of the STEM facility. The proposed project will add roughly 13,000 gross square feet (gsf) of education space plus a 1,700 gsf outdoor lanai.

Gardening areas will be provided between the biochemistry building and the physical science building; between the physical science building and the natural resources building; and to the south of the natural resources building. A lanai area is also proposed to the south of the physical science building. Rainwater catchment cisterns, bioswales, drainage basins, a rain garden, general landscaping, utility connections, and an accessible parking stall are also proposed as part of the project.

The facility will be designed to be state-of-the-art, efficient, functional, flexible, and easy to maintain. Sustainable design features will be integrated as feasible. The sustainable design strategies employed will be in accordance with the Hawai'i Collaborative for High Performance Schools (HI-CHPS) criteria, 2012 Edition. The HI-CHPS program is modeled after a California program and is a building rating system created for schools. The main rating categories are "CHPS Designated" and "CHPS

Verified". This project will apply for HI-CHPS Verified status. The strategies that will be applied will include:

- sustainable demonstration areas
- mixed-mode ventilation
- light pollution reduction
- native plants and water efficient landscaping
- water use reduction
- optimized energy performance
- systems commissioning (optimal integrated HVAC systems performance)
- measurement and verification of performance
- construction waste management
- recycled content of construction materials
- use of local/regional materials
- use of low-emitting materials (of volatile organic compounds)
- daylighting and line-of-sight to view (minimize need for electical lighting)
- innovation in design

The proposed STEM buildings will relate to the site by being single-story like the surrounding buildings. Floor areas will be stepped to follow the existing terrain. Gardens will relate to the existing agricultural plots and agriculture classrooms on the Subject Property.

Faculty Center

The existing science classroom in Building D will be renovated and converted into a new faculty center. The new faculty center will have a work/meeting room, lounge area, storage space, and two restrooms. An adjacent office space will be renovated as part of this project.

Since the new faculty center will be located within an existing classroom building, no site improvements are 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 it up to current DOE standards. The proposed project will strengthen the school's STEM program for the betterment of the students.

2.4. PROJECT SCHEDULE AND COST

A rough-order of magnitude cost estimate for construction of the new STEM buildings and related structures is $7.5 million. The cost estimate for renovating the vacated science classroom in Building D to create a new faculty center is $250,000. Construction may begin as early as the Fall of 2016. 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 County of Hawaii, the State of Hawai'i, and/or federal government to implement the proposed project. A summary listing is as follows:

<u>State of Hawai'i</u>

- Department of Health
  - National Pollutant Discharge Elimination System (NPDES) Stormwater Permit
  - Individual Wastewater System Permit
  - Noise Permit
  - Disability and Communication Access Board (DCAB) Approval

<u>County of Hawai'i</u>

- Planning Department
  - Plan Approval
  - Construction and Building Permits
  - Grading, Grubbing and Stockpiling Permits

- Utility Connection Permits
- Sewer Connection Application
- Industrial Wastewater Discharge Permit

• Department of Water Supply

- Construction/Connection Permit

Consultation with the County of Hawai'i Planning Department is on-going and this list may change.

2.6. CONSULTED PARTIES

County of Hawai'i

- Planning Department
- Department of Public Works
- Department of Water Supply
- Hawai'i Fire Department
- Planning Department

Other

- Hawai'i Electric Light Company

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

3.1. CLIMATE

Existing Condition

The island of Hawai'i's subtropical location and topography are the primary influences on local climate. In general, prevailing east and east-northeasterly trade winds occur approximately 70 percent of the year with higher percentages in the summer months than winter. This results in light and variable wind conditions. The climate in the area is warm and temperate with temperatures ranging between 50 degrees Fahrenheit and 90 degrees Fahrenheit. The area also receives a significant amount of rain with a mean annual rainfall amount of approximately 60 inches.

Potential Impacts and Mitigative Measures

The proposed STEM buildings are to be single-story with open garden areas. The ground preparation for the new facility, driveway, walkway, and utilities will involve removing existing overgrown vegetation, but new landscaping will be installed. The proposed faculty center will involve only interior renovation. As such, no significant impacts to local temperature, rainfall, or wind patterns are anticipated for either the short-term or long-term. No mitigation measures are proposed.

3.2. TOPOGRAPHY AND SOILS

Existing Condition

The Subject Property consists of rolling terrain that slopes down toward the north and northeast at roughly 6 to 10 degree slopes, according to the drainage study completed for this project. The proposed project area for the new STEM buildings is in the northern edge of the property, and construction would be occurring around the 500-foot elevation level.

Soils information for the project area was obtained from a soil survey prepared by the U.S. Department of Agriculture, September 2014[2]. According to the survey, the soil association for the property is Kohala silty clay. The new STEM facility would occur mostly on Kohala silty clay, 0 to 3% slopes. See Figure 3.

The Kohala silty clay soil type is weathered basic volcanic ash over weathered basalt. It is a well-drained soil with low run-off and infrequent ponding or flooding. This soil was used for irrigated sugarcane cultivation.

Potential Impacts and Mitigative Measures

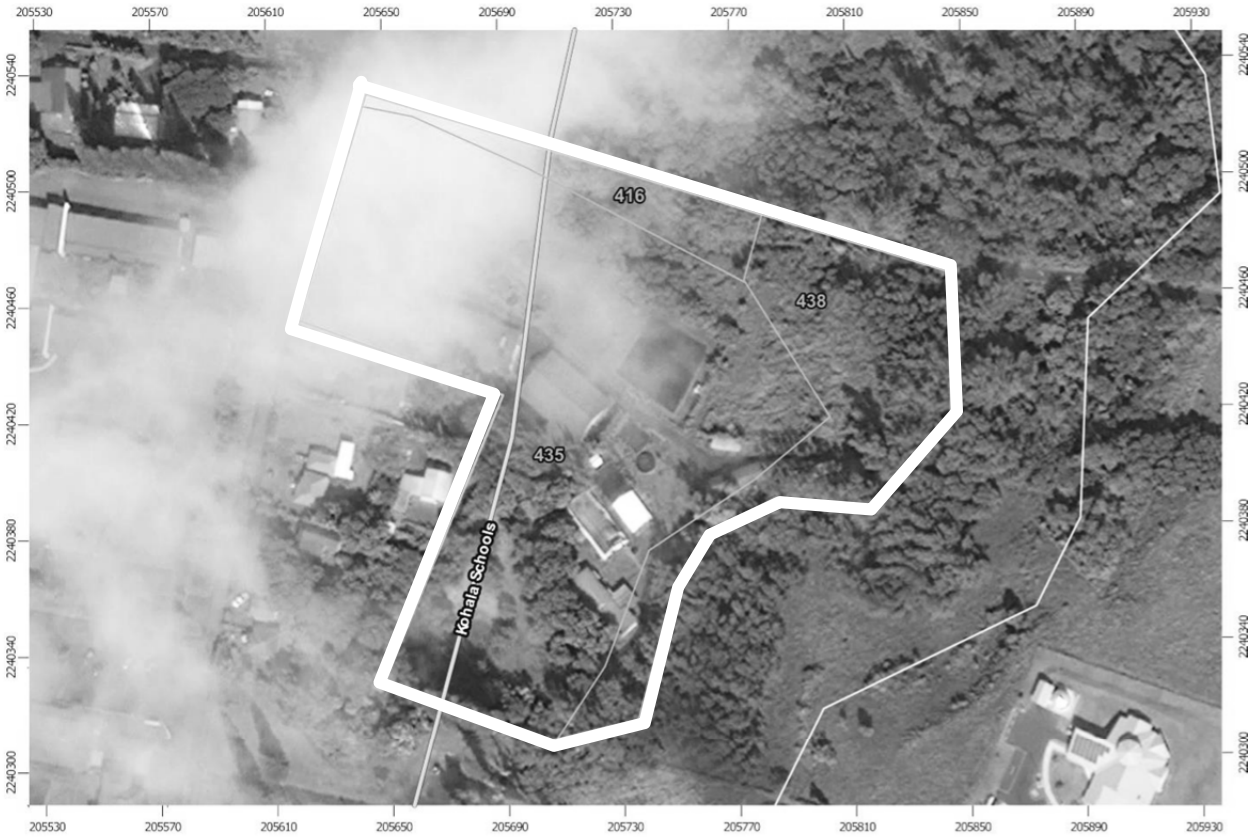
The proposed project will involve grading and site preparation for the new structures, lanai, driveway, walkway, utilities, bioswales, and drainage basins, which will cause minor changes in topography. However, the soil type will remain unchanged and erosion will be controlled. The proposed faculty center will not involve any change to topography or soils since it is an interior renovation.

Short-term construction related impacts associated with the proposed STEM buildings 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 and grading work will be done in accordance with Revised Ordinances of Honolulu (ROH) Chapter 14, Articles 13-16 as related to Grading, Soil Erosion and Sediment Control.

Permanent erosion control measures including planting, hardscape, bioswales, and runoff detention basins will be used once construction of the proposed STEM buildings is completed.

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

Soil Map—Island of Hawaii Area, Hawaii



Map Unit Legend

Island of Hawaii Area, Hawaii (HI801)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
416	Kohala silty clay, 3 to 12 percent slopes	0.4	5.8%
435	Kohala silty clay, 0 to 3 percent slopes	4.9	71.7%
438	Kohala silty clay, 35 to 70 percent slopes	1.5	22.4%
Totals for Area of Interest		**6.8**	**100.0%**

USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

Figure 3: Soil Survey

3.3. HYDROLOGY

Existing Condition

The Subject Property is situated at the top of Kapua Gulch on its east side and bordered by a drainage ditch that runs along Paro Drive at the northern property edge. Currently, surface runoff sheet flows downslope in a northerly direction toward the drainage ditch, or easterly direction toward Kapua Gulch, or becomes absorbed into the ground.

