DAVID Y. IGE
GOVERNOR

FILE COPY

MAY 23 2016

KATHRYN S. MATAYOSHI
SUPERINTENDENT

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

OFFICE OF THE SUPERINTENDENT

May 10, 2016

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

RECEIVED
'16 MAY 11 P2:55
OFC. OF ENVIRONMENTAL QUALITY CONTROL

Re: Final Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos.: Q94001-12 and Q94001-13

Dear Mr. Glenn:

The Hawaii State Department of Education (DOE) has reviewed the comments on the Draft Environmental Assessment received during the 30-day public comment period ending March 24, 2016, and has reviewed the Final Environmental Assessment for the subject project. The DOE has determined that the subject project will not have significant environmental impacts and has issued a Finding of No Significant Impact. Please publish notice in the May 23, 2016 issue of the Office of Environmental Quality Control (OEQC) Environmental Notice.

We have enclosed a completed OEQC Publication Form and two hardcopies of the Final Environmental Assessment, and a CD containing electronic files of these documents in MS-Word and PDF format, respectively.

Should you have any questions or concerns, please contact our consultant for this project, Lance Fukumoto of Fukunaga & Associates, Inc. at (808) 944-1821.

Sincerely,

Duane Y. Kashiwai
Public Works Administrator
Facilities Development Branch

KSM:dw
Enclosures

c: Facilities Development Branch

October 2015

NON-CHAPTER 343 DOCUMENT
PUBLICATION FORM
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

Project Name: Kalaheo High School Athletic Field Improvements

Applicable Law: Chapter 25, Revised Ordinances of Honolulu

Type of Document: Final Environmental Assessment

Island: Oahu

District: Koolaupoko

TMK: 4-4-034:024, 028, 029

Permits Required: Special Management Area, NPDES Permit for Construction Related Discharges, Grading Permit, Building Permit

Applicant or Proposing Agency: Department of Education, State of Hawaii; P.O. Box 2360, Honolulu, HI 96804; Cheng-Hsin Chang, (808) 586-0481

Approving Agency or Accepting Authority: Department of Planning and Permitting, City and County of Honolulu, 650 South King Street, 7th Floor, Honolulu, Hawaii 96813

Consultant: Fukunaga & Associates, Inc.; 1357 Kapiolani Blvd., Suite 1530, Honolulu, HI 96814; Lance Fukumoto, (808) 944-1821

Status: Finding of No Significant Impact (FONSI) Determination; comments are not taken on this action.

Project Summary:
The proposed project will improve the existing athletic field at Kalaheo High School. The improvements involve reconstructing the existing football field as a football/soccer field in combination with new bleachers and walkways, including drainage and irrigation improvements and new field equipment. The project will benefit the community by providing the school with the basic facilities to meet its program needs, thereby removing the limitations on its physical education program. The proposed project will have minor short term construction impacts on noise and air quality. No long term impacts are expected.

Kalaheo High School Athletic Field Improvements

FINAL
ENVIRONMENTAL ASSESSMENT

Prepared for:
State of Hawaii
Department of Education

Prepared by:
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

May 2016

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LIST OF ABBREVIATIONS

ALISH	Agricultural Lands of Importance to the State of Hawaii
BMP	Best Management Practices
BWS	Honolulu Board of Water Supply
CWRM	State of Hawaii, Department of Land and Natural Resources, Commission on Water Resource Management
CZM	Coastal Zone Management
DBEDT	State of Hawaii, Department of Business, Economic Development, and Tourism
DLNR	State of Hawaii, Department of Land and Natural Resources
DOE	State of Hawaii, Department of Education
DOFAW	State of Hawaii, Department of Land and Natural Resources, Division of Forestry & Wildlife
DOH	State of Hawaii, Department of Health
DPP	City & County of Honolulu, Department of Planning and Permitting
DTS	City & County of Honolulu, Department of Transportation Services
EA	Environmental Assessment
EIS	Environmental Impact Statement
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
HAR	Hawaii Administrative Rules
HECO	Hawaiian Electric Company
HPD	Honolulu Police Department
HRS	Hawaii Revised Statutes
IRH	State of Hawaii, Department of Health, Indoor and Radiological Health Branch
JROTC	Junior Reserve Officer Training Corps
KHCMP	Draft Kawainui-Hamakua Complex Master Plan
KPWMP	Koolaupoko Watershed Management Plan
KSCP	Koolaupoko Sustainable Communities Plan
LUO	Land Use Ordinance
MGD	Million Gallons per Day
MSL	Mean Sea Level
NFHS	National Federation of State High School Associations
NPDES	National Pollution Discharge Elimination System

NPS	National Park Service
OCCL	State of Hawaii, Department of Land and Natural Resources, Office of Conservation and Coastal Lands
ROH	Revised Ordinances of Honolulu
RUSP	Revised Ultimate Site Plan
SHPD	State of Hawaii, Department of Land and Natural Resources, Historic Preservation District
SMA	Special Management Area
TMK	Tax Map Key
UHERO	University of Hawaii, Economic Research Organization
U.S.	United States
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USP	Ultimate Site Plan

EXECUTIVE SUMMARY

Project Name:

Project 1:
Kalaheo High School Athletic Field Improvements
D.O.E. Job No.: Q94001-12
Kailua, Oahu, Hawaii

Project 2:
Kalaheo High School Bleachers for Athletic Field and Tennis Court
D.O.E. Job No.: Q94001-13
Kailua, Oahu, Hawaii

Approving Agency:

Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Proposing Agency:

Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, Hawaii 96804

Consultant:

Project 1:
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Oahu, Hawaii 96814

Project 2:
Sato and Associates Inc.
2046 So. King Street
Honolulu, Hawaii 96826

Project Summary:

The State of Hawaii Department of Education proposes to improve the existing athletic field at Kalaheo High School. The improvements include re-grading the existing football field,

landscaping and irrigation, new bleachers and walkways, and installation of a new retaining wall and drainage facilities.

The project area is located within the Urban State Land Use District; and within Residential R-7.5 and Preservation P-1 zoning designations. The project area is also located within the Special Management Area (SMA), and in a letter dated May 8, 2015, the City and County of Honolulu Department of Planning and Permitting indicated that a major special management area use permit would be required.

Permits Required:

Building Permit
Grading Permit
National Pollution Discharge Elimination System (NPDES) Permit
Special Management Area (SMA) Major Permit

Determination:

A Finding of No Significant Impact (FONSI) is determined for this project.

CHAPTER 1. INTRODUCTION

1.1 Purpose for Environmental Assessment

The State of Hawaii, Department of Education (DOE) proposes to improve the existing athletic field and install bleachers at Kalaheo High School.

In a letter dated May 8, 2015, the City and County of Honolulu, Department of Planning and Permitting (DPP) indicated that the project is exempt from the preparation of an Environmental Assessment (EA) pursuant to the State DOE Exemption List under Chapter 343 Hawaii Revised Statutes (HRS) and Hawaii Administrative Rules (HAR), Chapter 11-200-8; however, an EA must be prepared pursuant to Chapter 25 of the Revised Ordinance of Honolulu (ROH) related to the Special Management Area (SMA). Section 25.3.3 (c) (1) indicates:

> "Any proposed development within the special management area requiring a special management area use permit shall be subject to an assessment by the agency in accordance with the procedural steps set forth in HRS Chapter 343. The director may allow the assessment to be conducted concurrently with the processing of the application for a special management area use permit."

The majority of the project area is located within the Special Management Area; therefore, the DPP determined that an EA would be required.

1.2 Existing Facilities and Operations

Kalaheo High School is located along the northwest side of Mokapu Saddle Road and Mokapu Boulevard at the intersection with Kapaa Quarry Road/Iliaina Street. It encompasses tax map keys (TMK) 4-4-034:024, 028 and 029 which comprise approximately 19.3 acres in land area. Existing facilities include thirteen (13) buildings accommodating over 50 classrooms, a gymnasium, cafeteria, industrial arts facilities and administration; an athletic field, tennis courts and a parking lot.

The school's vision is to promote a community of learners where students prepare for the challenges and opportunities in a diverse and global society, and its mission is to prepare students for higher education, future employment and responsible citizenship. The curriculum offers a broad range of courses, such as high-level language arts, mathematics, social studies and sciences through its Honors and Advanced Placement courses. Kalaheo High also has an award-winning Naval Junior Reserve Officer Training Corps (JROTC), and strong career and technical education pathways, including arts and communication academy, health services, industrial and engineering technology and public human services. In 2013-14, student enrollment was 908 and the number of employed faculty members was 49.

Kalaheo High School is part of the DOE Kalaheo Complex within the Windward District. Its service area is generally bound on the north by the Pacific Ocean; on the east by Kailua Bay; and

on the south by the Ulumawao Ridge, Kawainui Marsh, Kaelepulu Stream, Mid-Pacific Country Club and Keolu Hills. The communities encompassed by the service area include Kaneohe Marine Corps Base, Kailua, Lanikai and the majority of the residential area along Kaneohe Bay Drive from Mokapu Saddle Road to the H-3 highway.

1.3 Project Need and Objective

The school was initially opened in 1966 as the Kalaheo Hillside Intermediate School. In 1971, the DOE adopted a plan to convert the intermediate school into a high school to provide another secondary school to relieve the overcrowded conditions at the Kailua High and Kailua Intermediate Schools. The conversion of Kalaheo from an intermediate to a high was completed by adding grades 10 through 12 and phasing out grades 7 and 8 between 1973 and 1976. To facilitate this conversion, the DOE adopted an Ultimate Site Plan (USP) in February 1974. From the time of adoption of this USP and 1984, several improvements on the original school were completed; including: a parking lot, an industrial arts building, expansion of the existing athletic field and a gymnasium. The USP was revised twice, with the DOE adopting the Revised Ultimate Site Plan (RUSP) in 1983. The RUSP was based on a design student enrollment of 1,400, grades 9 through 12. The following proposed facilities were located in the RUSP:

- Football/track field with bleachers and lights
- Baseball field
- Two playcourt units
- Tennis courts
- Varsity/junior varsity locker/shower
- Swimming pool
- Parking for 219 cars in two additional parking lots

Approximately 35.3 acres of land would need to be acquired, bringing the new total area for the school site to approximately 54.6 acres.

In 1984, an Environmental Impact Statement (EIS) was approved for the Revised Ultimate Site Plan. It estimated a land acquisition cost of $870,000 and a design and construction cost of $16.2 million, however, did not propose a schedule for the land acquisition or construction of the facilities.

The primary objective of the DOE is to provide adequate educational opportunities to all school-age children residing in Hawaii, and a sub-objective is to provide adequate facilities to provide such education. The RUSP for Kalaheo High School is to facilitate implementing these objectives.

1.4 Project Description

The RUSP proposed a new football and track field combination with bleachers and lights to replace the existing athletic field on the northwest corner of Mokapu Saddle Road and Iliaina Street. The existing athletic field was last improved in 1975 and is ageing; the soccer field size and clearances does not meet the National Federation of State High School Associations (NFHS), which specifies

15 foot safe clear zone around playing field and a minimum of 1.5 percent for engineered natural turf soccer fields which are surface drained.

Due to budgetary constraints, the DOE decided to reconstruct the existing field as a football/soccer field combination with bleachers, and excluded the lighting and track field from the project, which would have required additional land. The proposed project includes the following improvements:

- Athletic field improvements to provide a natural grass regulation soccer field and a natural grass football field with slope in accordance with latest NFHS rules and regulations.
- 1' to 4' grade adjustment retaining walls to expand the grass field to accommodate a regulation football and soccer field with required safety clear zones.
- New drainage swale and drainage system improvements.
- Concrete ramp, walkway, bleachers along the North sideline to accommodate spectators. The bleachers will cover an area of 117' by 40' and rise to a level up to 10' above ground. The walkway will be 174' long and 7'-6" wide. Both structures will be supported with concrete piers and footings.
- Installation of 400 linear feet of 20' high ball-stopper nets to minimize/prevent errant soccer balls and footballs from going over the chain link fencing into the highway area, brush area and Building M (Industrial Arts) area.
- Field equipment, including new football goal posts, scoreboard and associated electrical work. The goal posts will be 30' high and will be anchored into the ground with concrete footings. The scoreboard will be 20' long and 7'-6" high, extending to a height of 21'-6" above ground, and will be anchored into the ground with two concrete footings.
- Irrigation system, grassing and soil amendments for new natural grass athletic field. Excavation for irrigation lines is not expected to extend further than 2' below grade.

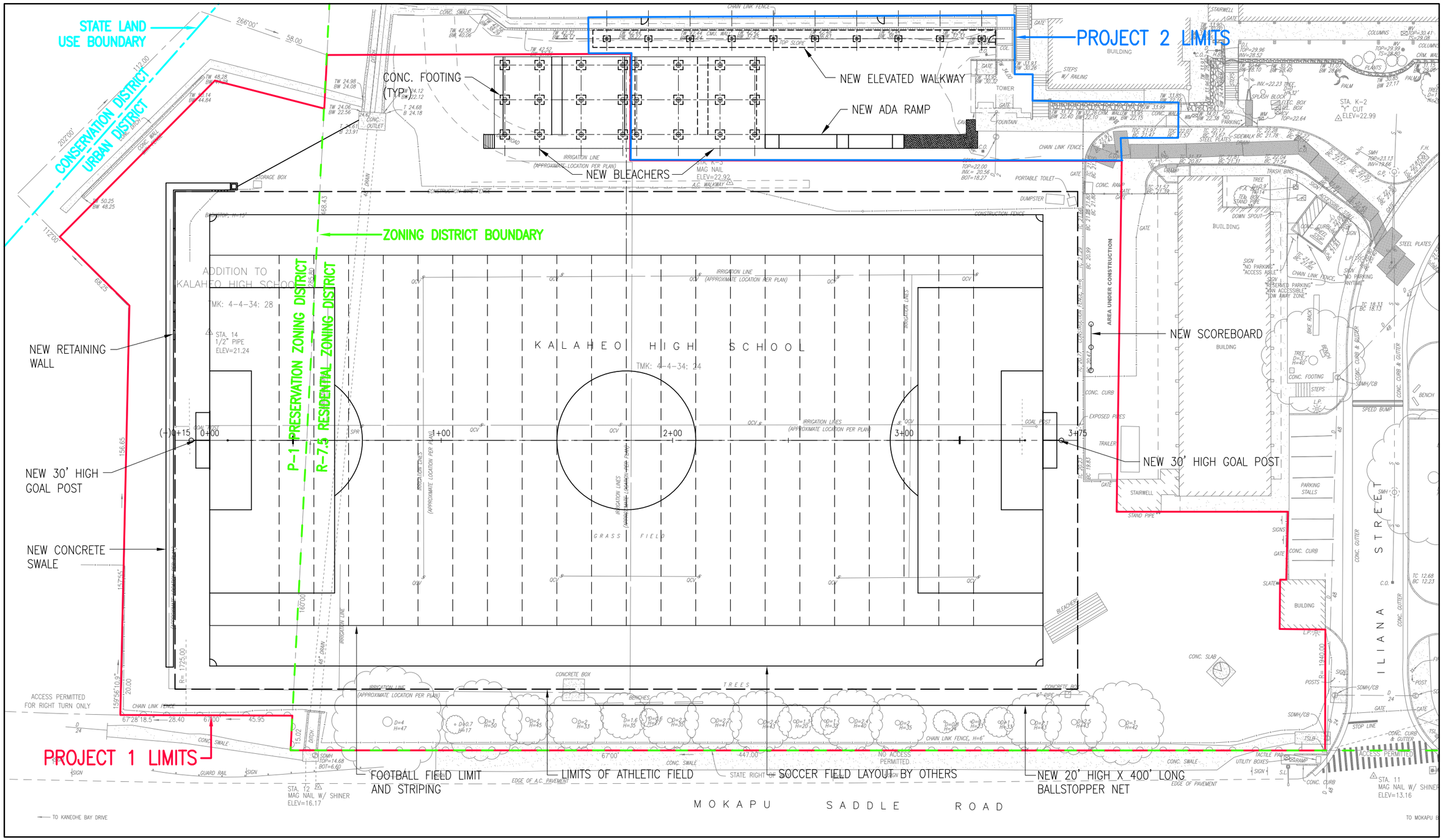
These improvements are shown in **Figures 1-1** and **1-2**.