Potential Impacts and Mitigative Measures

Over the long-term, the construction of the new facility and appurtenances will increase the amount of impervious surface on the property, but installation of new bioswales, rain gardens, and detention areas within the landscaping will mitigate this effect by storing any increase in water runoff. The drainage study completed for this project estimated that the new built areas will increase runoff volume by about 1.92 cubic feet per second (cfs), but because of mitigation measures, there will be no increase to the existing runoff volume of 1.72 cfs. The proposed improvements will have negligible impact on surface or groundwater resources and negligible drainage impact to the school.

BMPs for construction activities to mitigate short-term construction-related impacts will include silt fences, dust fences, and stabilized construction vehicle access ways. BMPs will be followed during construction to minimize soil erosion and runoff.

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 entire State of Hawai'i as being in attainment of the federal standards.

Occasional volcanic emissions of sulfur dioxide fom Kilauea volcano may affect the air quality in North Kohala, but such condition is infrequent and generally not long-lasting.

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 low, due to the mostly rural and undeveloped nature of the surrounding area. The primary source of noise near the project area is likely associated with school activities and occasional vehicular traffic along Honomakau Road and Paro Drive.

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 and around the new STEM buildings, and to a much lesser degree, in the new faculty center. However, noise generation in general will be limited to school days and between the hours of 7:30 am and 4:30 pm.

3.6. FLOOD HAZARD

Existing Condition

According to the project civil engineers, Kohala High School is in Flood Zone X, outside the flood prone areas, as determined by the Federal Emergency Management Agency (FEMA). The project site is also outside the tsunami evacuation area.

Potential Impacts and Mitigative Measures

The campus 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.

3.7. FLORA AND FAUNA

Existing Condition

The Kohala High School campus is located in previously cleared, cultivated and settled area and as such, the natural biota was disturbed long ago. A Final Environmental Assessment completed in 2007 for the Kohala Public Library stated that there were no native plant species in its project area and the only observed fauna were Mynah birds, barred doves, and a grazing cow and calf[3]. The Kohala Public Library is located approximately 600 feet away to the east of the Subject Property and the land was once part of the same sugar plantation as the Subject Property. Similar non-native species would likely be found within the project area. As such, no threatened or endangered species of plants or animals are anticipated within the project area.

Potential Impacts and Mitigative Measures

There will be no significant impact to native flora or fauna or habitats, as the vegetation was altered long ago.

3.8. HISTORICAL, CULTURAL, AND ARCHAEOLOGICAL RESOURCES

Existing Condition

The greater North Kohala region has been inhabited for centuries and was once a place of residence for Native Hawaiian chiefs and rulers, including Kamehameha I. Christian missionaries then entered the area, building homes, churches and schools, followed by agribusinessmen, who established sugar plantations that eventually proliferated.

According to an account in the year 1880 by George Browser, "North Kohala is a district very rich in sugar plantations…There are six sugar plantations in the neighborhood of Halawa, which is a village on the east coast of the North Kohala District…" In addition, "There are in the North Kohala District eight Government schools for natives…In this district are to be seen the ruins of ancient native buildings,

[3] Gerald Park Urban Planner and CDS International, p.14

which give evidence of the numerous population, of former times, and of the extent to which they had carried the useful arts." (Memories of Hawai'i Big Island, 18) One of the mentioned government schools became the Kohala High School of today.

The Subject Property once belonged to the Kohala Sugar Company and was not part of the original school campus, but was transferred to the Kohala High and Grammar School in 1948[4]. As such, the land was likely cultivated before school structures were built. A recent walking survey of the site by the project architects and engineers revealed no surface structures unrelated to the school use. In addition, archaeological monitoring work done in 2009 on the Subject Property in an area north of the existing driveway and Buildings F, G, and H, and about 100 feet away from the project area, found no historic or cultural materials.[5]

There are no known cultural or subsistence gathering places to which the Subject Property must be travelled en route. Although the original school grounds may be historically notable, the subject property itself was not part of the original campus area.

Potential Impacts and Mitigative Measures

Construction of the proposed STEM buildings, utility connections, and access improvements will involve ground disturbance in the form of grading and excavation. 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. Renovation of the existing science classroom to create a new faculty center will not involve any expansion of the existing Building D or any ground work. No mitigation is proposed for the new faculty center.

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[4] Territory of Hawai'i Executive Order 1281, signed 1948.

[5] Wilkinson, Sarah, Aulii Mitchell, and Hallett H. Hammatt, Final Archaeological Monitoring Report for the Kohala Elementary and High Schools, August 2009.

The proposed project and school 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

Kohala 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 County of Hawai'i *General Plan* and *North Kohala Community Development Plan* both identify the views of the Kohala mountains and the views of the green grazing lands and panoramic vistas of the coastline from Akoni Pule Highway and Kohala Mountain Road as important.

Potential Impacts and Mitigative Measures

The proposed project, over the short-term and long-term, will not significantly alter the views of the coastline from Akoni Pule Highway or Kohala Mountain Road. The proposed STEM buildings are to be single-story and will be located amongst other single-story structures of the school. The proposed faculty center will not increase the height of existing Building D. Views of the Kohala mountains from Akoni Pule Highway will not be affected since the entire campus is located makai of the highway.

3.11. ROADS AND TRAFFIC

Existing Condition

Kohala High School is accessed by Honomakau Road just off Akoni Pule Highway. Honomakau Road is a two-lane collector road that runs north-south. Akoni Pule Highway is a two-lane arterial that runs east-west and links North Kohala to South Kohala and Kawaihae.

According to the Final Environmental Assessment for the Kohala Public Library, traffic on Akoni Pule Highway is relatively light[6]. Vehicle counts taken on two days in May 2006 showed daily traffic volumes at 6,845 for day 1 and 6,731 for day 2. During peak morning hour, the number of vehicles were 566 and 518. During the peak afternoon hour, the numbers of vehicles were 647 and 572. Peak afternoon hour was defined as 3:30 to 4:30 PM[7]. It is uncertain how this compared to the afterschool hour of 2:00 to 3:00 PM.

Public transportation in the form of Hele-On bus system is provided along Akoni Pule Highway. Two routes connect North Kohala with South Kohala resorts and with Waimea and Kailua-Kona.

Potential Impacts and Mitigative Measures

The project components will have short-term construction impacts on local traffic, but since the proposed STEM classrooms and faculty center replace an undersized, sub-standard science classroom and faculty area, and they do not increase 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

[6] Gerald Park Urban Planner and CDS International, p. 25
[7] Ibid., p. 19

transit (Hele-On Bus) that travels 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 and school peak traffic hours.

3.12. UTILITIES

Wastewater

Existing Condition

According to the project engineer, there are no County sewer lines in the vicinity of Kohala High School. Wastewater is disposed by individual wastewater systems in the form of septic tanks and seepage pits. The existing wastewater system is at capacity.

Potential Impacts and Mitigative Measures

The new STEM buildings are estimated to relocate 5 staff members and 60 students to the Subject Property. Based on these numbers, an estimated increase in wastewater generation by 300 gpd will need to be addressed. The project proposes to add another individual wastewater system to handle the increase. The individual wastewater system is proposed to be located between the new facility and Paro Drive. 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.

The new faculty center is not expected to increase wastewater generation for Building D. No mitigation is proposed.

Water

Existing Condition

The Subject Property is serviced by a 6-inch County water main within Honomakau Road and a private 2-inch water line south of existing Buildings F and G. There are two fire hydrants roughly 350 to 450 feet away.

Potential Impacts and Mitigative Measures

The existing water supply is adequate to serve the projected needs of the new buildings. For fire-fighting purposes, however, it is uncertain if the water pressure is adequate to provide the required 2,000 gallons per minute for County of Hawai'i Fire Department (HFD) fire protection. This condition may be mitigated by providing each new structure with internal fire sprinklers. The proposed project is being reviewed by the HFD and will meet their requirements for fire protection.

Electrical

Existing Condition

Electrical power for Kohala High School is currently provided by Hawaiian Electric Light Company (HELCO).

Potential Impacts and Mitigative Measures

The existing HELCO services should have sufficient capacity to handle the additional load proposed by the project. A new minimum 150 kilowatt transformer will be installed. No other mitigation is required.

3.13. PUBLIC SERVICES

Existing Condition

Kohala High School is served by the Hawai'i Police Department and the Hawai'i Fire Department. The nearest fire station is the North Kohala Fire Station No. 15.

Potential Impacts and Mitigative Measures

The proposed project will improve public service in the form of public education. It will not significantly increase the demand on other public services, including law enforcement, fire protection, refuse collection, and medical and recreation facilities. As such, no mitigation is proposed.

3.14. SOCIO-ECONOMIC CHARACTERISTICS

Existing Condition

The Hawai'i Department of Education's (DOE) data for the school year 2013-2014[8] shows that the population of the community that is served by Kohala High School is 6,276 persons. The number of family households in the area is 1,589. Enrollment for the 2013-2014 school year was 276 students. In that same school year, Kohala High School was awarded Bronze medal status in the U.S. News and World report of the best high schools in the nation. The graduating class of 2014 consisted of 62 students and the school had a 92 percent graduation rate.

The latest available data for Kohala's student population shows the highest percentage of students by ethnicity group is 38.3 percent. This represents the Native Hawaiian ethnicity. This is followed by the Filipino ethnic group at 28 percent and White at 13.3 percent. All other ethnic groups present each represent less than 10 percent of the student population and zero percent were reported as mixed - two or more ethnicities. See following chart. This is in contrast to the ethnic breakdown shown by U.S. Census 2010 census tract data. For the Kohala census tract, the largest ethnic group reported was White at 33.3 percent, followed by Asian at 20.2 percent, and Native Hawaiian/Pacific Islander at 9.4 percent.

[8] State of Hawai'i Department of Education, Accountability Section, Assessment and Accountability Branch, Office of Strategy, Innovation and Performance. School Status and Improvement Report: Kohala High School, School Year 2013-2014. Honolulu, HI. January 9, 2015.
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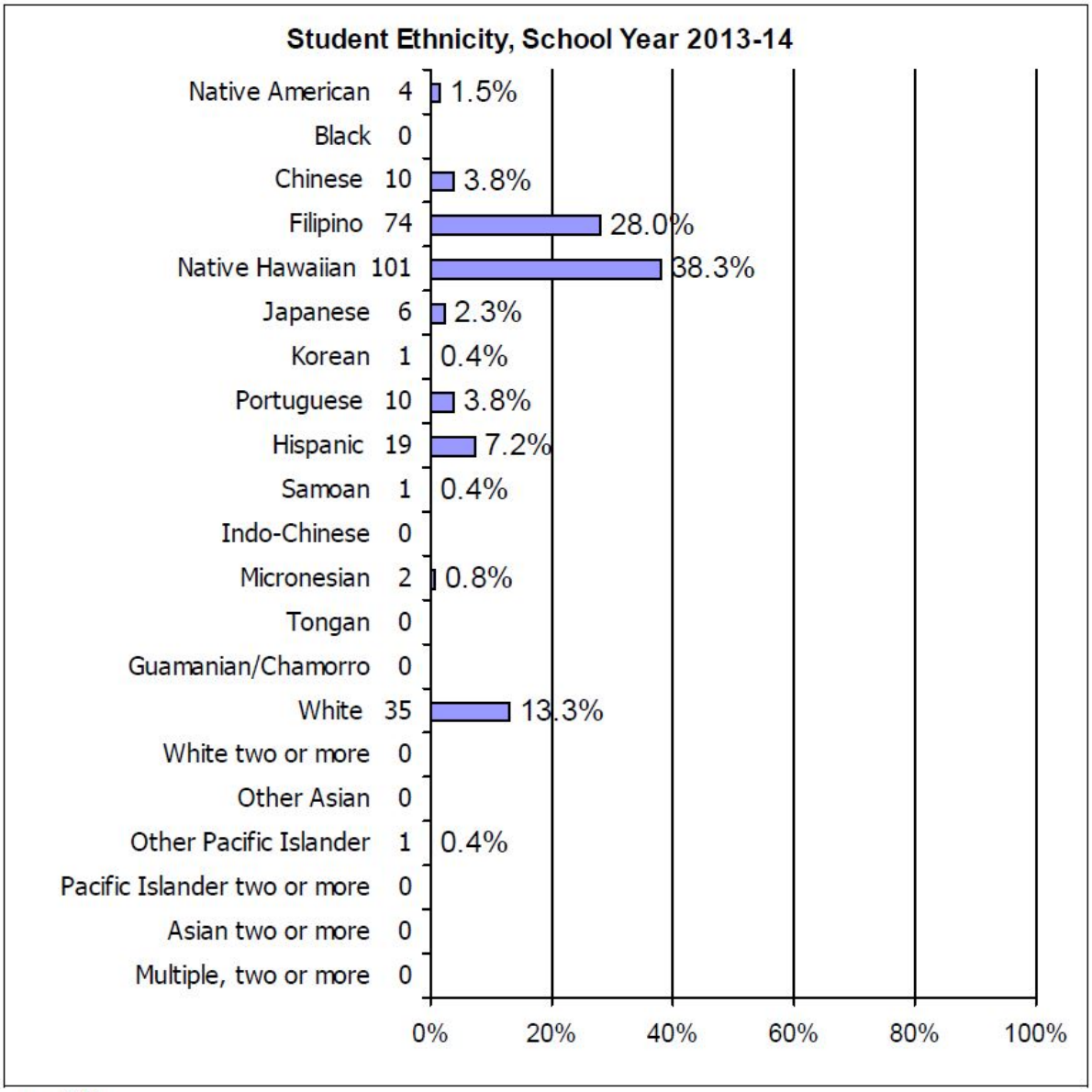


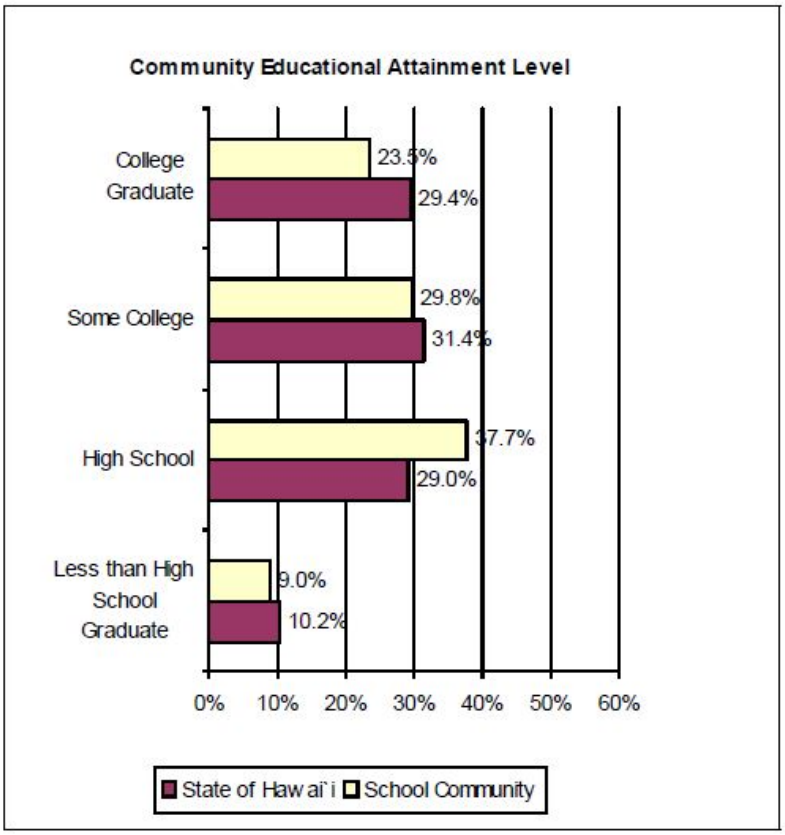
n = 264

Source: State of Hawai'i Department of Education

The DOE data shows that the population of the Kohala community has a higher median age of 43.6 years than the entire state's median age of 38.6 years, and median household income of $53,360 is lower than the state's median of $66,420.

Based on the 2010 U.S. Census

Kohala HSC Complex	School Community	State of Hawai`i
Total population	6,276	1,360,301
Percentage of population aged 5-19	18.4%	18.4%
Median age of population	43.6	38.6
Number of family households	1,589	313,907
Median household income	$53,360	$66,420



Source: State of Hawai'i Department of Education

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 science, technology, engineering, and mathematics programs, renewing pride in the school, improving faculty morale, and attracting community investment into the aging school. While the new facilities may lead to a stronger STEM program and may attract new students who are already living in the area, but attending a private school, no significant change to enrollment is expected.

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 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 HAWAI'I

Hawai'i State Plan

The Hawai'i 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 Hawai'i 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 STEM classroom buildings will help achieve the objectives and policies above, especially policies 2, 5, 7, and 8.

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. Kohala High School is within the Urban district. The Urban district is regulated by the counties. The following sections describe the County of Hawai'i regulations.

4.2. COUNTY OF HAWAI'I

General Plan

The General Plan for the County of Hawai'i is a collection of "long-range goals, policies, standards, and courses of action for the entire County" to steer toward a more desirable future. The General Plan guides the regional plans or Community Development Plans, as well as the County's functional plans and Area Improvement Plans.

The proposed project for construction of STEM buildings and renovations for a new faculty center is consistent with the policies and goals of the County of Hawai'i General Plan, particularly the following:

2.1. Economic

2.3 Policies

(f) Support all levels of educational, employment and training opportunities and institutions.

(i) Continue to encourage the research, development and implementation of advanced technologies and processes.

(j) Support the development of high technology industries.

2.4.5.2 Courses of Action (North Kohala)

(d): Assist in the formulation and implementation of education and manpower training programs to strengthen the overall skill level of the local residents to compete in existing and emerging sustainable and environmentally sound industries and businesses.

3.1. Energy

3.3 Policies

(n) Encourage energy-saving design in the construction of buildings.

7.1. Natural Beauty

7.2 Goals

(b) Protect scenic vistas and view planes from becoming obstructed.

7.5.5. Table 7-9, Natural Beauty Sites, District of North Kohala

- Coastline viewplane from Akoni-Pule Highway
- Coastline viewplane from Kohala Mountain Road

8.1. Natural Resources and Shoreline

8.2 Goals

(b) Provide opportunities for recreational, economic, and educational needs without despoiling or endangering natural resources.

(f) Ensure that alterations to existing land forms, vegetation, and construction of structures cause minimum adverse effect to water resources, and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation, or failure in the event of an earthquake.

10.1. Public Facilities

10.2 Education

10.2.2 Policies

(d) Encourage implementation of the Department of Education's 'Educational Specifications and Standards for Facilities'.

10.2.4.4.2 Courses of Action (North Kohala)

(a): Encourage the expansion of the public school and library facilities as needs arise.

(c): Encourage continual improvements to existing educational facilities.

The proposed project complies with the policies and goals of the General Plan by strengthening the science, technology, engineering, and mathematics (STEM) educational programs in public education. Students of Kohala High School will gain skills for possible employment and research advancement. Teachers of Kohala High School will also gain skills in class and lab instruction. STEM knowledge and teaching will strengthen the overall skill level of local residents to allow them to compete in existing and emerging sustainable and environmentally sound industries and businesses. The proposed faculty center is also an improvement on the overall public educational facility.

The designs and construction of the STEM buildings and renovation for the faculty center will meet high aesthetic and functional standards as per the Department of Education's Educational Specifications and Standards (ESPECS) for high school science and general classrooms and Facilities Assessment and Development Schedule (FADS). The designs also incorporates energy efficiency measures to meet requirements to be fully sustainable and qualify for HI-CHPS Verified Certification (see Section 2.3).

The single-story STEM buildings will not compromise the area's natural beauty, will not obstruct important views as identified in the General Plan, will not endanger natural resources, or pose environmental hazards.

North Kohala Community Development Plan

The County of Hawai'i's Community Development Plans (CDPs) further refine the General Plan policies for the each of the nine districts of the County of Hawai'i. The proposed project is consistent with the following North Kohala CDP priority issues and goals, and action program:

3.1 Priority Issues & Goals

- **Infrastructure and Community Facilities:** to update Kohala's infrastructure systems that are aging or in disrepair, and provide infrastructure, community facilities, and services that adequately serve the community on an on-going basis, and especially in times of emergency.