1.5 Construction Schedule and Cost

Project 1 was bid in June 2014, and a contract of $1.04 million was awarded.

Project 2 was bid in June 2014, and a contract of $418,800 was awarded.

Construction of both projects is anticipated to begin following the acceptance of this EA or subsequent EIS, and compliance with all State and City rules, regulations, and ordinances and acquisition of all associated permits and clearances. The DOE predicts that construction will begin in late 2016 and will be completed by mid-2017.

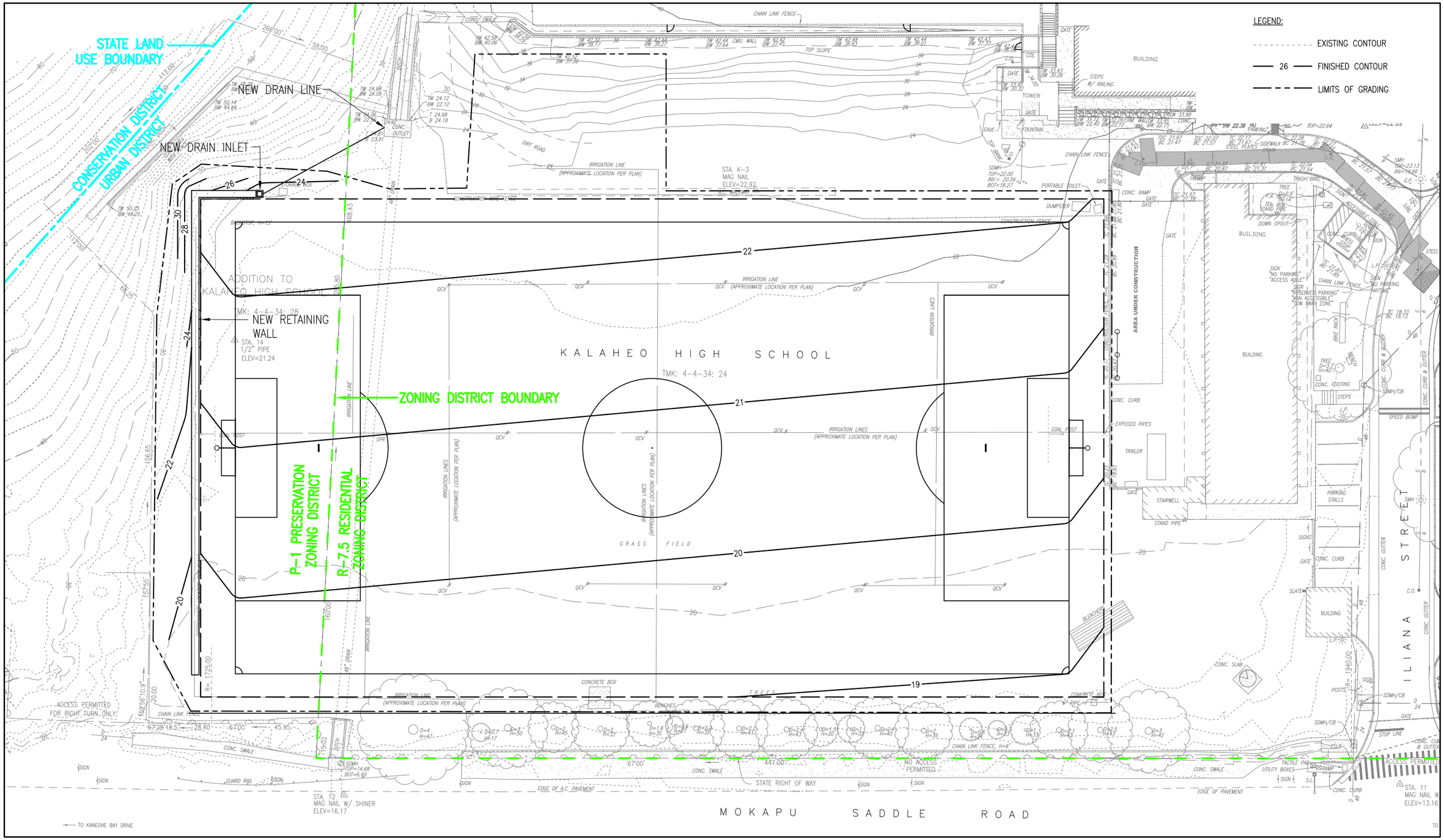


Kalaheo High School Athletic Improvements
Final Environmental Assessment

PROPOSED SITE PLAN

FUKUNAGA & ASSOCIATES, INC.

Figure 1-1



Kalaheo High School Athletic Improvements
Final Environmental Assessment

PROPOSED GRADING PLAN

FUKUNAGA & ASSOCIATES, INC.

Figure 1-2

CHAPTER 2. DESCRIPTION OF THE ENVIRONMENT, IMPACTS AND MITIGATIVE MEASURES

2.1 Climate

The island of Oahu is characterized by a tropical savanna climate with little seasonal and diurnal variability in temperature. Average monthly temperatures for the project area range between 79 and 85 degrees F for the highs and between 69 and 76 degrees F for the lows. The average annual precipitation is 42.6 inches, predominantly falling between the months of October and April. Trade winds flow from east to west and prevail during the greater part of the year.

2.2 Topography

The island of Oahu was formed by two different shield volcanoes, the Waianae and the Koolau, with the former being the older of the two. Formation of the island began approximately 4 million years ago. Both volcanoes have undergone erosion and coral reef growing stages and have experienced submarine landslides. This activity helped create the Kawainui and Kaelepulu embayments, which in turn have shaped the land forming the Kailua area.

The topography throughout the most of the project area is relatively flat. Existing ground elevations within the athletic field range between 18 and 22 feet MSL. The hillside to the north and west of the athletic field experiences steep slopes in the range of 15 to 20 percent, and ground elevations northwest of the field quickly rise to 60 feet MSL at the project area boundary. See **Figure 2-1**.

2.3 Soils

2.3.1 Soil Survey

The USDA, Soil Conservation Service 1972 "Soil Survey" provides detailed information on soil classifications, characteristics and maps showing their locations on the islands. The survey is useful for engineers and builders because the information includes descriptions of soil properties and the relative stability of soils for engineering purposes. According to the survey, only three different soil types are found within the project area as described below. **Figure 2-2** shows the locations of these soils.

- Jaucas sand, 0 to 15% slopes (JaC): in most places the slope does not exceed 7 percent. A representative profile is single grain, pale brown to very pale brown, sandy, more than 60 inches deep, and neutral to moderately alkaline throughout the profile. Often the surface layer is dark brown as a result of accumulation of organic matter and alluvium. Runoff is very slow to slow, and permeability is rapid. Water erosion is a slight hazard, but wind erosion is a severe hazard where vegetation has been removed. This soil is used for pasture, sugarcane, truck crops, and urban development.

- Mokuleia clay loam (Mt): This soil occurs as small areas on the coastal plains and is nearly level. A representative profile includes a very dark greyish-brown clay loam surface layer about 16 inches thick. The next layer is dark-brown and light-grey, single-grain sand and loamy sand 34 to more than 48 inches thick. The surface layer is and neutral in reaction, and the underlying material is moderately alkaline. Permeability is moderate in the surface layer and rapid in the subsoil. The erosion hazard is no more than slight, and runoff is very slow. In places roots penetrate to a depth of 5 feet or more. This soil is used for sugarcane, truck crops, and pasture.
- Marsh (MZ): This classification consists of wet, periodically flooded areas covered largely with grasses and bulrushes or other herbaceous plants. It occurs as small, low-lying areas along the coastal plains. Fresh or brackish water stands on the surface, depending on its proximity to the ocean. Marsh vegetation thrives.
- Water (W): Included in the project area is the Maunawili Stream and the Kawainui Canal.

2.3.2 Land Study Bureau

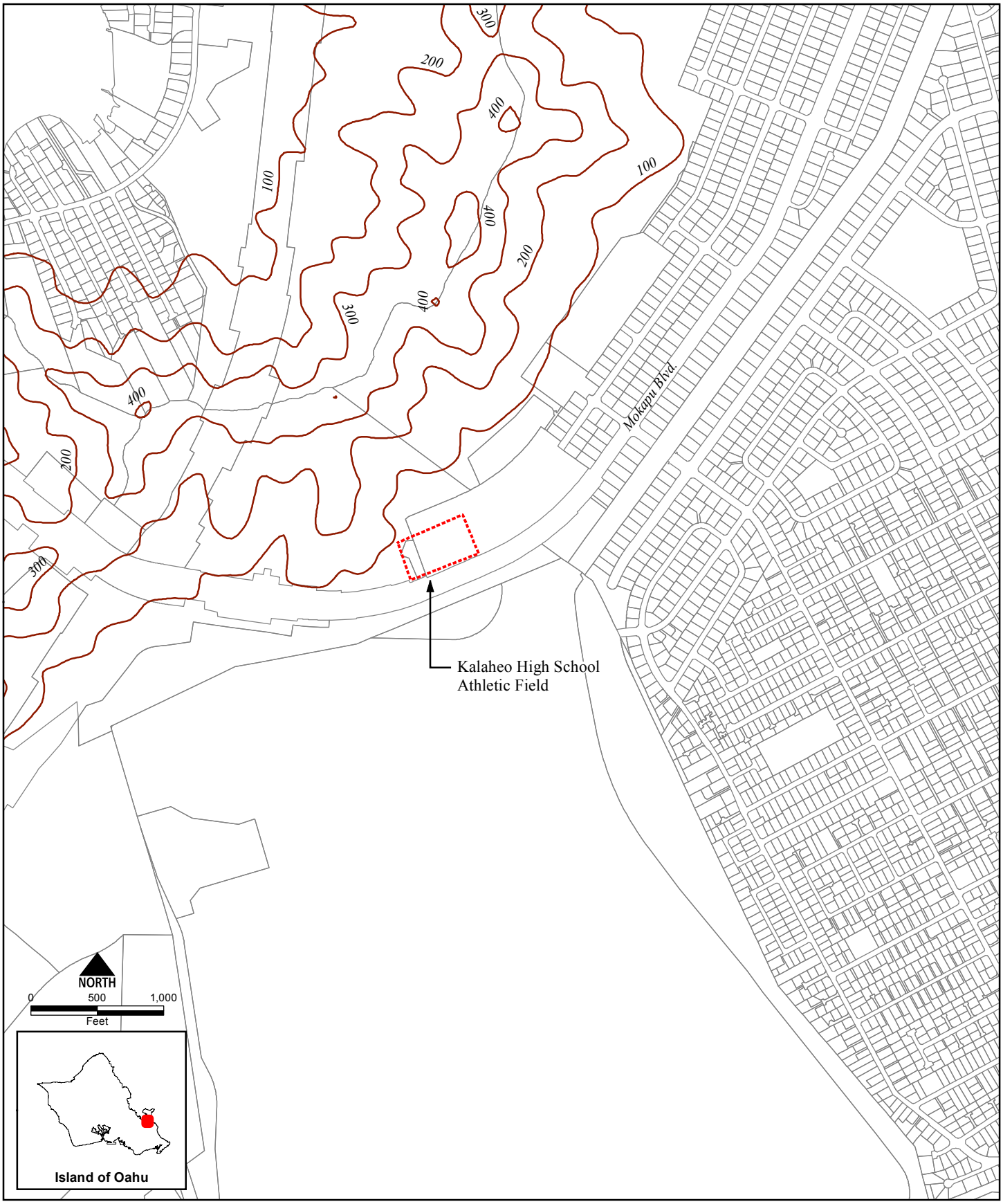
The University of Hawaii, Land Study Bureau 1972 "Detailed Land Classification – Island of Oahu" grouped all non-urban lands into five categories based on their soil properties and capabilities for agricultural productivity measured by their performance for selected crops. The categories were assigned letters "A" through "E" in order of highest to least productive. The project area is almost entirely within State Urban land and therefore is not associated with a Land Study Bureau category; however, a small section of TMK 4-4-034:028 is within State Conservation land and has been classified by the Land Study Bureau as "E". See **Figure 2-3**.

2.3.3 Agricultural Lands of Importance to the State of Hawaii

The Department of Agriculture "Agricultural Lands of Importance to the State of Hawaii" (ALISH) provided a classification system for identification of agriculturally important lands to the State, which established three classes of agricultural lands primarily, but not exclusively, on the basis of soil characteristics. The classifications are: Prime Agricultural Land, Unique Agricultural Land and Other Agricultural Land. These classifications provide decision makers understanding of long-term implications of several land use options for production of food, feed, forage, and fiber crops, however, do not designate areas to any specific land use. Lands not considered for classification as ALISH are: 1) Developed urban land over 10 acres; 2) Natural or artificial enclosed bodies of water over 10 acres; 3) Forest reserves; 4) Public use lands, e.g. parks and historic sites; 5) Lands with slopes in excess of 35%; and 6) Military installations, except undeveloped areas over 10 acres. The project area is entirely within lands not considered for classification. See **Figure 2-4**.