4.4 Infrastructure & Public Facilities

GOAL: revamp, repair, and/or replace aging or damaged infrastructure; improve emergency preparedness; prioritize and implement future improvements to public facilities and services; and develop and implement rural infrastructure standards

4.12c: Support Enhancement of Educational Facilities and Programs for the District

Background: Supporting improvements to educational facilities and programs continues to stand as a top priority of the community. With the exception of Private, Charter and on-line facilities, education in Kohala has been the charge of the State of Hawai`i's Department of Education. Nonetheless, the CDP recognizes the need for Hawai`i County to join in supporting enhancement of educational opportunities for all Kohala's students regardless of age. To that end, the CDP recommends that, at a minimum, any land use applications for expansion or creation of educational facilities in the North Kohala District be considered favorably as long as the proposal will not adversely impact nearby land owners or significantly diminish Kohala's great natural beauty. For the same reasons and with the same conditions, enhancement of Educational Outreach Programs for the community should also be supported by Hawai`i County whenever feasible.

The proposed project is consistent with the above as it will replace and modernize aged facilities and equipment, as well as improve the overall quality of the school. The proposed project will not adversely impact nearby land owners or significantly diminish the natural beauty of North Kohala.

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, there would be no change to Kohala High School. The students and teachers 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. Current DOE ESPECS will not be met.

5.2. ALTERNATIVES CONSIDERED

Alternative Site 1:

Photo of Alternative Site 1, looking north, Honomakau Road to the right. The alternative path for the future fire lane is between the portable classroom and the pine trees.

Under this alternative, the new STEM classrooms would be constructed on the north end of the main campus, along the west edge of Honomakau Road, where portable classroom P-5 is located. P-5 would be demolished. This site is large and somewhat open, but construction would still require demolition and/or relocation of a portable classroom and an accessible path. In addition, the open area at the northern edge behind P-5 is an alternate path for a future fire access lane. This alternative path would be lost by any new construction. The size and shape of this site would require

the STEM classrooms to be contained in a single two-story building, which would pose challenges for taking advantage of natural ventilation and daylight. Still, a positive aspect of this site location is its potential to serve as a uniting and formal hub between the main campus and the rest of the campus on the other side of Honomakau Road.

Alternative Site 2:

Photo of Alternative Site 2, looking north, Honomakau Road to the right. Administration Building J is to the left and Building S is in the center.

Under this alternative, the new STEM buildings would be constructed on the main campus, along the west edge of Honomakau Road, next to Building J. This area currently serves as a grassed parking area and is bordered by an existing HELCO utility vault, as well as Honomakau Road and Administration Building J. The configuration of this site would result in a rectangular classroom building that is two-stories tall. This site is favorable due to its potential to connect and extend the pedestrian circulation and it is located near the main parking lot. However, this site is less than desirable because it would result in a loss of parking, it would block views and ventilation for the Administration Building J, there are overhead utility lines in the area, and existing trees would need to be removed.

Alternative Site 3:

Photo of Alternative Site 3, looking west toward Honomakau Road.

Under alternative site 3, the new STEM buildings would be constructed on the east edge of Honomakau Road, at the corner of Honomakau Road and Paro Drive. This alternative has the least constraints, but is apart from the main campus and is not flat. This site could be seen as undesirable because of its distance from the other classrooms of the main campus. However, another view is that the proximity of this site to the agriculture classrooms on the same parcel creates an opportunity to relate STEM education to agricultural science. This relationship recognizes the school's agricultural history and context. This alternative is the largest site, is most flexible for building layout and design, would not force a two-story building design, and can maximize use of natural ventilation and daylight. Construction on this site may still require relocation of an accessible path and may be more costly than on the other alternative sites.

5.3. PREFERRED ALTERNATIVE

The preferred alternative is alternative site 3. This site has the least constraints and would not require loss of an existing classroom or existing parking. The topography is not as desirable and utilities would need to be installed, but site 3 is mainly vacant and unused.

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. Due to the area's history, there is a possibility of encountering sub-surface archaeological resources during the construction of the project, but should that occur, all work will be stopped and following action will be in consultation and 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 school campus is already reserved for school use and partially developed. The underlying Urban land use classification and RS-15 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 science and mathematics education, which in turn can help prepare students for employment in those fields. Positive effects on the community are anticipated with the upgrading of the existing public facility and provision of better opportunities for learning, experimentation, and team building, but the project is still quite limited in scale.

5. Substantially affects public health.

The proposed project will not substantially affect public health. Construction of the new STEM buildings, 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. Renovation of the existing science classroom to create a faculty center is expected to impact air quality and ambient noise levels to an even lesser degree.

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 Kohala High School campus. The modernizing of the science facilities are means to provide a better education for the students and renew school and community pride. Substantial secondary impact on resident population is not expected since the surrounding communities are limited in density and the area is fairly remote. 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 facility and improvements are for the Kohala High School campus only.

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 or main campus. The project area and vicinity have been cleared and the vegetation has been altered.

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

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 County of Hawai'i 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.

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 or campus are not in an environmentally sensitive area. The campus is not along the coastline or within a Special Management Area. It is outside of flood prone and tsunami inundation areas.

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

As discussed in the previous Section 3.10, the proposed project will not significantly alter the views of the coastline from Akoni Pule Highway or Kohala Mountain Road. The proposed STEM buildings are to be single-story and they will be located amongst other single-story structures of the school. Views of the Kohala mountains from Akoni Pule Highway will not be affected since the campus is located makai of the highway.

13. Requires substantial energy consumption.

The new faculty center or STEM buildings will not require substantial energy consumption. The new STEM buildings will incorporate energy conservation measures to be fully sustainable and qualify for HI-CHPS Verified Certification (see Section 2.3 for definition). The energy efficient strategies that will be applied will include:

- mixed-mode ventilation
- optimized energy performance
- systems commissioning (optimal integrated HVAC systems performance)
- measurement and verification of performance
- daylighting and line-of-sight to view (minimize need for electical lighting)
- innovation in design

7. CONSULTATION

7.1. EARLY CONSULTATION

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

County of Hawai'i

Fire Department
Planning Department
Department of Public Works
Department of Water Supply

Other
Hawai'i Electric Light Co.

References

Memories of Hawaiʻi – Big Island. 2011. *Island of Hawaiʻi – the Big Island in 1880*. Hilo: Memories of Hawaiʻi – Big Island, LLC.

Park, Gerald and CDS International. October 2007. *Kohala Public Library: Final Environmental Assessment, Finding of No Significant Impact*.

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

Schweitzer, Sophia V. with Michael Gomes. 2003. Kohala Aina: A History of North Kohala. Honolulu: Mutual Publishing.

State of Hawaiʻi Department of Education, Accountability Section, Assessment and Accountability Branch, Office of Strategy, Innovation and Performance. *School Status and Improvement Report: Kohala High School, School Year 2013-2014*. Honolulu, HI. January 9, 2015.

Territory of Hawaiʻi, *Executive Order 1281*, signed 1948.

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

Wilkinson, Sarah, Aulii Mitchell, and Hallett H. Hammatt. Cultural Surveys Hawaiʻi, Inc. August 2009. *Final Archaeological Monitoring Report for the Kohala Elementary and High Schools, Hawaiʻi Inter-Island DOE Cesspool Project, Honomakaʻu Ahupuaʻa, District of North Kohala, Island of Hawaiʻi*.

APPENDIX

Comments to the Draft EA

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

In reply, please refer to:
File:

EPO 15-266

November 2, 2015

Ms. Lisa Leonillo Imata
PlanPacific, Inc.
P.O. Box 892735
Mililani, Hawaii 96789

Dear Ms. Leonillo Imata:

SUBJECT: Draft Environmental Assessment (DEA) for Kohala High School – New STEM Science Buildings
TMK: (3) 5-4-008:021 and (3) 5-4-007:014

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your DEA to our office via the OEQC link: http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Hawaii/2010s/2015-10-23-HA-5B-DEA-Kohala-High-School-New-STEM-Science-Buildings.pdf

EPO strongly recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: http://health.hawaii.gov/epo/landuse. Projects are required to adhere to all applicable standard comments.

We suggest you review the requirements for the National Pollutant Discharge Elimination System (NPDES) permit. We recommend contacting the Clean Water Branch at (808) 586-4309 or cleanwaterbranch@doh.hawaii.gov after relevant information is reviewed at:

1. http://health.hawaii.gov/cwb
2. http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/standard-npdes-permit-conditions
3. http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/forms

Please note that all wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems". We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. Should you have any questions, please review online guidance at: http://health.hawaii.gov/wastewater and contact the Planning and Design Section of the Wastewater Branch at 586-4294.

EPO encourages you to examine and utilize the Hawaii Environmental Health Portal. The portal provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings. The Portal is continually updated. Please visit it regularly at: https://eha-cloud.doh.hawaii.gov

You may also wish to review the draft OEQC viewer at: http://eha-web.doh.hawaii.gov/oeqc-viewer/ This viewer geographically shows where previous Chapter 343 documents have been prepared.

In order to better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed a new environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you to explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www2.epa.gov/ejscreen

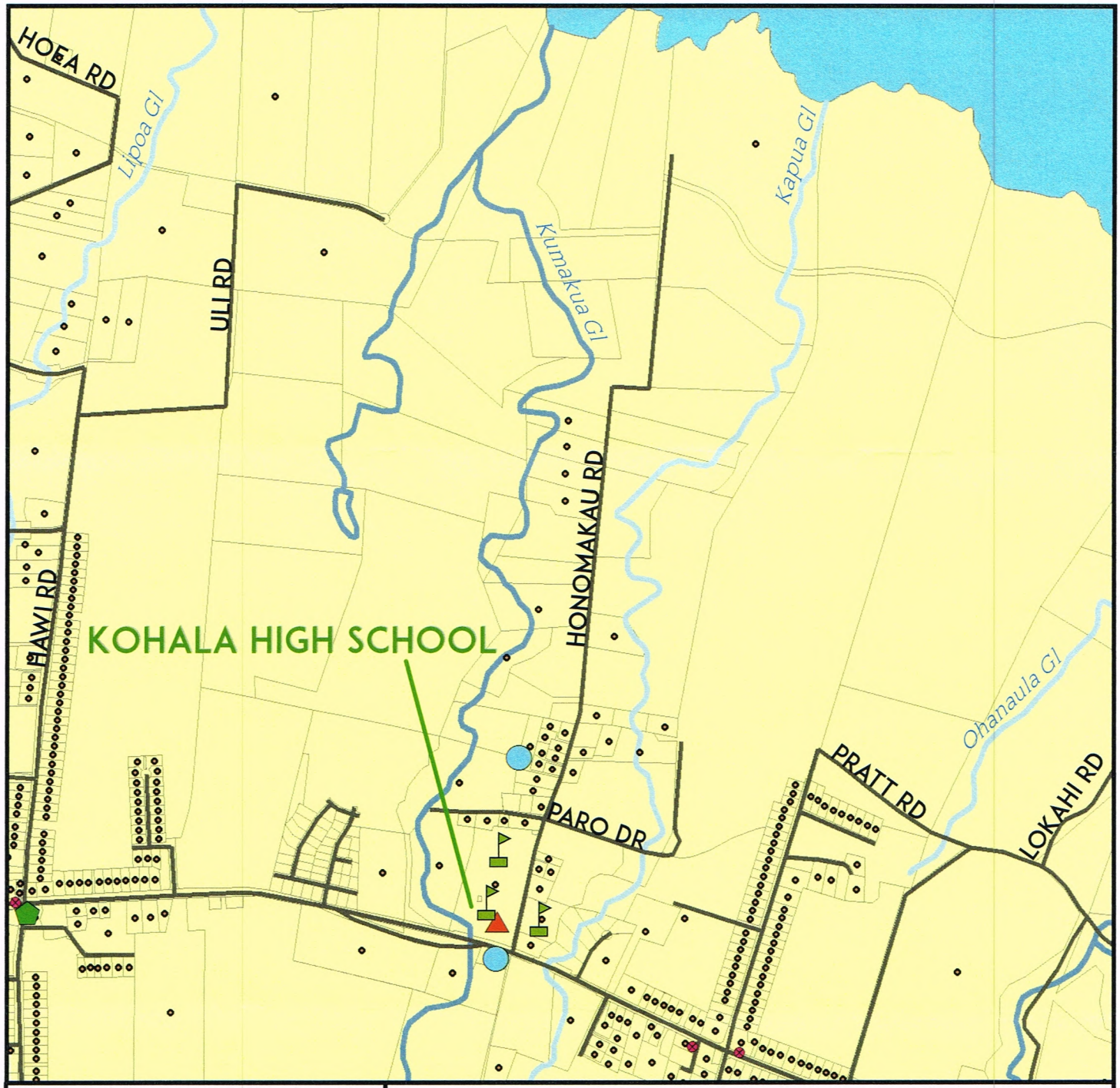
We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design.

Mahalo nui loa,

Laura Leialoha Phillips McIntyre, AICP
Program Manager, Environmental Planning Office

Attachment 1: EPO Environmental Information Map
Attachment 2: OEQC Viewer Map
Attachment 3: U.S. EPA EJSCREEN 3 page report

c: Arnold Fukunaga, Department of Education, Facilities Development Branch
DOH: DHO Hawaii & CWB {via email only)



HAWAII STATE DEPARTMENT OF HEALTH

Kohala High School Environmental Information

- NPDES Permit
- HWM -- Small Quantity Generator
- Underground Storage Tank
- Multiple Permits
- Schools
- Cesspools
- State TMK
- Sugarcane 1900-1937

Environmental Interests data obtained from the Environmental Health Warehouse (http://eha-web.doh.hawaii.gov/ehw)

DOH-EPO NO.: 15-266

Prepared by: Department of Health (DOH)

This map is intended for illustrative purposes only.

Date Prepared: 11/2/2015

hawaii.gov Stay Connected

OEQC Viewer

Kohala High School

5 sites found

Results | Filter

Map Location

Kohala High School, 54-3611 Akoni Pule Hwy, Kapaau, HI 96755, USA

Show sites with no location

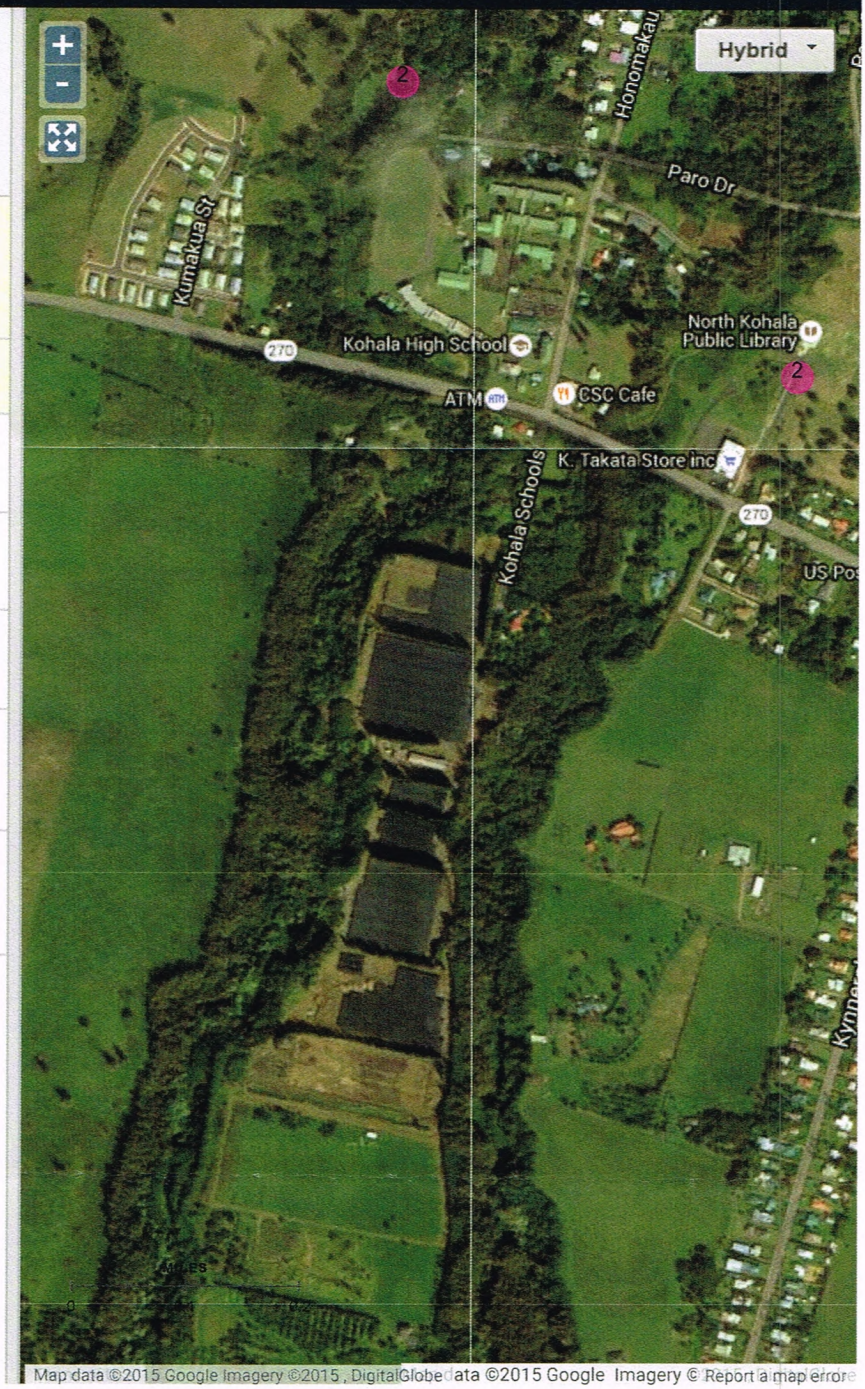
Kohala Public Library (FEA-FONSI)
Environmental Assessment (Agency)

Kohala Public Library (FEA-FONSI)
Environmental Assessment (Agency)

Ainakea Senior Residences (FEA-FONSI)
Environmental Assessment (Applicant)

KUMAKUA AFFORDABLE HOUSING (DEA-AFNSI)
Environmental Assessment (Applicant)

KUMAKUA AFFORDABLE HOUSING (DEA-AFNSI)
Environmental Assessment (Applicant)