2.4 Natural Hazards

As shown on **Figure 2-5**, the Flood Hazard Assessment Report, which is based on the Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA),

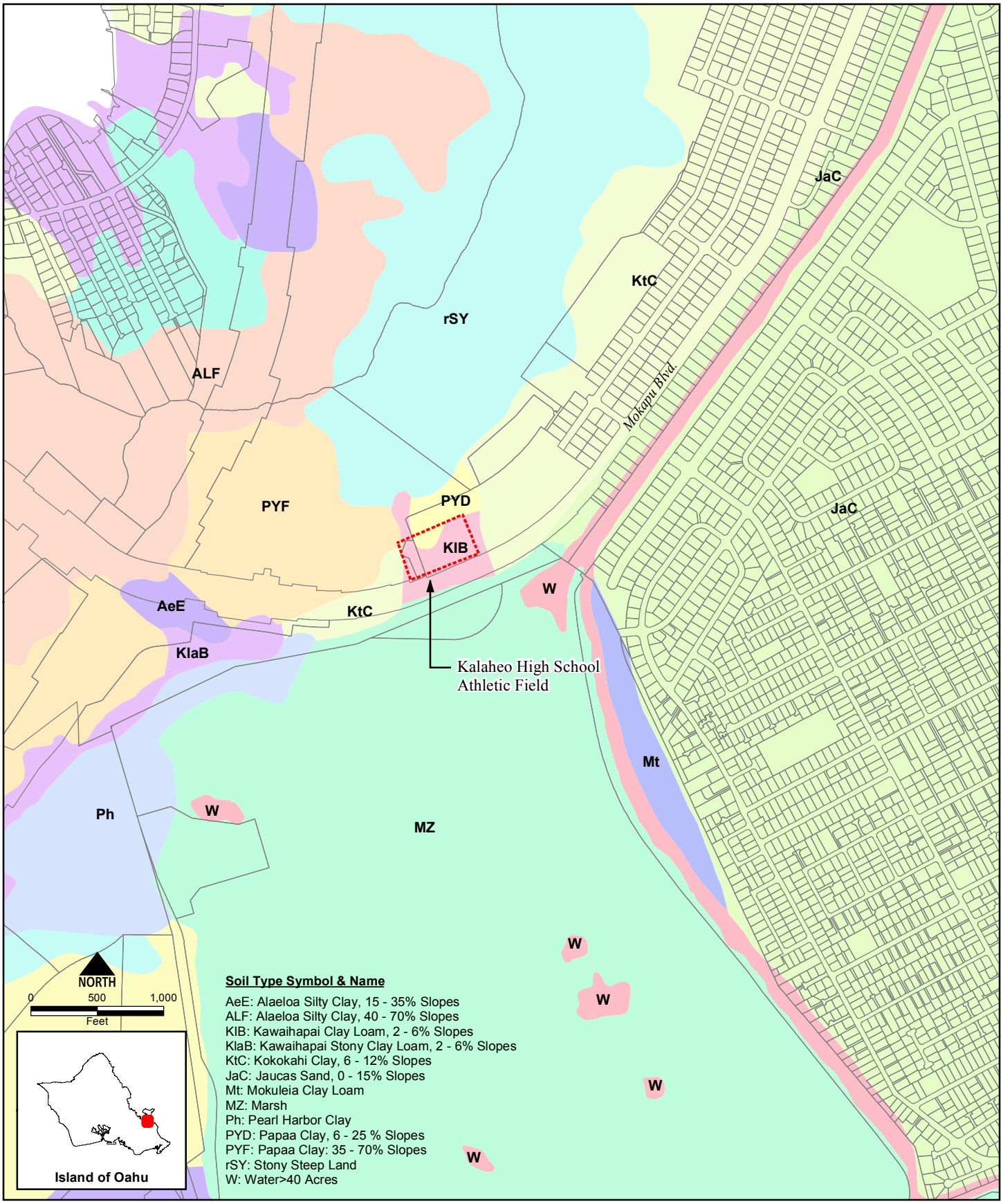


Kalaheo High School Athletic Field Improvements
Final Environmental Assessment

ELEVATION MAP

FUKUNAGA & ASSOCIATES, INC.

Figure 2-1

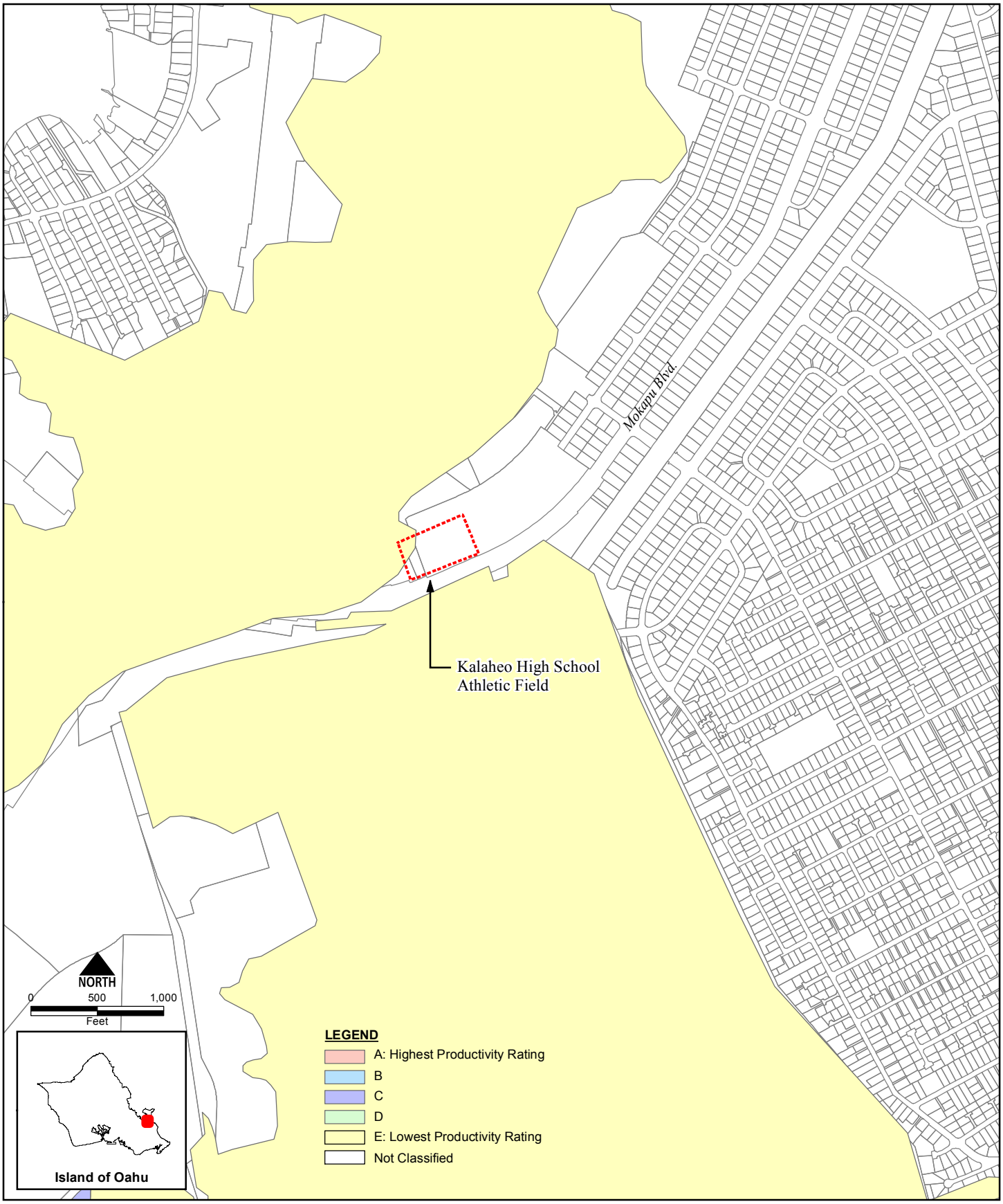


Kalaheo High School Athletic Field Improvements
Final Environmental Assessment

USGS SOIL MAP

FUKUNAGA & ASSOCIATES, INC.

Figure 2-2

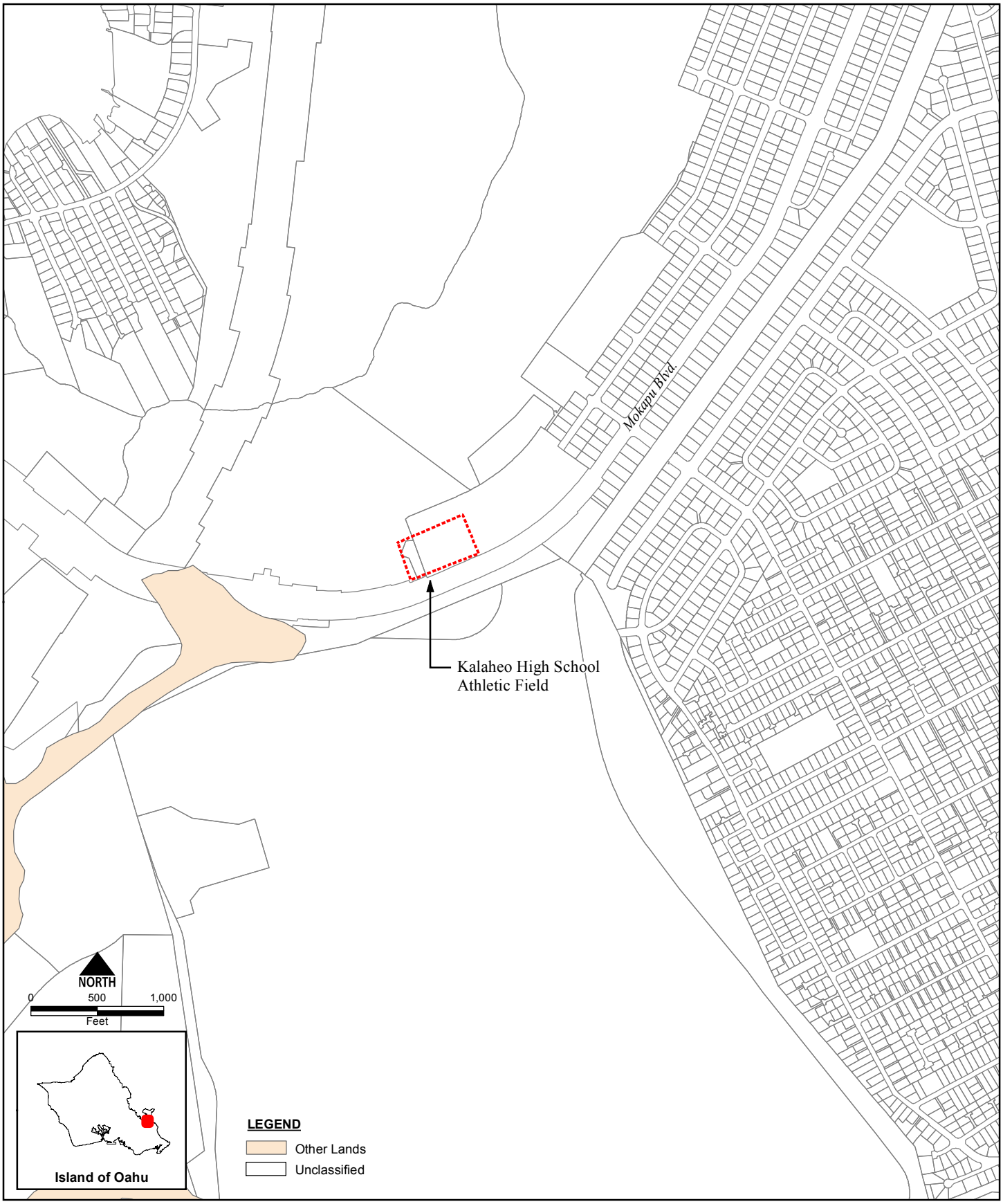


Kalaheo High School Athletic Field Improvements
Final Environmental Assessment

LAND STUDY BUREAU MAP

FUKUNAGA & ASSOCIATES, INC.

Figure 2-3



Kalaheo High School Athletic Field Improvements
Final Environmental Assessment

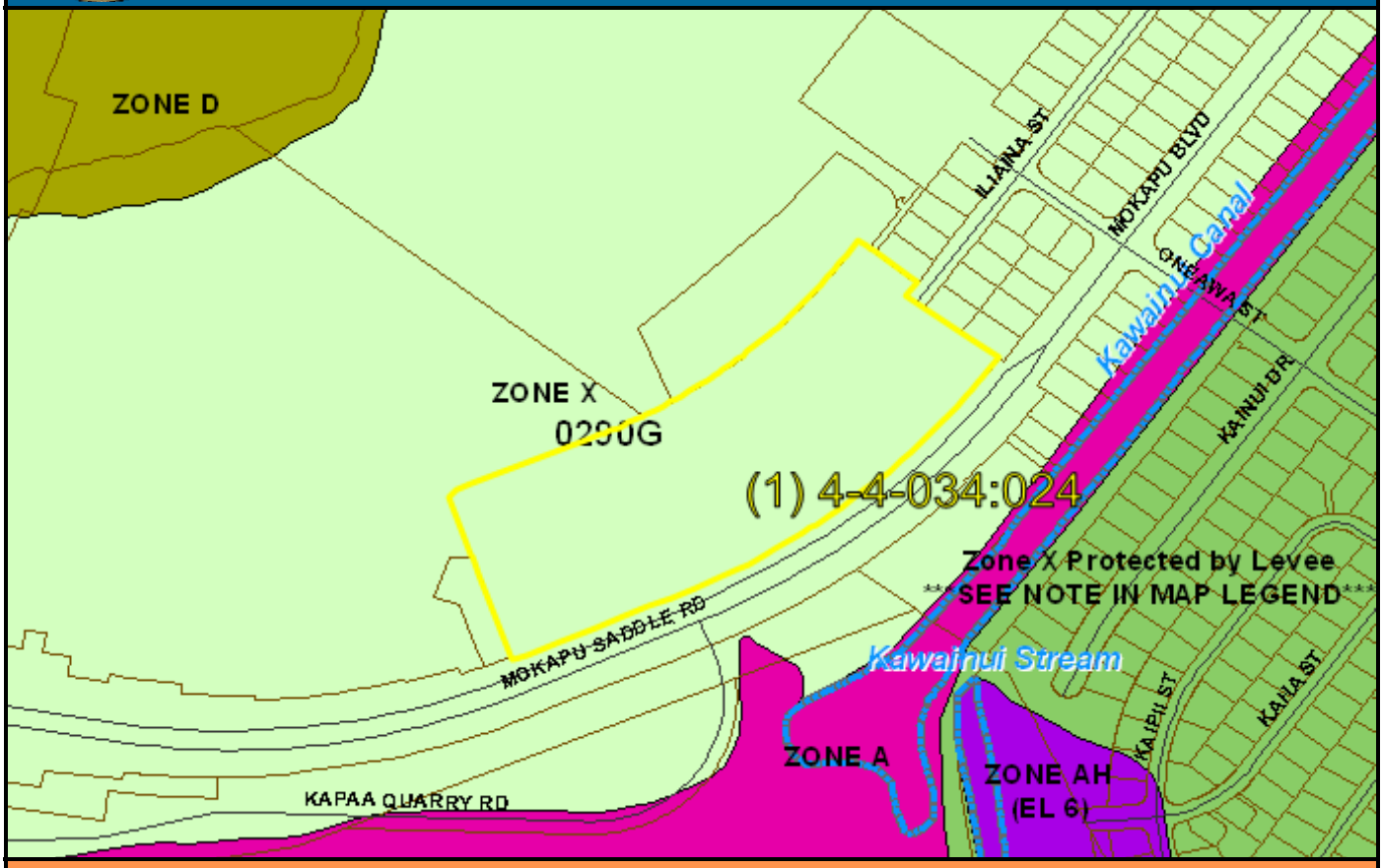
ALISH MAP

FUKUNAGA & ASSOCIATES, INC.

Figure 2-4

State of Hawaii

FLOOD HAZARD ASSESSMENT REPORT



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD ZONE DEFINITIONS

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A: No BFE determined.
- Zone AE: BFE determined.
- Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

PROPERTY INFORMATION

COUNTY:	HONOLULU
TMK NO:	(1) 4-4-034-024
PARCEL ADDRESS:	730 ILIAINA ST KAILUA, HI 96734
FIRM INDEX DATE:	JANUARY 19, 2011
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL(S):	15003C0290G
PANEL EFFECTIVE DATE:	JANUARY 19, 2011

PARCEL DATA FROM:	APRIL 2014
IMAGERY DATA FROM:	MAY 2006

IMPORTANT PHONE NUMBERS

County NFIP Coordinator	
City and County of Honolulu	
Mario Siu-Li, CFM	(808) 768-8098
State NFIP Coordinator	
Carol Tyau-Beam, P.E., CFM	(808) 587-0267

Disclaimer: The Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR from any liability, which may arise from its use.

If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.

indicates that the project area is located in Zone X. This is an area determined to be outside of the 500 year flood plain and less than 1 foot depth in a 100 year flood event.

According to the City and County of Honolulu, Department of Emergency Management's Tsunami Evacuation Maps, the nearly all of the project area is within the "Safe Zone", and a small strip adjacent to Mokapu Boulevard is in the "Extreme Tsunami Evacuation Zone". The area is therefore not considered to be vulnerable to tsunamis.

2.5 Hydrology

The Commission on Water Resource Management has established hydrologic units for both groundwater and surface water resources. Groundwater is described in the State Water Code as: "any water found beneath the surface of the earth, whether in perched supply, dike-confined, flowing, or percolating in underground channels or streams, under artesian pressure or not, or otherwise". Surface water is defined as: "both contained surface water—that is, water upon the surface of the earth in bounds created naturally or artificially including, but not limited to, streams, other watercourses, lakes, reservoirs, and coastal waters subject to state jurisdiction—and diffused surface water—that is, water occurring upon the surface of the ground other than in contained water bodies. Water from natural springs is surface water when it exits from the spring onto the earth's surface".

Groundwater hydrologic units have been delineated by Aquifer Sector Areas which are further subdivided into Aquifer System Areas. The project lies within the Waimanalo Aquifer System Area [30604], which is part of the Windward Aquifer Sector Area [306]. The Sustainable Yield for the Waimanalo Aquifer System Area is 10 MGD.

Surface water hydrologic units are divided by watershed units which are comprised of one or more drainage basins. The project is located within the Kawainui surface water hydrologic unit [3033]. According to the Hawai'i Stream Assessment, the Kawainui/Maunawili stream system is the only perennial stream in the vicinity of the project area.

2.6 Flora and Fauna

The flora within the project area and vicinity consists of vegetation common to the area, such as grasses, koa haole and klu with occasional guava and kiawe trees. No rare and endangered plants are known within the area. The fauna within the project area and vicinity consists of introduced species that are common throughout the area, such as rats, mice, mongoose, insects and feral cats. The University of Hawaii 1973 "Atlas of Hawaii" indicates the avifauna known to exist in the area includes cardinals, barred and spotted doves, mocking birds, mynahs, golden plovers, pueos, rice birds, sparrows and white eyes.

Kawainui-Hamakua Complex Master Plan (KHCMP), described further in Section 3.6, identifies the flora and fauna found within the adjacent Kawainui State Park Preserve – Kalaheo Section and Kapaa Section, which are located across Mokapu Saddle Road/Mokapu Boulevard from the project area. The flora includes Milo grove at the western end of the Kalaheo Section; monkeypod trees and other non-native and invasive plants; non-native scrub plants on land; and native and non-

native wetland plants. In the Kalaheo Section, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) has observed that adult and juvenile endangered Hawaiian waterbirds utilize the water's edge of the Kawainui Canal for foraging and loafing but has not observed nesting and fledgling birds in this area. Non-native animal species are commonly visible along the Kawainui Canal or within the upland areas. The four endangered Hawaiian waterbirds known to utilize the Kawainui Marsh as primary habitat are the Hawaiian coot, the Hawaiian duck, the Hawaiian moorhen and the Hawaiian stilt. Numerous native and non-native aquatic species inhabit the canal itself, including indigenous goby, endemic goby, and endemic eleotrid that utilize the canal to migrate between the ocean and the Kawainui area. The Kapaa Section consists of mostly non-native species, and the adjacent wetland is not known to be a habitat for native Hawaiian endangered waterbirds.

In a letter dated March 17, 2016, the United States Fish and Wildlife Service (USFWS) indicated that, although there is no federally designated critical habitat within the vicinity of the proposed project, data indicates that the federally endangered Hawaiian stilt or aeʻo (*Himantopus mexicanus knudseni*), endangered, Hawaiian common moorhen or ʻalae ʻula (*Gallinula chloropus sandvicensis*), endangered Hawaiian petrel or ʻuaʻu (*Pterodroma sandwichensis*), and the wedge-tailed shearwater or ʻuaʻu kani (*Puffinus pacificus*), a seabird protected under the Migratory Bird Treaty Act [16 U.S.C. 703-712] (MBTA) could be impacted by components of the project. USFWS offered the following comments:

> ***Hawaiian stilt and Hawaiian common moorhen:***
> The Hawaiian stilt and Hawaiian common moorhen occur at various sites within the vicinity of the project area (e.g., Kawainui Marsh, Hamakua Marsh). Hawaiian waterbirds, in particular, the Hawaiian stilt, is known to nest in sub-optimal locations (e.g., any ponding water) if present. Hawaiian waterbirds attracted to sub-optimal habitat may suffer adverse impacts, such as predation, reduced reproductive success due to disturbance within the vicinity of a nest, injury or death from being hit by a vehicle and thus the project may create an attractive nuisance.
>
> ***Hawaiian seabirds:***
> Outdoor lighting, such as street lights, can adversely impact migratory seabird species (e.g., wedge-tailed shearwater) found in the vicinity of the proposed project. Seabirds fly at night and are attracted to artificially lighted areas which can result in disorientation and subsequent fallout due to exhaustion or collision with objects such as utility lines, guy wires, and towers that protrude above the vegetation layer. Once grounded, they are vulnerable to predators or often struck by vehicles along roadways. Wedge-tailed shearwater nesting colonies are located on offshore islets and several locations on Oahu and every year many young shearwaters are downed and struck along Oahu roadways. Any increase in the use of night-time lighting, particularly during each year's peak fallout period (September 15 through December 15), could result in additional seabird injury or mortality.

USFWS recommended that the proposed project be designed in a manner that minimizes the amount of time standing water is present during construction, thereby, reducing the potential to attract waterbirds, and that if night-time work is proposed, that impacts to seabirds be minimized by shielding outdoor lights to the maximum extent possible, eliminating night-time construction,

and providing all project staff with information about seabird fallout. All lights, including street lights, should be shielded so the bulb can only be seen from below and use the lowest wattage bulb possible. The contractor for the proposed project will be made aware of these recommendations prior to construction.

2.7 Drainage

Part of the overland flow from the steep hillside to the west of the project area travels across the athletic field to two concrete drainage swales along the shoulder of Mokapu Saddle Road. The rest of the flow is intercepted by an existing concrete drainage swale to the northwest of the athletic field and carried to a 48" storm drain under the field, crossing Mokapu Saddle Road, and discharging on the south side. The majority of the runoff from the athletic field enters the longer concrete drainage swale along Mokapu Saddle Road; it is carried to a 48" storm drain crossing to the southeast side of the intersection of Mokapu Saddle Road/Mokapu Boulevard and Iliaina Street/Kapaa Quarry Road and discharges to a natural drainage swale which leads to the Kawainui Canal.

Construction of the new swale along the west end of the athletic field will intercept even more of the overland flow from the steep hillside to the west of the project area and carry it to the 48" storm drain described above. See **Figures 1-1** and **2-6**. This will benefit the athletic field by reducing the amount of overland flow traveling across the field and therefore facilitate improved drainage; however, this will also reduce the amount of infiltration by the field and therefore increase the amount of flow at the two discharge points previously described. This is not expected to impact the adjacent Kawainui State Park Preserve – Kalaheo Section and Kapaa Section.

2.8 Water Quality

The Department of Health (DOH), Water Quality Standards Map, indicates that the area across Mokapu Saddle Road/Mokapu Boulevard from the project area are designated inland Class "1" waters, including the Kawainui Canal, which is expected to be the receiving water for stormwater runoff from the project site. The objective of Class "1" inland waters is "that these waters remain in their natural state as nearly as possible with an absolute minimum of pollution from any human-caused source".

A National Pollution Discharge Elimination System (NPDES) Permit will be required for the project because the disturbed area will be greater than one acre. As part of the permit requirements, Best Management Practices (BMP) will be incorporated which will control the discharge of storm water runoff and improve the quality of the effluent resulting from construction activities. The BMPs will be shown and described on the design plans and will be subject to approval from DOH. Based on preliminary information, part of the treated storm water runoff leaving the project site during construction will sheet flow approximately 1,000 feet over vegetated land to reach Maunawili Stream, which will further improve the quality of the effluent through natural filtration. Part of the treated storm water runoff leaving the project site will travel along a natural drainage swale to the Kawainui Canal. It is not expected that storm water runoff from the proposed project will impact the quality of these receiving waters.

2.9 Hazardous Materials

There are no sites listed in the DOH, Solid and Hazardous Waste Branch, Hawaii Leaking Underground Storage Tank Database, nor incidents listed in the DOH, Hazard Evaluation and Emergency Response Office records in the vicinity of the project area.

2.10 Air Quality

The DOH, Clean Air Branch monitors ambient air for several air pollutants at 13 monitoring stations throughout Oahu, Big Island and Maui; however, there are no monitoring stations on the windward side of Oahu. Air quality in the vicinity of the project is typically very good; the existing sources of air pollution are emissions from motor vehicles traveling on adjacent Mokapu Saddle Road/Mokapu Boulevard and nearby Kapaa Quarry Road. Short term impacts during the construction period may arise from construction activity. Emissions from construction vehicles may slightly increase air pollution; however, these will likely be dispersed by the prevailing trade winds. Fugitive dust arising from trenching activities and construction vehicles must comply with the provisions of HAR 11-60.1-33. The contractor will be encouraged to implement a dust control plan, which may include several measures, including using dewatering trucks and covering stockpiles of excavated material.

2.11 Noise

The predominant existing source of noise within the project area is vehicular traffic along Mokapu Saddle Road/Mokapu Boulevard and Kapaa Quarry Road. HAR Title 11, Chapter 46 describes the regulations for community noise control and sets forth maximum noise tolerances by zoning district, which are to be administered by DOH, Indoor and Radiological Health Branch (IRH). Noise from construction activities will be short-term and localized, but will likely exceed these tolerances. An approved Community Noise Permit will be required for construction during the hours of 7:00 am and 6:00 pm Monday through Friday, and 9:00 am through 6:00 pm Saturdays. Construction outside of these hours will require an approved Community Noise Variance. The use of certain equipment (pile drivers, jackhammers, etc.) will be limited to between 9:00 am and 5:30 pm, Monday through Friday. Any permits and/or variances required from the DOH IRH Branch would be obtained by the Contractor prior to construction.

2.12 Archaeological and Cultural Resources

The State Historic Preservation District (SHPD) maintains the Hawaii Register of Historic Places, which are recognized as districts, sites, structures, buildings and objects and their significance in Hawaii's history, architecture, archaeology, engineering and culture. The National Park Service (NPS) maintains the National Register of Historic Places, which includes significant properties nominated by State and Federal agencies, historic areas in the National Park System and all National Historic Landmarks. A review of the State Register of Historic Places on the SHPD website and the National Register of Historic Places on the NPS website revealed that there are no historic places within the project area.

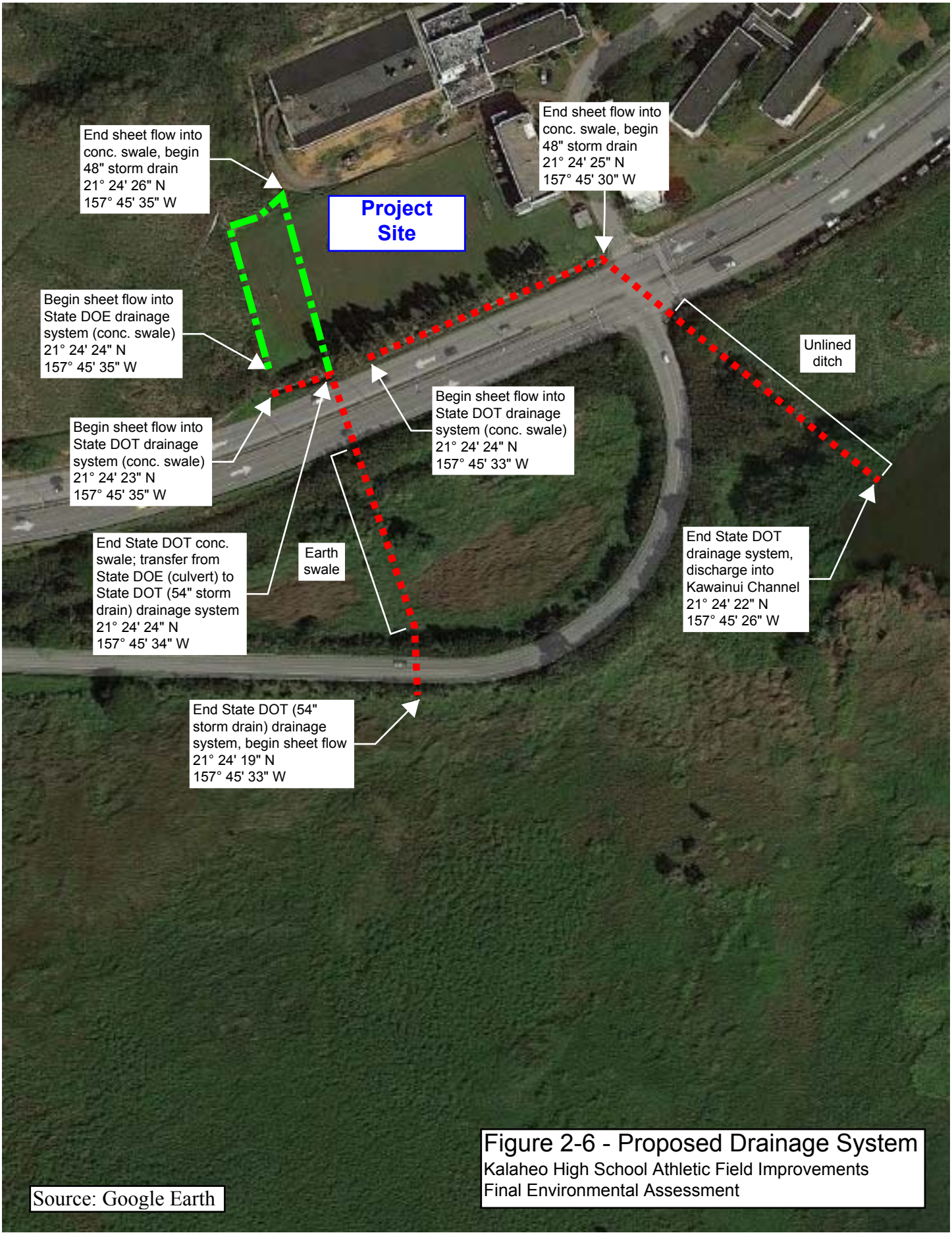


Figure 2-6 - Proposed Drainage System
Kalaheo High School Athletic Field Improvements
Final Environmental Assessment

In a letter dated March 8, 2016, SHPD expressed concern that the proposed project may adversely impact potential subsurface historic properties (cultural deposits and/or human burials) based on its proximity to Kawainui Marsh and Kaelepulu Stream, in and around which numerous archaeological studies have identified and documented the presence of numerous historic properties, including human burials; additionally, few of these studies have documented the presence of cultural deposits and/or burials in both primary and context as well as in areas impacted by utility installation or improvement projects. However, in a meeting on April 27, 2016, additional information was presented to SHPD indicating current project plans that likely limit exposure to such cultural deposits/burials as planned ground altering activities will be conducted mostly in fill layers, with excavations not being very deep within this built environment.