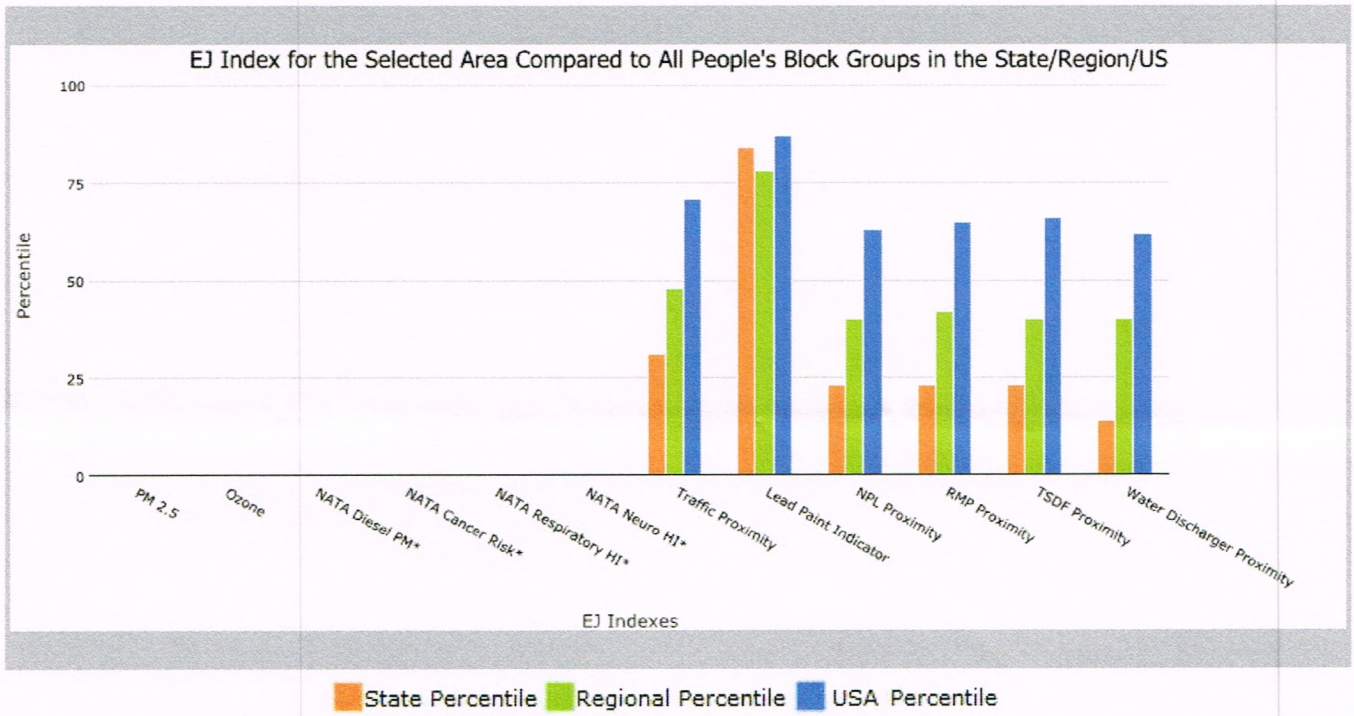
EJSCREEN Report

for 1.5 mile Ring Centered at 20.236954,-155.818165, HAWAII, EPA Region 9

Approximate Population: 2683

Kohala High School

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA Diesel PM*	N/A	N/A	N/A
EJ Index for NATA Air Toxics Cancer Risk*	N/A	N/A	N/A
EJ Index for NATA Respiratory Hazard Index*	N/A	N/A	N/A
EJ Index for NATA Neurological Hazard Index*	N/A	N/A	N/A
EJ Index for Traffic Proximity and Volume	31	48	71
EJ Index for Lead Paint Indicator	84	78	87
EJ Index for Proximity to NPL sites	23	40	63
EJ Index for Proximity to RMP sites	23	42	65
EJ Index for Proximity to TSDFs	23	40	66
EJ Index for Proximity to Major Direct Dischargers	14	40	62



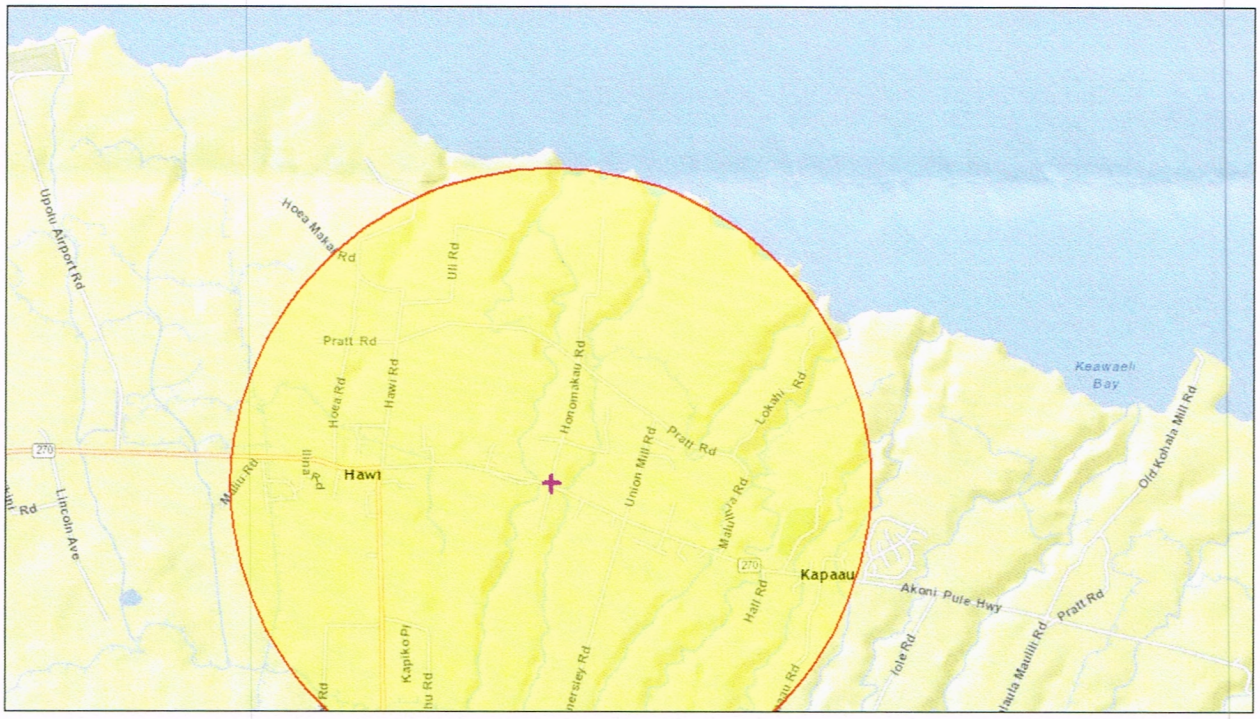
This report shows environmental, demographic, and EJ indicator values. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

EJSCREEN Report

for 1.5 mile Ring Centered at 20.236954,-155.818165, HAWAII, EPA Region 9

Approximate Population: 2683

Kohala High School



November 2, 2015

Digitized Point

Buffer Area

1:36,112

0 0.3 0.6 1.2 mi

0 0.5 1 2 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

EJSCREEN Report

for 1.5 mile Ring Centered at 20.236954,-155.818165, HAWAII, EPA Region 9

Approximate Population: 2683

Kohala High School

Selected Variables	Raw Data	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	N/A	N/A	N/A	9.95	N/A	9.78	N/A
Ozone (ppb)	N/A	N/A	N/A	49.7	N/A	46.1	N/A
NATA Diesel PM (µg/m³)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Cancer Risk (lifetime risk per million)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Respiratory Hazard Index*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Neurological Hazard Index*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Traffic Proximity and Volume (daily traffic count/distance to road)	15	280	18	190	16	110	30
Lead Paint Indicator (% Pre-1960 Housing)	0.4	0.17	84	0.25	71	0.3	68
NPL Proximity (site count/km distance)	0.0036	0.092	13	0.11	0	0.096	0
RMP Proximity (facility count/km distance)	0.024	0.18	4	0.41	2	0.31	3
TSDF Proximity (facility count/km distance)	0.0038	0.092	13	0.12	1	0.054	5
Water Discharger Proximity (facility count/km distance)	0.0097	0.33	1	0.19	0	0.25	0
Demographic Indicators							
Demographic Index	60%	51%	76	46%	70	35%	82
Minority Population	87%	77%	62	57%	79	36%	88
Low Income Population	32%	25%	71	35%	51	34%	53
Linguistically Isolated Population	0%	6%	25	9%	20	5%	45
Population With Less Than High School Education	9%	10%	56	18%	38	14%	43
Population Under 5 years of age	5%	6%	37	7%	33	7%	35
Population over 64 years of age	12%	14%	42	12%	62	13%	52

* The National-scale Air Toxics Assessment (NATA) environmental indicators and EJ indexes, which include cancer risk, respiratory hazard, neurodevelopment hazard, and diesel particulate matter will be added into EJSCREEN during the first full public update after the soon-to-be-released 2011 dataset is made available. The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: http://www.epa.gov/ttn/atw/natamain/index.html.

For additional information, see: www.epa.gov/environmentaljustice

PLANPACIFIC

December 7, 2015

Laura McIntyre, AICP, Program Manager
Hawai'i Department of Health
Environmental Planning Office
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Ms. McIntyre,

Subject: Draft Environmental Assessment for Kohala High School – New STEM Buildings, North Kohala, Hawaii

Thank you for your comment letter, dated November 2, 2015, referenced as EPO 15-266. We have reviewed the Standard Comments per your recommendation. The comments and responses are as follows:

Clean Air Branch

1. Construction/Demolition Involving Asbestos:
If the proposed project includes renovation/demolition activities which may involve asbestos, the applicant should contact the Asbestos Abatement Office in the Noise, Radiation and Indoor Air Quality Branch at 586-4700.

Response: Should asbestos be discovered in the renovation of the existing science classroom, the DOE or its contractors will contact the Asbestos Abatement Office.

2. Control of Fugitive Dust:
A significant potential for fugitive dust emissions exists during all phases of construction and operations. Proposed activities that occur in proximity to existing residences, businesses, public areas or thoroughfares, exacerbate potential dust problems. It is recommended that a dust control management plan be developed which identifies and addresses all activities that have a potential to generate fugitive dust. The plan, which does not require DOH approval, would help with recognizing and minimizing the dust problems from the proposed project.

95-1030 Meheula Pkwy
#89-2735
Mililani, HI
96789

Tel: (808) 521-9418

Activities must comply with the provisions of Hawaii Administrative Rules, §11-60.1-33 on Fugitive Dust. In addition, for cases involving mixed land use, we strongly recommend that buffer zones be established, wherever possible, in order to alleviate potential nuisance problems.

The contractor should provide adequate measures to control the fugitive dust from the road areas and during the various phases of construction. Examples of measures that can be implemented to control dust include, but are not limited to, the following:

a. Planning the different phases of construction, focusing on minimizing the amount of dust - generating materials and activities, centralizing on-site vehicular traffic routes, and locating potential dust-generating equipment in areas of the least impact;

b. Providing an adequate water source at the site prior to start-up of construction activities;

c. Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;

d. Minimizing dust from shoulders and access roads;

e. Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and

f. Controlling dust from debris being hauled away from the project site.

Response: Construction activities will comply with applicable rules and regulations, including HAR 11-60.1-33 regarding fugitive dust. Measures, such as installation of dust screens, to minimize fugitive dust and lessen impacts to surrounding residences and roadways will be detailed in the construction and engineering plans and utilized.