Forthcoming recommendations by SHPD will be addressed prior to construction. In the event that historical or cultural resources are encountered during construction, work will be halted in the immediate area of the discovery, a qualified archaeologist will be summoned to the site to identify the find, and SHPD will be contacted as outlined in HRS Chapter 6E.

2.13 Socio-Economic Characteristics

According to the U.S. Census Bureau, the population, percent non-Caucasian, and median household income of the communities within the project area are as follows:

Table 2-1: Selected Socio-Economic Data

Census Designated Place	Population[1]	% Minorities[1]	Median Household Income[2]
Kailua	38,635	56.0	$97,883

[1]Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary, extracted by DBEDT, Hawaii State Data Center
[2]Source: U.S. Census American Community Survey (ACS), 2009-2013

The University of Hawaii, Economic Research Organization (UHERO) prepared a County economic forecast in June 2015. The study concludes that the Hawaii economy is poised for better performance over the next several years. Tourism will see additional healthy gains on the Neighbor Islands for the next two years, and construction will become a significant contributor to growth. Unemployment rates have been decreased substantially by gains in employment, and moderate expansion of jobs and income will continue, which will solidify the local spending leg of the economic expansion. The predictions relevant to Oahu are as follows:

- Honolulu visitor growth has ended for now because of capacity constraints.
- The construction industry has begun to add a moderate number of jobs on Oahu. Activity has been focused in nonresidential resort and retail development, although residential permitting numbers on Oahu are suppressed by the categorization of some components of high-rise condo development as nonresidential.
- The strongest job growth other than construction will generally be seen in the wholesale and retail trade sector in the near term, but slowing as the tourism expansion wanes. Our large “other services” category, including everything from entertainment to professional

services, will continue to see moderate growth. Government budget pressure will limit the role of the public sector in job creation, particularly at the Federal level.

- In the near term, overall job growth will continue at a moderate pace. The tighter labor market conditions and low inflation associated with reduced energy prices will support healthy growth in real income, in the neighborhood of 2+% on Oahu for the next few years, before falling back as the County economies slow toward trend.
- Most of the risks to the economic forecast are external to Hawaii. These risks include the potential for policy errors by the Federal Reserve; greater fiscal austerity in the United States, Europe, or Japan; or a failure to orchestrate a "soft landing" of China's slowing economy. In the absence of these surprises, a long-awaited pickup in construction and improving household finances will drive moderate growth for the next several years.

The proposed project is not expected to have any long-term economic impacts; however, it will have minor positive short-term impacts associated with construction. These impacts include the creation of jobs for the anticipated duration of construction, assuming the project is awarded to a local contractor; and indirect economic stimulus from those workers spending their income on goods and services.

2.14 Utilities

Existing utilities within the project area are limited to electrical, telephone, cable television, sanitary sewers and waterlines. Water service is provided by the Honolulu Board of Water Supply. Electrical service is provided by Hawaiian Electric Company (HECO), telephone service is provided by Hawaiian Telcom, and cable television service is provided by Oceanic Time Warner Cable. Service lines located within the project area are exclusively for the use of the school.

The proposed project will include replacement of the existing landscape irrigation system for the athletic field. The proposed point of connection to the existing water system is a gate valve within the school site. There is no source of non-potable water available in the area to supply the irrigation demands. The anticipated maximum "off peak" demands for the system are a flow rate of 72 GPM and an average day demand of 21,165 GPD. Although replacement of the irrigation system is not expected to affect the existing water system, all work will be required to follow the Board of Water Supply Water System Standards. The project will also include replacement of existing electrical panels and ducts which will supply the new scoreboard for the athletic field. This work is not expected to affect the existing HECO system.

2.15 Transportation

Mokapu Saddle Road/Mokapu Boulevard is a four-lane divided major arterial State road and an important mode of transport between Kaneohe and Kailua. In addition to personal automobile traffic, it also provides transport for the TheBus, which has a two routes running in both directions. Route 85 connects Downtown Honolulu, University of Hawaii at Manoa and Kaneohe/Kailua; and Route PH5 connects Pearl Harbor, Kaneohe and Kailua. Both routes only run on weekdays.

Kapaa Quarry Road in the vicinity of Mokapu Saddle Road is under State or City ownership; however other sections of the road are privately owned. This road provides the only access to the City and County of Honolulu Kapaa Transfer Station and is therefore often traveled by hauling vehicles.

In a letter dated March 23, 2016, the City and County of Honolulu, Department of Transportation Services (DTS) indicated the following concerns:

- The area Neighborhood Board, as well as the area residents, businesses, emergency personnel (fire, ambulance and police), Oahu Transit Services, Inc. (TheBus), etc., should be kept appraised of the details of the proposed project and the impacts that the project may have on the adjoining local area street network.
- Construction materials and equipment should be transferred to and from the project during off-peak traffic hours (8:30 a.m. to 3:30 p.m.), but not during school dismissal periods for the safety of the students and to minimize any possible disruption to traffic on the local streets.

Furthermore, in a letter dated March 7, 2016, the Honolulu Police Department (HPD) recommended that the contractor provide a sufficient amount of traffic control devices (e.g. cones, flag persons, special duty officers, etc.) to accommodate construction vehicles and motorists traveling in the area during the daytime hours to avoid any traffic congestion.

Road closures are not expected during construction. Construction vehicles may travel either of these roads and then along the section of Iliaina Street entirely within the school property to access the site; therefore, ingress and egress operations to the construction area will not affect public roadways. Impacts on transportation along these roadways are expected to be minimal. Dump trucks may be intermittently traveling these roads during grading operations; however, the magnitude of the operation is not likely large enough to have an appreciable impact on traffic flow. Material and equipment delivery truck travel is also expected to be intermittent. However, the contractor will be required to address the recommendations provided by DTS and HPD during construction.

2.16 Police Protection

The nearest Honolulu Police Department (HPD) station is located approximately 3.6 miles west of the project area in Kaneohe. There is also a HPD substation located approximately 1.8 miles southeast of the project area in Kailua. As discussed previously, there are not anticipated to be appreciable impacts on traffic flow; therefore, police protection services should not be affected. However, the contractor will be required to coordinate with HPD during construction.

2.17 Fire Protection

The Honolulu Fire Department Aikahi station is located approximately 1.3 miles north of the project area along Kanehoe Bay Drive in Kailua. Waterlines potentially affected by the proposed

project are located within the school property which is not expected to affect external water transmission and distribution mains; therefore, fire protection services should not be affected.

2.18 Educational Facilities

In addition to Kalaheo High School, there are several schools within the State Department of Education Kalaheo Complex, which encompasses the approximate service area of Kalaheo High School. These schools include: Aikahi Elementary, Kailua Elementary, Kailua Intermediate, Kainalu Elementary, Mokapu Elementary and Lanikai Elementary. All of these schools are greater than a mile away from Kalaheo High School are not expected to be impacted by the proposed project.

CHAPTER 3. RELATIONSHIP TO FEDERAL, STATE AND COUNTY PLANS AND POLICIES

3.1 Hawaii State Plan

The Hawaii State Plan, Chapter 226 of the Hawaii Revised Statutes, was first adopted in 1978. It serves as a guide for the future long-range development of the State through identification of goals, objectives, policies, and priorities. The objectives and policies relevant to the proposed project are described below:

§226-11 Objectives and policies for the physical environment—land-based, shoreline, and marine resources.

(a) Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:
  (1) Prudent use of Hawai‘i's land-based, shoreline, and marine resources.
  (2) Effective protection of Hawai‘i's unique and fragile environmental resources.

(b) To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to:
  (2) Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.
  (3) Take into account the physical attributes of areas when planning and designing activities and facilities.
  (4) Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.

§226-12 Objective and policies for the physical environment—scenic, natural beauty, and historic resources.

(a) Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawai‘i's scenic assets, natural beauty, and multi-cultural/historic resources.

(b) To achieve the scenic, natural beauty, and historic resources objectives, it shall be the policy of this State to:
  (1) Promote the preservation and restoration of significant natural and historic resources.
  (2) Provide incentives to maintain and enhance historic, cultural, and scenic amenities.
  (3) Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.
  (4) Protect those special areas, structures, and elements that are an integral and functional part of Hawai‘i's ethnic and cultural heritage.
  (5) Encourage the design of developments and activities that complement the natural beauty of the islands.

§226-13 Objective and policies for the physical environment—land, air, and water quality.

(a) Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:
  (1) Maintenance and pursuit of improved quality in Hawai‘i's land, air, and water resources.

(b) To achieve the land, air, and water quality objectives, it shall be the policy of this State to:
  (2) Promote the proper management of Hawai‘i's land and water resources.
  (3) Promote effective measures to achieve desired quality in Hawai‘i's surface, ground, and coastal waters.

§226-21 Objective and policies for socio-cultural advancement—education.

(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 proposed project is in compliance with the aforementioned goals and objectives.

The Hawaii State Plan also establishes a statewide planning system to coordinate and guide all major state and county activities and to implement the overall theme, goals, objectives, policies, and priority guidelines through the development of functional plans and county general plans. Functional plans set forth the policies, statewide guidelines, and priorities within a specific field of activity, and are developed by the State agency primarily responsible for a given functional area, which include agriculture, conservation lands, education, energy, higher education, health, historic preservation, housing, recreation, tourism, and transportation. Implementing actions should be taken with a two- to six-year period and may include organizational or management initiatives,

facility or physical infrastructure development initiatives, initiatives for programs and services, or legislative proposals.

The Education Functional Plan document was produced in 1989 by the Department of Education (DOE) and includes strategies to address the policies and priority guidelines of the Hawaii State Plan and the goals of the Board of Education and the concerns of the State Education Functional Plan Advisory Committee. HRS 226, as amended by Act 336, 1987, identifies directions specifically for Education in two sections, Section 226-21 Objectives and policies for socio-cultural advancement—education and Section 226-107 Quality education. These formed the basis for the twelve Education Functional Plan policies, which include academic excellence, basic skills, education workforce, facilities and services, alternatives for funding and delivery, autonomy and flexibility, increased use of technology, personal development, students with special needs, early childhood education, Hawaii's cultural heritage, and research programs and [communication] activities. The goal relevant to the proposed project is described below:

> ***Cluster B(4): Personal Development***
> ***Policy:*** Support education programs and activities that enhance personal development, physical fitness, recreation, and cultural pursuits of all groups.
>
> > ***Implementing Action B(4)(d):*** Strengthen the total wellness of students by fully implementing a coordinated health, physical education and nutrition education program.

The proposed project is in conformance with the aforementioned policy and corresponding implementing action.

In February 2016, the DOE prepared a Statewide Master Plan for Athletic Facilities to assess the existing conditions of the high school physical education and athletic facilities and to provide guidance in maintaining the these facilities and providing for new and/or replacement facilities. This strategic plan identified and prioritized needs per school with the intent of assisting schools, DOE, legislators, and others during the process of developing and funding these capital improvements. The plan categorizes projects into DOE Funded Projects for Design/ Construction, Priority 1 Recommendations, and Priority 2 Recommendations. Renovation of the existing football field is listed in the plan as a DOE Funded Project for Design/Construction; therefore, the proposed project conforms to this plan.

3.2 State Land Use Law

Chapter 205 of the Hawaii Revised Statutes, the State Land Use Law, classified four major land use districts in which all lands are placed and established a framework of land use management and regulation for these lands. The four land use districts are: Rural, Urban, Agricultural and Conservation. The State Legislature established the Land Use Commission (LUC) to administer the State Land Use Law.

The Conservation District is regulated by the Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL), and is divided into five subzones: Protective, Limited, Resource, General and Special. The first four subzones are arranged in a hierarchy of

environmental sensitivity, ranging from the most to the least sensitive; the Special subzone is applied in special cases specifically to allow a unique land use on a specific site. As established in Hawaii Administrative Rules (HAR) Chapter 13-5, Subchapters 2 and 3, these subzones define a set of "identified land uses" which may be allowed by discretionary permit or some sort of approval from the DLNR. Major permits are required for land uses which have the greatest potential impact, and an EA and/or an EIS and potentially Public Hearing are required; minor permits are required for land uses which may have fewer impacts.

The majority of the project area is within the Urban land use district, and a small portion of TMK 4-4-034:028 is within the Conservation district, General subzone. The area across Mokapu Boulevard from the project site is considered part of the Kawainui Marsh, which is within the Protected subzone. See **Figure 3-1**. HAR Chapter 13-5 states the following in regards to the General subzone:

§13-5-14 General (G) subzone.

(a) The objective of this subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature.

(b) The (G) subzone shall encompass:

(1) Lands with topography, soils, climate, or other related environmental factors that may not be normally adaptable or presently needed for urban, rural, or agricultural use; and

(2) Lands suitable for farming, flower gardening, operation of nurseries or orchards, grazing; including facilities accessory to these uses when the facilities are compatible with the natural physical environment.

(c) Identified land uses in the general (G) subzone are restricted to those listed in section 13-5-25.

§13-5-25 Identified land uses in the general subzone.

(a) In addition to the land uses identified in this section, all identified land uses and their associated permit or site plan approval requirements listed for the protective, limited, and resource subzones also apply to the general subzone, unless otherwise noted.

(b) If a proposed use is not presented below or in section 13-5-22, 13-5-23, or 13-5-24, an applicant may request a temporary variance, petition the land use commission for a land use district boundary change, or initiate an administrative rule change to have the proposed use added to the identified land uses.

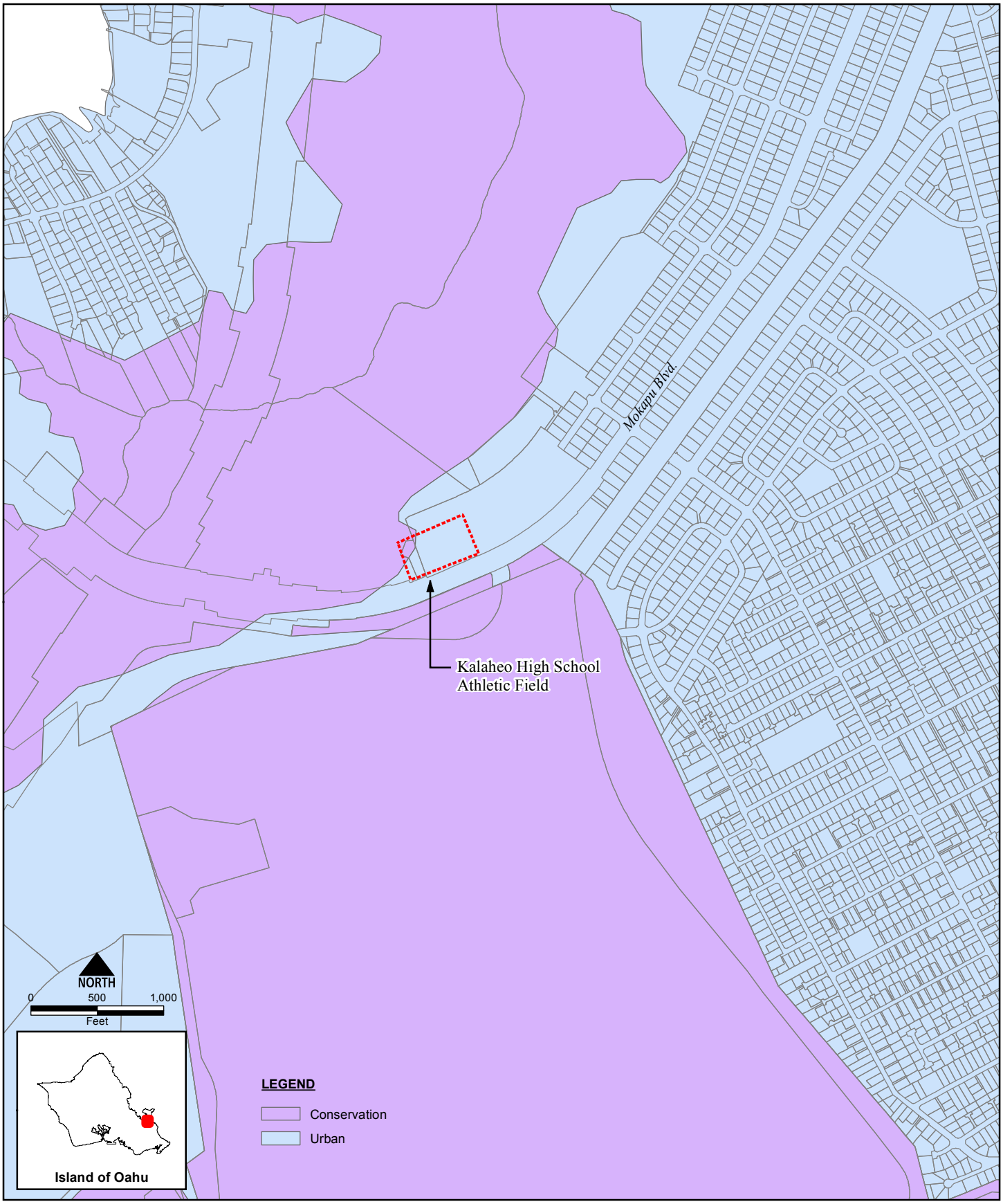
(c) Identified land uses in the general subzone and their required permits (if applicable), are listed below:

(1) Identified land uses beginning with the letter (A) require no permit from the department or board;

(2) Identified land uses beginning with the letter (B) require site plan approval by the department;

(3) Identified land uses beginning with the letter (C) require a departmental permit; and

(4) Identified land uses beginning with the letter (D) require a board permit and where indicated, a management plan.



Kalaheo High School Athletic Field Improvements
Final Environmental Assessment

STATE LAND USE MAP

FUKUNAGA & ASSOCIATES, INC.

Figure 3-1

The land use of the proposed project is not identified in HAR Chapter 13-5 as an allowable use in the Conservation district General subzone; therefore, a determination from the LUC was sought to ascertain the location of the boundary between the Urban and Conservation districts within TMK 4-4-034:028. In 1975, the Kalaheo High School athletic field was improved through expansion into and installation of drainage improvements within TMK 4-4-034:028. The drainage improvements included a concrete swale parallel to and at an offset of approximately 20 feet from the northwest property line. The approved drawings of these improvements, shown in **Figure 3-2**, clearly depict the State Land Use Boundary line on the mauka side of this drainage swale. Since all of the work under the proposed project will be makai of this drainage swale, the DOE maintained that the proposed project is entirely within the Urban designation. A request for a Land Use boundary determination was sent to the LUC, along with the aforementioned approved drawing and the Bid Set drawings of the proposed project, on September 11, 2015. On September 17, 2015, the LUC concurred that the proposed project is entirely within the Urban designation.

3.3 City and County of Honolulu General Plan

The City and County of Honolulu General Plan, a requirement of the City Charter, is a broad but comprehensive statement of objectives and policies which sets forth the long-range aspirations of Oahu's residents and the strategies of actions to achieve them within an approximate 20-year planning horizon. The Department of Planning and Permitting strives to maintain the dynamic nature of the General Plan; the current edition was released in 1992, and amended in 2002, and a public review draft of proposed revisions was released in 2012. It is the focal point of a comprehensive planning process that, together with the regional development plans, provides a direction and framework to addresses physical, social, economic and environmental concerns affecting the City and County of Honolulu. This planning process serves as the coordinative means by which the City and County government provides for the future growth of the metropolitan area of Honolulu.

There are eleven (11) areas of concern outlined in the General Plan:

(1) population;
(2) economic activity;
(3) the natural environment;
(4) housing,
(5) transportation and utilities;
(6) energy;
(7) physical development and urban design;
(8) public safety;
(9) health and education;
(10) culture and recreation; and
(11) government operations and fiscal management

The General Plan does not define specific land uses or area.

The policies and objectives for Health and Education, Section 9, relevant to the proposed project, are as follows:

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

Policy 3: Encourage the after-hours use of school buildings, grounds, and facilities.

Policy 4: Encourage the construction of school facilities that are designed for flexibility and high levels of use.

The proposed project is consistent with the aforementioned policies.

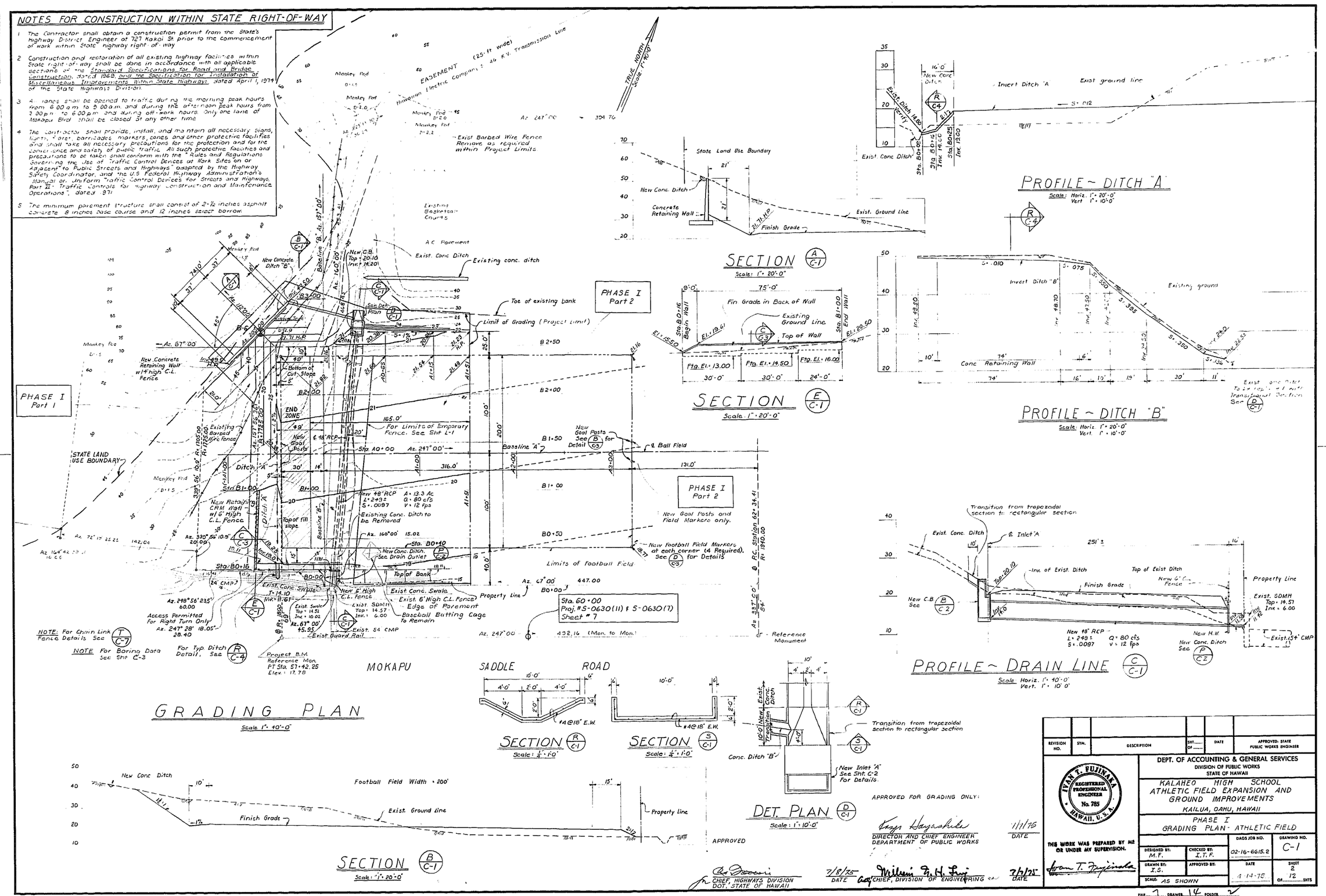
3.4 Koolaupoko Sustainable Communities Plan

Chapter 24 of the Revised Ordinances of Honolulu (ROH) sets out the requirement for the preparation of development plans, which are community-oriented plans intended to help guide public policy, investment, and decision-making through a planning horizon to year 2020. Each of these plans covers a geographic planning region on Oahu, addressing the specific conditions and community values of each region. The Koolaupoko Sustainable Communities Plan (KSCP) in one of eight such development plans. Two of the eight planning regions were areas to which major growth in population and economic activity were anticipated to be directed over the next 20 years and beyond, and the remaining six planning regions, including Koolaupoko, were envisioned to remain relatively stable. The plans for the former regions were titled "Development Plans," and the plans for the latter regions were titled "Sustainable Communities Plans". The vision statement and supporting provisions of the KSCP is hence oriented toward maintaining and enhancing the region's ability to sustain its unique character and lifestyle. These plans were adopted and revised by ordinance and are required to implement objectives and policies set forth in the General Plan.

The 2000 Koolaupoko Sustainable Communities Plan is incorporated into Ordinance 00-47 by reference. A public review draft of the update was made available in October 2014. The 2000 KSCP is organized in five chapters addressing Koolaupoko's role in Oahu's development pattern; the vision for Koolaupoko's future; land use policies, principles, and guidelines; public facilities and infrastructure policies and principles; and implementation. In carrying out the purposes of the General Plan, Koolaupoko is not expected to undergo growth over the 20-year horizon. Policies in support of this goal limit the potential for expansion of the residential development, commercial centers and economic activity, and focus on maintaining the patterns of development characteristics of its urban fringe and rural areas. The future vision is shaped around two principal concepts: the protection of the communities' natural, scenic, cultural, historic and agricultural resources; and the need to improve and replace, as necessary, the region's aging infrastructure systems.

Section 3.1 of the KSCP calls for the preservation of open space, an element of which is wetlands, wildlife preserves and nature parks/preserves. The Kawainui Marsh is specifically indicated as one of these. The guideline in the KSCP relating to wildlife preserves in Koolaupoko relevant to this project states the following:

> *"Prohibit encroachment or intensification of residential or other urban uses near wildlife sanctuaries and nature parks."*



Kalaheo High School Athletic Field Improvements
Final Environmental Assessment

1975 Kalaheo High School Athletic Field Expansion Drawings

Figure 3-2

Chapter 4 of the KSCP sets forth public facilities and infrastructure policies and principles, and Section 4.7 specifically deals with school and library facilities. The planning principle/guideline described in the KSCP for planning and operating schools in Koolaupoko relevant to this project is as follows:

> *"**Shared Facilities.** The Department of Parks and Recreation should coordinate with the DOE regarding the development and use of athletic facilities such as playgrounds, play fields and courts, swimming pools, and gymnasiums where the joint use of such facilities would maximize use and reduce duplication of function without compromising the schools' athletic programs."*

It is not known whether the Department of Parks and Recreation has attempted to coordinate with the DOE for the proposed project. The project is otherwise in conformance with the principles and objectives outlined in the KSCP.

3.5 Koolaupoko Watershed Management Plan

The Koolaupoko Watershed Management Plan (KPWMP) is a long-range plan with a 20-year timeframe to the year 2030 for the preservation, restoration, and balanced management of ground water, surface water, and related watershed resources in the Koolaupoko District. Prepared jointly by the City and County of Honolulu Department of Planning and Permitting (DPP) and the Honolulu Board of Water Supply (BWS) in accordance with the State Water Code, the Hawaii Water Plan, and the City's Ordinance 90-62 that established the Oahu Water Management Plan, it is one of eight district-specific plans that together will form the updated Oahu Water Management Plan. The KPWMP was approved by the Honolulu City Council in August 2012 and adopted by the State Commission on Water Resource Management (CWRM) in September 2012.

The overall goal and five major objectives for all eight watershed management plans are as follows:

Goal: To formulate an environmentally holistic, community-based, and economically viable watershed management plan that will provide a balance between: (1) the preservation and restoration of Oahu's watersheds, and (2) sustainable ground water and surface water use and development to serve present and future generations.