Clean Water Branch

Permit Issuance

- *Any project and its potential impacts to State waters must meet the State's:*

  1) Antidegradation policy, which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected;

  2) Designated uses, as determined by the classification of the receiving State waters; and

  3) Water quality criteria [Hawaii Administrative Rules (HAR), Chapter 11-54].

- *A Section 401 Water Quality Certification (WQC) is required if your project/activity:*

- *Requires a federal permit, license, certificate, approval, registration, or statutory exemption; and*

- *May result in a discharge into State waters. The term "discharge" is defined in Clean Water Act, Subsections 502(16), 502(12), and 502(6). Examples of "discharge" include, but are not limited to, allowing the following pollutants to enter State waters from the surface or in-water: solid waste, rock/sand/dirt, heat, sewage, construction debris, any underwater work, chemicals, fugitive dust/spray paint, agricultural wastes, biological materials, industrial wastes, concrete/sealant/epoxy, and washing/cleaning effluent. Determine if your project/activity requires a federal permit, license, certificate, approval, registration, or statutory exemption by contacting the appropriate federal agencies (e.g. Department of the Army (DA), U.S. Army Corps of Engineers (COE), Pacific Ocean Division Honolulu District Office (POH) Tel: 808-835-4303; U.S. Environmental Protection Agency Tel: 415-947-8021; Federal Energy Regulatory Commission Tel: 866-208-3372; U.S. Coast Guard Office of Bridge Programs Tel: 202-372-1511).*

To request a Section 401 WQC, you must complete and submit the Section 401 WQC application. This application is available on the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/.

Please see HAR, Chapter 11-54 for the State's Water Quality Standards and for more information on the Section 401 WQC. HAR, Chapter 11-54 is available on the CWB website at: http://health.hawaii.gov/cwb/.

• *National Pollutant Discharge Elimination System (NPDES) permit coverage is required for:*

- *Storm water associated with construction activities for land disturbances of one (1) acre or more. Land disturbance includes, but is not limited to, clearing, grading, grubbing, excavation, demolition, uprooting of vegetation, equipment staging, and storage areas.*

- *Storm water associated with industrial activities for facilities with Standard Industrial Classification Codes regulated in 40 CFR 122.26(b)(14)(i) through (ix) and (xi).*

- *Storm water and certain non-storm water from a small Municipal Separate Storm Sewer System.*

- *Discharges of water pollutants into State surface waters. Examples of these discharges include, but are not limited to, cooling water, hydrotesting waters, dewatering effluent, and process wastewater.*

- *Discharges from the application of pesticides (including insecticides, herbicides, fungicides, rodenticides, and various other substances to control pest) to State waters*

An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge or start of construction activities. To request an

NPDES individual permit, you must complete and submit the NPDES individual permit application. This application is available on the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/.

A Notice of Intent (NOI) for coverage under a specific NPDES general permit must be submitted at least 30 calendar days before the commencement of the discharge or start of construction activities. To request NPDES general permit coverage, you must complete and submit the NOI. The NOI is available on the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/.

Please see HAR, Chapter 11-55 for more information on the NPDES individual permit and NPDES general permits. The specific NPDES general permits are located in HAR, Chapter 11-55, Appendices B through M. HAR, Chapter 11-55 and HAR, Chapter 11-55, Appendices B through M are available on the CWB website at: http://health.hawaii.gov/cwb/.

• According to State law, all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards.

Monitoring

• Effluent discharge and/or receiving water monitoring may be required as conditions of Section 401 Water Quality Certifications and NPDES General and Individual permits.

Enforcement

• Noncompliance with water quality requirements contained in HAR, Chapter 11-54 and/or permitting requirements specified in HAR, Chapter 11-55 may be subject to penalties of $25,000 per day per violation.

• Violations of Hawaii Revised Statutes 342D and 342E may elicit administrative, civil and criminal penalties for such violations.

Polluted Runoff Control

• Manage projects identified in watershed-based plans that reduce polluted runoff and educate the public about nonpoint source pollution. Projects are selected through an annual request for proposals. Funding is provided by the EPA through the Clean Water Act. For more information on projects and funding opportunities, please visit: www.hawaii.gov/doh/pollutedrunoffcontrol.

Response: The project will comply with the applicable rules and regulations for the protection of the State's water quality and to comply with the Clean Water Act. All necessary permits will be obtained prior to construction or occupancy.

Hazard Evaluation and Emergency Response Office

1. A Phase I Environmental Site Assessment (ESA) should be conducted for developments or redevelopments. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and or groundwater sampling plan. If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan.

Site Assessment and Cleanup Programs
http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/site-assessment-and-cleanup-programs

Response: A Phase I Environmental Site Assessment (ESA) was conducted for the subject site in August 2015. There were two Recognized Environmental Conditions (RECs) reported. A Phase II ESA may be warranted. The project will comply with chapter 128D, Environmental Response Law, *HRS*, and Title 11, Chapter 451, *HAR*, State Contingency Plan.

2. All lands formerly in the production of sugarcane should be characterized for arsenic contamination. If arsenic is detected above the US EPA levels (preliminary remediation goal (PRG) for non-cancer effects, then a removal and or remedial plan must be submitted to the Hazard Evaluation and Emergency Response (HEER) Office of the State Department of Health for approval. The plan must comply with Chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan.

Arsenic in Hawaiian Soils: Questions and Answers on Health Concerns Fact Sheet (Revised 04/01/13)
http://eha-web.doh.hawaii.gov/eha-cma/documents/89351510-99d5-4c01-99fc-ca1b331f6214

Response: The subject property was formerly in the production of sugarcane. The project will comply with Chapter 128D, Environmental Response Law, *HRS*, and Title 11, Chapter 451, *HAR*, State Contingency Plan.

3.If the land has a history of previous releases of petroleum, hazardous substances, pollutants, or contaminants, we recommend that the applicant request a "no further action" (NFA) letter from the Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response (HEER) Office prior to the approval of the land use change or permit approval

Response: The Phase I ESA investigated the history of contaminants associated with the subject property. The Phase I ESA concludes that a Phase II ESA may be warranted because of the sugar plantation association and potential for contaminated soils. Coordination with the DOH/ Hazard Evaluation and Emergency Response (HEER) Office will be requested if found necessary.

Noise, Radiation & Indoor Air Quality Branch

Project activities shall comply with the Administrative Rules of the Department of Health:

- *Chapter 11-39 Air Conditioning and Ventilating.*
- *Chapter 11-45 Radiation Control.*
- *Chapter 11-46 Community Noise Control.*
- *Chapter 11-501 Asbestos Requirements.*
- *Chapter 11-502 Asbestos -Containing Materials in Schools.*
- *Chapter 11-503 Fees for Asbestos Removal and Certification*
- *Chapter 11-504 Asbestos Abatement Certification Program*

Should there be any questions, please contact Jeffrey Eckerd, Environmental Health Program Manager, Indoor and Radiological Health Branch, at 586-4700.

Response: The project will comply with the above Administrative Rules of the Department of Health.

Safe Drinking Water Branch

The Safe Drinking Water Branch administers programs in the areas of: 1) public water systems; 2) underground injection control; and 3) groundwater protection. Our general comments on projects are as follows.

Public Water Systems

- *Federal and state regulations define a public water system as a system that serves 25 or more individuals at least 60 days per year or has at least 15 service connections. All public water system owners and operators are required to comply with Hawaii Administrative Rules, Title 11, Chapter 20, titled Rules Relating to Public Water Systems.*

- *All new public water systems are required to demonstrate and meet minimum capacity requirements prior to their establishment. This requirement involves demonstration that the system will have satisfactory technical, managerial and financial capacity to enable the system to comply with safe drinking water standards and requirements.*

- *Projects that propose development of new sources of potable water serving or proposed to serve a public water system must comply with the terms of Section 11-20-29 of Chapter 20. This section requires that all new public water system sources be approved by the Director of Health prior to its use. Such approval is based primarily upon the submission of a satisfactory engineering report which addresses the requirements set in Section 11-20-29.*

- *The engineering report must identify all potential sources of contamination and evaluate alternative control measures which could be implemented to reduce or eliminate the potential for contamination, including treatment of the water source. In addition, water quality analyses for all regulated contaminants, performed by a laboratory certified by the*

State Laboratories Division of the State of Hawaii, must be submitted as part of the report to demonstrate compliance with all drinking water standards. Additional parameters may be required by the Director for this submittal or additional tests required upon his or her review of the information submitted.

- *All sources of public water systems must undergo a source water assessment which will delineate a source water protection area. This process is preliminary to the creation of a source water protection plan for that source and activities which will take place to protect the source of drinking water.*

- *Projects proposing to develop new public water systems or proposing substantial modifications to existing public water systems must receive approval by the Director of Health prior to construction of the proposed system or modification. These projects include treatment, storage and distribution systems of public water systems. The approval authority for projects owned and operated by a County Board or Department of Water or Water Supply has been delegated to them.*

- *All public water systems must be operated by certified distribution system and water treatment plant operators as defined by Hawaii Administrative Rules, Title 11, Chapter 11-25 titled; Rules Relating to Certification of Public Water System Operators*

- *All projects which propose the use of dual water systems or the use of a non-potable water system in proximity to an existing potable water system to meet irrigation or other needs must be carefully designed and operated to prevent the cross-connection of these systems and prevent the possibility of backflow of water from the non-potable system to the potable system. The two systems must be clearly labeled and physically separated by air gaps or reduced pressure principle backflow prevention devices to avoid contaminating the potable water supply. In addition backflow devices must be tested periodically to assure their proper operation. Further, all non-potable spigots and irrigated areas should be clearly labeled with warning signs to prevent the inadvertent consumption on non-potable water. Compliance with Hawaii Administrative Rules, Title 11, Chapter 11-21 titled; Cross-Connection and Backflow Control is also required.*

- *All projects which propose the establishment of a potentially contaminating activity (as identified in the Hawai`i Source Water Assessment Plan) within the source water protection area of an existing source of water for a public water supply should address this potential and activities that will be implemented to prevent or reduce the potential for contamination of the drinking water source.*

- *For further information concerning the application of capacity, new source approval, operator certification, source water assessment, backflow/cross-connection prevention or other public water system programs, please contact the Safe Drinking Water Branch at 586-4258.*

Underground Injection Control (UIC)

- *Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting under Hawai`i Administrative Rules, Title 11, Chapter 11-23, titled Underground Injection Control (UIC). The Department of Health's approval must be first obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs.*

- *Authorization to use an injection well is granted when a UIC permit is issued to the injection well facility. The UIC permit contains discharge and operation limitations, monitoring and reporting requirements, and other facility management and operational conditions. A complete UIC permit application form is needed to apply for a UIC permit.*

- *A UIC permit can have a valid duration of up to five years. Permit renewal is needed to keep an expiring permit valid for another term.*

For further information about the UIC permit and the Underground Injection Control Program, please contact the UIC staff of the Safe Drinking Water Branch at 586-4258.