Objective #1: Promote sustainable watersheds

Objective #2: Protect and enhance water quality and quantity

Objective #3: Protect Native Hawaiian rights and traditional and customary practices

Objective #4: Facilitate public participation and education, and project implementation

Objective #5: Meet future water demands at a reasonable cost

The KPWMP provides a summary profile of the Koolaupoko District, including in-depth discussion of demographic, cultural, and physical aspects. The KPWMP also provides detailed tabulations of existing water use and forecasts of future water use and demand both by source (surface, ground, recycled) and by end use category (Municipal, agriculture, irrigation). Finally,

the KPWMP provides information on specific water supply and watershed management "Projects with Champions," and more general information on "Watershed Management Strategies."

The proposed project is not expected to impact the water supply or watershed management and is therefore in conformance with the Koolaupoko Watershed Management Plan.

3.6 Kawainui-Hamakua Complex Master Plan

Prepared in 2014 for the DLNR, Division of Forestry and Wildlife (DOFAW) and Division of State Parks, the Draft Kawainui-Hamakua Complex Master Plan (KHCMP) is a planning guide for the future of just over 1,000 acres of precious natural and cultural resources in the Kailua ahupuaa. Kawainui is generally bounded by Mokapu Saddle Road/Mokapu Boulevard to the north, the Kawainui flood control levee to the east, Kailua Road and Kalanianaole Highway to the south, and Kapaa Quarry Road to the west. Hamakua is generally bounded by Kailua Road to the north, Hamakua Drive to the east, residential properties to the south, and Puuoehu hillside to the west. 986 acres of this land is State owned. Kawainui is the largest remaining freshwater wetland in the State, and it, along with Hamakua, were designated as State Wildlife Sanctuaries by Executive Orders to protect the wetlands as wildlife habitat.

The KHCMP is a vision and call for community action for appropriate land use. It supports continued wetland restoration and upland reforestation, Hawaiian cultural practices, on-site learning activities focused on the environment and culture, and public access for passive outdoor recreation with the goal of sustaining and preserving the Kawainui-Hamakua Complex for future generations.

The KHCMP is divided into five chapters; these cover the history and overview of the project, existing conditions, the planning process and framework, the plan, and implementation of the plan. The KHCMP addresses each of the 14 parcels that comprise the Kawainui-Hamakua Complex separately. The only two parcels with the potential to be impacted by the proposed project are the Kawainui State Park Preserve – Kalaheo Section, and the Kawainui State Park Preserve – Kapaa Section, both of which are located across Mokapu Saddle Road/Mokapu Boulevard from the project area.

The Kalaheo Section is located on the southeast corner of Mokapu Boulevard and Kapaa Quarry Road and is comprised of a 3.33 acre section under jurisdiction of the DLNR Division of State Parks and the a 1.25 acre section within the Kawainui Marsh State Wildlife Sanctuary. The KHCMP's vision for Kalaheo is use of the area as an interpretive center for the Kawainui-Hamakua Complex and a cultural center for canoe/voyaging studies. It includes a launch site for paddling practice on Kawainui Canal and Kailua Bay for small groups, such as school paddling teams. Other envisioned activities envisioned include education and practices related to Hawaiian canoes and voyaging, such as celestial navigation, and potentially a qualified curator organization to maintain the park and administer canoe/voyaging activities. The plan also includes an approximately 1,000 square foot interpretive shelter; an approximately 4,200-square-foot hale waa accommodating canoes and equipment and a large covered lanai space for educational/cultural activities; a small rest room building; an approximately 300-square-foot roofed observation

pavilion; approximately 42 parking stalls with a loading zone; a pedestrian bridge crossing the Kawainui Canal connecting the Kalaheo Section to the levee; and paths and boardwalks.

The Kapaa Section is located between Mokapu Saddle Road and Kapaa Quarry Road. It is approximately 16.9 acres and is under the jurisdiction of the DLNR Division of State Parks. The KHCMP plans a 0.6-mile path and boardwalk system for the Kapaa Section with stunning views across Kawainui to Puuoehu, Olomana, Ulumawao, and the Koolau mountains. Invasive plant species are planned to be removed and replaced with native species on the steep slopes above Kapaa Quarry Road and on the marsh side, where it will form a protective buffer for the marsh.

The proposed project is in conformance with the Kawainui-Hamakua Complex Master Plan. However, the DOE should coordinate with the State DLNR to ensure that the two existing drainage swales crossing the Kalaheo and Kapaa sections, which carry flow from the project area, are maintained.

3.7 City and County of Honolulu Zoning

Chapter 21 of the Revised Ordinances of Honolulu (ROH), Land Use Ordinance (LUO), sets forth the City's zoning district classifications and prescribes the permitted land uses and activities within those designations. The proposed project is within the P-1 Preservation district and the R-7.5 Residential district, with TMK 4-4-034:028 entirely in the former and TMK 4-4-034:024 entirely in the latter. TMK 4-4-034:029 is within the P-1 and P-2 zones; however, this section of the school is not within the project area. See **Figure 3-3**. The LUO states the following regarding the Preservation and Residential districts:

Sec. 21-3.40 Preservation districts--Purpose and intent.

(a) The purpose of the preservation districts is to preserve and manage major open space and recreation lands and lands of scenic and other natural resource value.

(b) It is intended that all lands within a state designated conservation district be zoned P-1 restricted preservation district.

(d) Should lands be removed from either the state-designated conservation district or from federal jurisdiction, all uses, structures and development standards shall be as specified for the P-2 general preservation district.

(e) It is also the intent that lands designated urban by the state, but well suited to the functions of providing visual relief and contrast to the city's built environment or serving as outdoor space for the public's use and enjoyment be zoned P-2 general preservation district. Areas unsuitable for other uses because of topographical considerations related to public health, safety and welfare concerns shall also be placed in this district.

Sec. 21-3.40-1 Preservation uses and development standards.

(a) Within the P-1 restricted preservation district, all uses, structures and development standards shall be governed by the appropriate state agencies.

(c) Within the P-2 general preservation district, permitted uses and structures shall be as enumerated in Table 21-3.

(d) Within the P-2 general preservation district, development standards shall be as enumerated in Table 21-3.1.

(e) Additional Development Standards.
  (1) Height. The maximum height may be increased from 15 to 25 feet if height setbacks are provided.
  (2) Height Setbacks. Any portion of a structure exceeding 15 feet shall be set back from every side and rear buildable area boundary line one foot for each two feet of additional height above 15 feet.

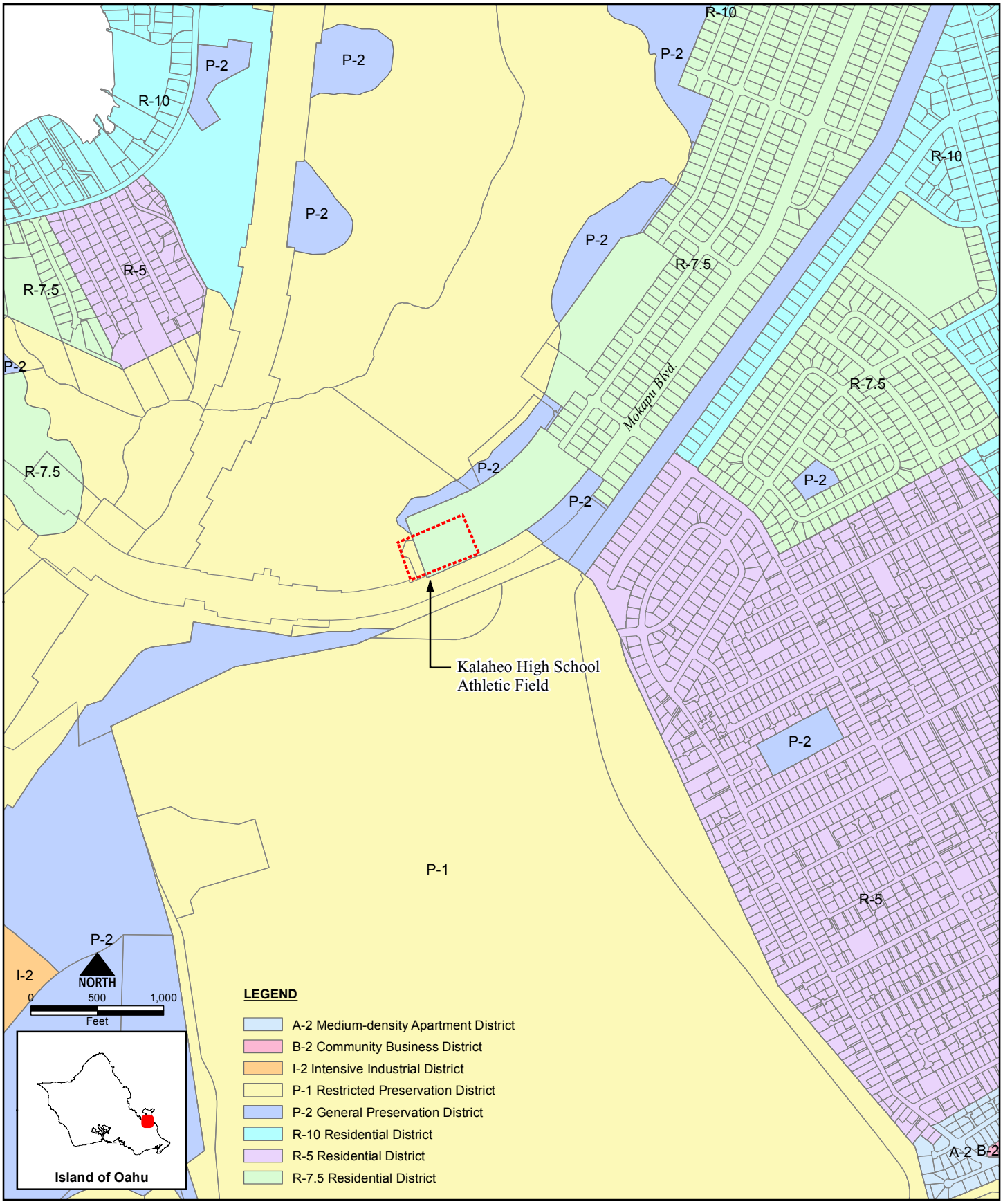
Sec. 21-3.70 Residential districts--Purpose and intent.

(a) The purpose of the residential district is to allow for a range of residential densities. The primary use shall be detached residences. Other types of dwellings may also be allowed, including zero lot line, cluster and common wall housing arrangements. Nondwelling uses which support and complement residential neighborhood activities shall also be permitted.
(c) The intent of the R-7.5, R-5 and R-3.5 districts is to provide areas for urban residential development.

Sec. 21-3.70-1 Residential uses and development standards.

(a) Within the residential districts, permitted uses and structures shall be as enumerated in Table 21-3.
(c) Additional Development Standards.
  (1) Maximum Height. The maximum height of structures shall be determined by the building envelope created as the result of the intersection of two planes. The first plane shall be measured horizontally across the parcel at 25 feet above the high point of the buildable area boundary line. The second plane shall run parallel to grade, as described in Section 21-4.60(b), measured at a height of 30 feet. If the two planes do not intersect, then the building envelope shall be determined by the first plane (see Figure 21-3.10).
  (2) Height Setbacks.
    (A) Any portion of a structure exceeding 15 feet shall be set back from every side and rear buildable area boundary line one foot for each two feet of additional height over 15 feet (see Figure 21-3.10); and
    (B) Any portion of a structure exceeding 20 feet shall be set back from the front buildable area boundary line one foot for every two feet of additional height over 20 feet.

Per Section 21-3.40-1(a), all uses, structures and development within the P-1 designation shall be governed by the appropriate State agencies. As discussed in Section 3.2, the State Land Use Commission determined that the proposed project is entirely within the Urban State Land Use district. Per Section 21-3.70(a), non-dwelling uses which support and complement residential neighborhood activities shall be permitted. Per 21-3.70-1(a), within residential districts, permitted uses and structures shall be as enumerated in Table 21-3. Table 21-3 indicates that for R-7.5 zoning districts, under Social and Civic Service, public uses and structures are permitted uses. Structures for a public high school fall under these categories. Therefore, the proposed project is in conformance with the City and County of Honolulu LUO.



Kalaheo High School Athletic Field Improvements
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CITY & COUNTY OF HONOLULU ZONING MAP

FUKUNAGA & ASSOCIATES, INC.

Figure 3-3

3.8 Coastal Zone Management Program

Hawaii's Coastal Zone Management (CZM) Program was approved in 1977 though HRS Chapter 205A subsequent to the passage of the Federal CZM Act in 1972. The program was enacted to provide a common focus for State and County actions dealing with land and water uses and activities. It is administered by the State Department of Business, Economic Development and Tourism (DBEDT), Office of Planning; however, each County has been delegated local authority and is responsible for issuing permits for activities within its lands. The permit associated with the CZM relevant to this project is the Special Management Area (SMA). The SMA is a land area extending inland from the shoreline as delineated by the maps developed through the CZM program in which development is regulated. Permit requirements are set forth in ROH Chapter 25 and is under the jurisdiction of the DPP.

As shown in **Figure 3-4**, the greater part of the project area is within the SMA. According to the SMA Ordinance, only actions considered a development are subject to a SMA permit. This project is considered a development because of the following:

> ***Sec. 25-1.3 Definitions.***
> "Development" means any of the uses, activities or operations on land; in or under water, within the special management area that are included below, but not those uses, activities, or operations excluded in paragraph (2).
> (1) "Development" includes but is not limited to the following:
> (B) Grading, removing, dredging, mining or extraction of any materials;
> (E) Construction, reconstruction, demolition or alteration of the size of any structure.

In a letter dated May 8, 2015, the DPP confirmed that a SMA major permit would be required for this project because the construction cost will exceed $500,000. Preparation of this Environmental Assessment is one of the requirements of the SMA permitting process.

Chapter 205A also requires legal and operational compliance with CZM objectives and policies as described in §205A-2. These objectives and policies applicable to the proposed project are indicated in **Table 3-1**.