Groundwater Protection Program

- *Projects that propose to develop a golf course are asked to use the Guidelines Applicable to Golf Courses in Hawai`i (Version 6) in order to address certain groundwater protection concerns, as well as other environmental concerns.*

Response: The project will comply with the above requirements. No golf course is being proposed.

Solid and Hazardous Waste Branch

The Solid and Hazardous Waste Branch administers programs in the areas of:
1) Management of hazardous waste;
2) Regulation of underground storage tanks; and
3) Management of solid waste.
Our general comments on projects are as follows.

Hazardous Waste Program

The state regulations for hazardous waste are in Chapters 11-260 to 11-280, Hawaii Administrative Rules (HAR). These rules apply to the identification, handling, transportation, storage and disposal of regulated hazardous waste. Generators, transporters and treatment, storage and disposal facilities of hazardous waste must adhere to these requirements or be subject to fines and penalties.

Response: The project will comply with Chapters 11-260 to 11-280, Hawaii Administrative Rules (HAR), regarding hazardous waste.

Solid Waste Section

The Solid Waste Section (SWS) enforces laws and regulations contained in Hawaii Revised Statutes (HRS) Chapters 342H and 342I; and Hawaii Administrative Rules, Title 11, Chapter 58.1 "Solid Waste Management Control".

The purpose of the rules is to establish minimum standards governing the design, construction, installation, operation, and maintenance of solid waste disposal, recycling, reclamation and transfer systems.

All facilities that accept solid wastes are required to obtain a solid waste management permit from the SWS. Examples of the types of facilities governed by these regulations include landfills, transfer stations and convenience centers, recycling facilities, composting facilities, salvage facilities. Medical waste, infectious waste and foreign waste treatment facilities are also included.

Generators of solid waste are required to ensure that their wastes are properly delivered to permitted solid waste management facilities. Managers of construction and demolition projects should require their waste contractors to submit disposal receipts and invoices to ensure proper disposal of wastes.

Response: The project will not create a solid waste facility. Should the project generate solid waste, activities for disposal will comply with the laws and regulations in *HRS Chapters 342H and 342I; and HAR, Title 11, Chapter 58.1 "Solid Waste Management Control".*

Office of Solid Waste Management

The Office of Solid Waste Management administers integrated solid waste management planning requirements, which apply to the counties, as well as the Glass Advance Disposal Fee (ADF) and Deposit Beverage Container (DBC) Programs. Management of the DBC Program is conducted pursuant to HRS Chapter 342G, which contains compliance and enforcement provisions, and HAR Title 11, Chapter 232 "Deposit Beverage Recycling." OSWM is also responsible for limited enforcement and compliance of solid waste management facilities that operate primarily as certified DBC redemption centers pursuant to HRS Chapter 342H and HAR Title 11, Chapter 58.1, entitled: "Solid Waste Management Control." Authority for the integrated solid waste management planning and ADF programs is contained in HRS Chapter 342G.

Glass Advance Disposal Fee Program: Businesses that manufacture, or import glass containers into Hawaii are required to register with the Department of Health and pay a 1.5-cent per container fee. Fee revenue is distributed to the counties for the operation of glass recycling programs.

Deposit Beverage Container Program: Business that manufacture, or import, deposit beverage containers into Hawaii are required to register with the Department of Health and pay the five-cent deposit and one-cent container fee on each deposit container. Deposits and fees are

deposited into a special fund and are used to reimburse DBC redemption center refunds paid to consumers; and to pay handling fees to redemption/recycling companies to process and recycle collected deposit beverage containers; and to pay program administrative costs.

The Department of Health reimburses and pays an associated handling fee for the redemption of legitimate deposit beverage containers (DBC). These transactions are conducted only with certified redemption centers. Certification requires obtaining a solid waste management permit from the SWS (which addresses environmental issues) and a certification from the DBC program (which addresses business issues).

HRS Chapter 342G encourages the reduction of waste generation, reuse of discarded materials, and the recycling of solid waste. Businesses, property managers and developers, and government entities are highly encouraged to develop solid waste management plans to ensure proper handling of wastes.

Solid waste management plans should also seek to maximize waste diversion and minimize disposal. Such plans should include designated areas to promote the collection of reusable and recyclable materials.

Response: The project will comply with HRS 342G where possible.

Underground Storage Tank

The state regulations on underground storage tanks (USTs), Chapter 11-281, Hawaii Administrative Rules (HAR), became effective on January 28, 2000. The state UST regulations include, among other things, specific requirements that UST owners and operators must meet when installing and permanently closing their UST system and addressing releases from USTs.

A guidance manual entitled "Technical Guidance Manual for Underground Storage Tank Closure and Release Response" (dated March 2000) have been developed to assist responsible parties and their consultants and contractors in complying with the state UST closure requirements and release response activities.

A permit is required prior to the installation and operation of an UST. The UST system that will be installed must have secondary containment. Refer to Subchapter 2-5 of the HAR. The installation permit expires in 1 year from the date of issue. The operation permit expires in 5 years from the date of issue.

The HAR section 11- 281-61 requires owners and operators of USTs or tank systems to notify DOH within twenty-four (24) hours, and follow the procedures in section 11-281-63, for any of the following conditions:

1) *The discovery by any person of evidence of regulated substances which may have been released at the UST or tank system site or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water;*

2) *Unusual UST or tank system operating conditions observed or experienced by owners and operators (such as the erratic behavior of product dispensing equipment, the sudden loss of product from the UST or tank system, or an unexplained presence of water in the tank), unless a component of the UST or tank system is found to be defective but not leaking, and is immediately repaired or replaced; or*

3) *Monitoring results from a release detection method required under section 11-281-51(e) indicate a release may have occurred unless, the monitoring device is found to be defective, and is immediately repaired, calibrated, or replaced, and additional monitoring results do not confirm the initial result.*

For further information about these programs, please contact the Solid and Hazardous Waste Branch at (808) 586-4226.

Response: The Environmental Information map that you sent and the findings of the Phase I ESA show no underground storage tanks at the project site.

Wastewater Branch

Hawai'i Island:

- *The subject project is located in the Non-Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where new cesspools may be allowed with specific criteria.*

- *The subject project is located in the One –Acre Lot Exception Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where new cesspools may be allowed, provided there is at least one-acre of land.*

- *The subject project is located in the Five –Acre Lot Exception Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where new cesspools may be allowed, provided there is at least five-acres of land.*

- *The subject project is located in the Critical Wastewater Disposal Area (CWDA) as determined by the Hawaii County Wastewater Advisory Committee where no new cesspools will be allowed.*

Response: The project will comply with wastewater rules and regulations.

Thank you for your comments. If you have questions or further comments, please contact me at limata@plapacific.com or 521-9418 ext. 1002. Thank you very much.

Sincerely,

Lisa L. Imata
President

DAVID Y. IGE
GOVERNOR OF HAWAII

Scott Glenn
INTERIM DIRECTOR

STATE OF HAWAI'I
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
Department of Health
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813
Telephone (808) 586-4185
Facsimile (808) 586-4186
Email: oeqchawaii@doh.hawaii.gov

November 23, 2015

State of Hawaii, Department of Education
Facilities Development Branch
Attn: Arnold Fukunaga, AIA
1151 Punchbowl Street
Honolulu, HI 96813

Dear Mr. Fukunaga,

SUBJECT: Draft Environmental Assessment (EA) for Kohala High School- New STEM Buildings, North Kohala, Hawaii

The Office of Environmental Quality Control (OEQC) reviewed the Draft EA prepared for the subject project and offers the following comments for your consideration.

Page 19 was missing from the hard copy of the Draft EA, but was on the digital version. Please be sure to include this page on the Final EA, especially as it has the Flora and Fauna survey.

The OEQC was impressed that this building would modeled after CHPS and would incorporate Low Impact Development measures. We second the mitigation measures discussed for stormwater runoff such as bioswales and rain gardens. We also second the recommendation for using native vegetation and water-efficient plants for landscaping. Lastly, the project's commitment to decreased resource use and repurposed and recycled materials for construction is to be applauded. This project is well designed with forward thinking construction and facilities. Perhaps solar panels can be installed in the future to help further offset the energy and resource cost of the facility.

Thank you for the opportunity to comment on the Draft EA. We look forward to the response that also will be included within the project's Final EA. If you have any questions about these comments, please consult myself or Tom Eisen in our office at (808) 586-4185.

Sincerely,

Scott Glenn, Interim Director

PLANPACIFIC

December 7, 2015

Mr. Scott Glenn
Interim Director
Office of Environmental Quality Control
Department of Health
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Dear Mr. Glenn,

Subject: Draft Environmental Assessment for Kohala High School – New STEM Buildings, North Kohala, Hawaii

Thank you for your comment letter, dated November 23, 2015. We will check that the hard copy of the Final EA will have all pages. We appreciate your recognition of the efforts of the design team in making the project CHPS compliant, low impact, and more energy efficient.

Sincerely,

Lisa L. Imata
President

P.O. Box 892735
Mililani, HI
96789

Tel: (808) 521-9418