Table 3-1: Coastal Zone Management Progam Objectives

Objective	Description	Applicable
Recreational resources	Provide coastal recreational opportunities accessible to the public.	No
Historic resources	Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.	Yes
Scenic and open space resources	Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.	Yes
Coastal ecosystems	Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.	Yes
Economic uses	Provide public or private facilities and improvements important to the State's economy in suitable locations.	No
Coastal hazards	Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.	No
Managing development	Improve the development review process, communication, and public participation in the management of coastal resources and hazards.	No
Public participation	Stimulate public awareness, education, and participation in coastal management.	No
Beach protection	Protect beaches for public use and recreation.	No
Marine resources	Promote the protection, use, and development of marine and coastal resources to assure their sustainability.	No

The policies relevant to the proposed project are as follows:

§205A-2(c)(2) Historic Resources:

(A) Identify and analyze significant archaeological resources;

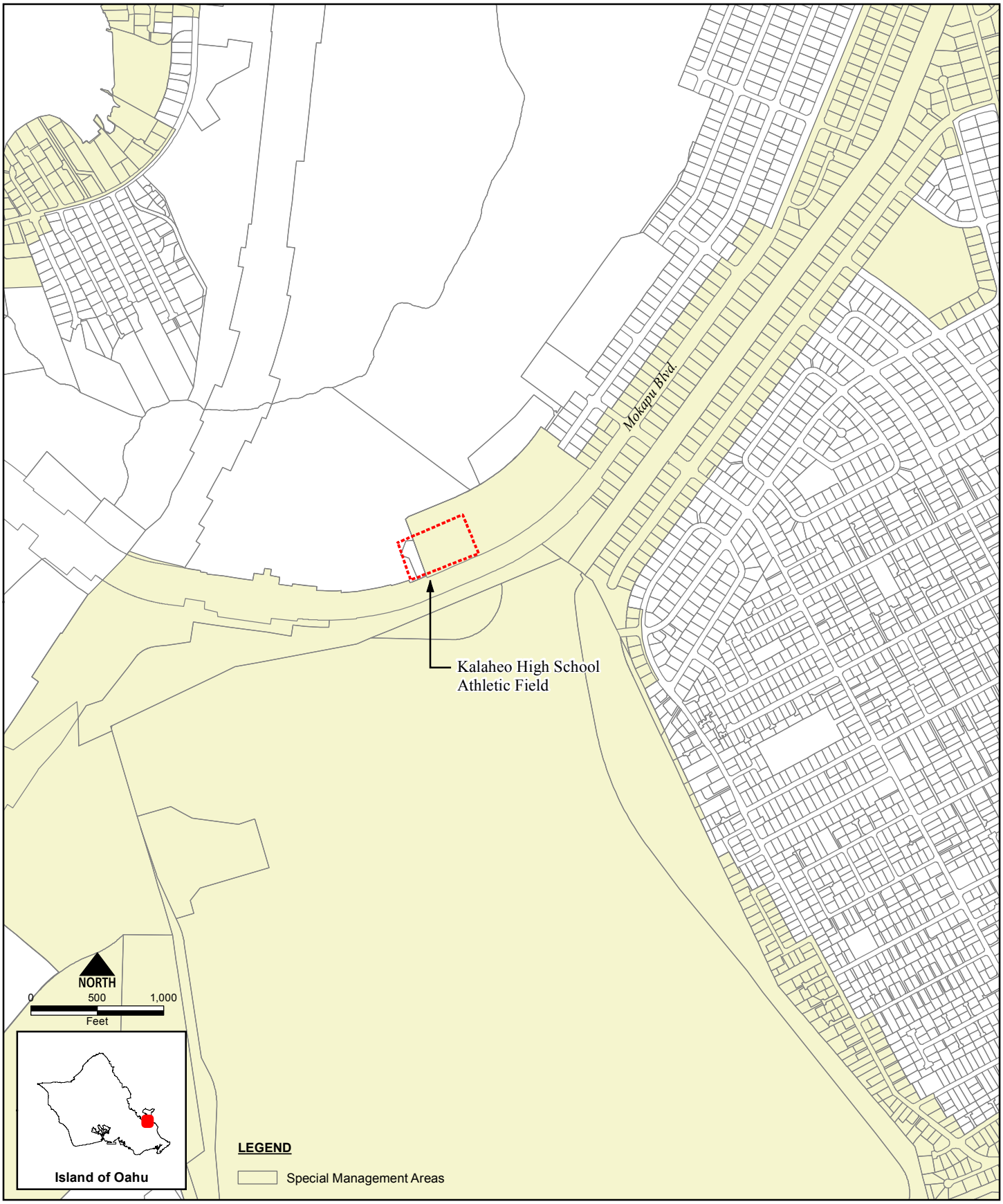
(B) Maximize information retention through preservation of remains and artifacts or salvage operations;

§205A-2(c)(3) Scenic and open space resources:

(C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources;

§205A-2(c)(4) Coastal ecosystems:

(D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs;



Kalaheo High School Athletic Field Improvements
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SMA MAP

FUKUNAGA & ASSOCIATES, INC.

Figure 3-4

As discussed in Section 2.12, SHPD was consulted, and the potential for encountering archaeological and historic properties will be identified, and appropriate mitigation measures will be developed as required. Although the proposed project will include the installation of new structures such as a scoreboard and retaining wall, these will not impact scenic view planes. Finally, an NPDES permit will be obtained for storm water discharges associated with construction, which will ensure that storm water leaving the project site and eventually reaching coastal waters is not polluted and will not impact those waters. Therefore, the proposed project is in conformance with the aforementioned policies.

CHAPTER 4. ALTERNATIVES CONSIDERED

4.1 No Action

Under the No Action alternative, the athletic field would not be in compliance with NFHS requirements and be unsafe if not improved. Per the 1984 Environmental Impact Statement (EIS) for the Revised Ultimate Site Plan (RUSP), because of the lack of facilities, the school's physical education program is limited and some of its athletic teams must go off-campus to practice and to play home games. Without improvements, the school will not be provided with the basic facilities to meet its program needs. The school's football team would be one of these athletic teams.

Without the proposed drainage improvements, the athletic field would continue to the path of travel for part of the overland flow from the adjacent hillside. The drainage improvements could prevent flooding after heavy rain events.

For these reasons, the No Action alternative was rejected.

4.2 Other Alternatives

An evaluation report was prepared for the RUSP where six different alternative site plans were developed and evaluated for the same facility improvements as described in Section 1.3. This evaluation report is included as an appendix to the 1984 EIS. The proposed project is in conformance with the selected RUSP; therefore, development of new alternatives was not necessary for this Environmental Assessment.

CHAPTER 5. DETERMINATION

In accordance with Hawaii Administrative Rules §11-200-12, the potential effects of the proposed project are evaluated for the significance criteria which are summarized as follows:

1. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource:* The proposed project will not cause a loss to or destruction of any natural or cultural resource as discussed in Sections 2.6 and 0.

2. *Curtails the range of beneficial uses of the environment:* Construction of the proposed project and its intended uses will not impact any activities occurring in the area and therefore will not curtail the beneficial uses of the environment.

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 will be conform to Chapter 344, HRS. All permits and approvals in accordance with State and County rules and regulations will be obtained.

4. *Substantially affects the economic welfare, social welfare, and cultural practices of the community or State:* The proposed project is not anticipated to significantly affect the economic or social welfare, or cultural practices of the community or State.

5. *Substantially affects public health:* The proposed project will promote public health by providing better athletic facilities for the students of Kalaheo High School.

6. *Involves substantial secondary impacts, such as population changes or effects on public facilities:* The proposed project will not trigger a population increase nor appreciably affect public facilities or utilities.

7. *Involves a substantial degradation of environmental quality:* The scale of the proposed project is small and it will not degrade environmental quality.

8. *Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions:* The proposed project is part of the Revised Ultimate Site Plan (RUSP) for Kalaheo High School, prepared in 1983 by the DOE. The 1984 Environmental Impact Statement affirmed that the cumulative impact of the RUSP will not significantly affect the environment. The proposed project is not related to other activities in the area such that cumulative effects upon the environment would be considerable.

9. *Substantially affects a rare, threatened, or endangered species, or its habitat:* The proposed project will not substantially affect a rare, threatened, or endangered species, or its habitat, as discussed in Section 2.6.

10. *Detrimentally affects air or water quality or ambient noise levels: The proposed project will not permanently affect air or water quality or ambient noise levels:* Minor short term impacts associated with construction involving air quality, noise and water quality and will be mitigated by appropriate measures required in the construction contract. BMP's will be utilized to mitigate water quality impacts associated with storm water runoff, and DOH regulations for community noise will be followed.

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, fresh water, or coastal waters:* As discussed in Section 2.4, the proposed project is not in an area prone to natural hazards. The proximity to the Kawainui Canal is not expected to have any impact on the proposed project.

12. *Substantially affects scenic vistas and viewplanes identified in county or state plans or studies:* The new structures associated with the proposed project are minor and will not affect scenic vistas and viewplanes.

13. *Requires substantial energy consumption:* Construction of the proposed project and operation and maintenance of the new scoreboard will involve minimal energy consumption.

This Environmental Assessment has henceforth determined that the proposed project will not have significant adverse impacts on the environment, and therefore, an Environmental Impact Statement (EIS) is not warranted. A Finding of No Significant Impact (FONSI) is issued for the proposed project.

CHAPTER 6. CONSULTED PARTIES

The Draft Environmental Assessment was distributed to various agencies and interested parties for review and comment. The agencies and interested parties are listed below. Comments received are incorporated in Appendix A.

Agency or Interested Party	Draft EA Sent	Response with comments	Response w/no comments
Federal Agencies			
Department of the Army	x	x	
U.S. Fish & Wildlife Service	x	x	
U.S. Department of Agriculture, National Resources Conservation Service	x		
State Agencies			
Department of Accounting and General Services	x		x
Department of Agriculture	x		
Department of Business, Economic Development, and Tourism, Office of Planning	x	x	
Department of Business, Economic Development, and Tourism, Land Use Commission	x		
Department of Hawaiian Home Lands	x		x
Department of Health, Clean Air Branch	x		
Department of Health, Clean Water Branch	x	x	
Department of Health, Indoor and Radiological Health Branch	x		
Department of Health, Safe Drinking Water Branch	x		x
Department of Health, Solid and Hazardous Waste Branch	x		
Department of Land and Natural Resources, Land Division	x		
Department of Land and Natural Resources, Division of Engineering Division	route	x	

Agency or Interested Party	Draft EA Sent	Response with comments	Response w/no comments
Department of Land and Natural Resources, Commission on Water Resource Management	route		
Department of Land and Natural Resources, Land Division – Oahu District	route		x
Department of Land and Natural Resources, State Historic Preservation Division	x	x	
Department of Transportation, Director	x		
Office of Hawaiian Affairs	x		x
City and County of Honolulu Agencies			
Board of Water Supply	x	x	
Department of Planning and Permitting	x	x	
Department of Transportation Services	x	x	
Honolulu Fire Department	x		x
Honolulu Police Department	x	x	
Utility Companies			
Hawaiian Telcom, Inc.	x		x
Hawaiian Electric Company, Inc.	x	x	
Oceanic Time Warner Cable	x		x
The Gas Company	x		
Other Individuals/Organizations			
Ahahui Malama I Ka Lokahi	x		
Kawainui Heritage Foundation	undeliverable		

CHAPTER 7. REFERENCES

"2013 State of Hawaii Data Book," prepared by State of Hawaii, Department of Business, Economic Development and Tourism.

City and County of Honolulu, Department of Emergency Management

"Environmental Impact Statement for Kalaheo High School Revised Ultimate Site Plan," prepared for Division of Public Works, Department of Accounting and General Services; by Engineers Surveyors Hawaii, May 1984.

Federal Emergency Management Agency

"General Plan, Objectives and Policies," prepared by City and County of Honolulu, Department of General Planning, 1992 amended October 3, 2002.

Hawaii Administrative Rules

Hawaii Revised Statutes

"Hawaii Stream Assessment: A Preliminary Appraisal of Hawaii's Stream Resources, Report R84," prepared for State of Hawaii, Commission on Water Resource Management; by National Park Service, Hawaii Cooperative Park Service Unit, December 1990.

"Kalaheo High, Trend Report: Educational and Fiscal Responsibility, School Report for School Year 2013-2014," prepared by State of Hawaii, Department of Education.

"Kawainui-Hamakua Complex Master Plan, Draft," prepared for State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife and Division of State Parks; by HHF Planners, May 2014.

"Koolaupoko Sustainable Communities Plan," prepared by City and County of Honolulu, Department of Planning and Permitting, July 2000.

"Koolaupoko Sustainable Communities Plan, Public Review Draft," prepared by City and County of Honolulu, Department of Planning and Permitting, October 2014.

"Koolaupoko Watershed Management Plan, prepared for Honolulu Board of Water Supply; by Townscape, Inc., September 2012.

National Park Service

"Noise Reference Manual, Oahu Edition," prepared by State of Hawaii, Department of Health, Indoor and Radiological Health Branch, February 2008.

"Oahu General Plan, Proposed 2013 Edition, Public Review Draft," prepared for City and County of Honolulu, Department of Planning and Permitting; by Helbert Hastert & Fee Planners, Inc., November 2012.

Revised Ordinances of Honolulu

"Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii," United States Department of Agriculture, Soil Conservation Service, August 1972.

"State of Hawaii, Annual Summary, 2009, Air Quality Data," prepared by State of Hawaii, Department of Health, September 2010.

State of Hawaii, Department of Health

State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division

State of Hawaii, Office of Planning, Hawaii Statewide GIS Program

"Statewide Athletic Plan, Master Planning and School Assessment, Job No. Q61002-12, Master Plan for Athletic Facilities," prepared for State of Hawaii, Department of Education; by Sato & Associates, Inc., February 2016.

"UHERO County Forecast," prepared by University of Hawaii, Economic Research Organization, June 2015.

U.S. Census Bureau

U.S. Census American Community Survey

The Hawaii State Plan – Education

"Water Resource Protection Plan," prepared for State of Hawaii, Commission on Water Resource Management; by Wilson Okamoto Corporation, June 2008.

APPENDIX A

Draft Environmental Assessment Comments
and Responses

Lance Fukumoto

From: Paahana, Jessie K POH <Jessie.K.Paahana@usace.army.mil>
Sent: Friday, April 29, 2016 11:41 AM
To: Lance Fukumoto
Subject: POH-2016-00068 Request for Comments on the Draft EA for the Kalaheo High School Athletic Field Improvements

Importance: High

Aloha, Mr. Fukumoto:

You requested comments on the subject report. No information was included regarding the location of wetlands or other potential waters of the U.S. e.g. streams, canals, etc that may be impacted by the subject improvements. The comments we are able to provide at this time will be cursory in nature and do not represent a formal jurisdictional determination from the U.S. Army Corps of Engineers.

Please be advised that Section 10 of the Rivers and Harbors Act of 1899 requires that a Department of the Army (DA) permit be obtained for certain structures or work in or affecting navigable waters of the United States, prior to conducting the work (33 U.S.C. 403). Section 404 of the Clean Water Act requires that a DA permit be obtained for the discharge of dredged and/or fill material into waters of the U.S., including wetlands and navigable waters of the U.S, prior to conducting the work (33 U.S.C. 1344).

If you would like substantive comments from this agency, please provide information regarding potential waters of the U.S. including wetlands.

Your project has been assigned DA file number POH-2016-00068. Please reference this number in all future correspondence with this office concerning this project.

Please send any correspondence sent after May 31, 2016 to CEPOH-RO@usace.army.mil

Mahalo,
Jessie

Jessie K Paahana, Biologist
Honolulu District, US Army Corps of Engineers Regulatory Office Building 230 Fort Shafter, Hawaii 96858-5440
ph: 808.835.4303

For more information regarding the Regulatory Program at the Honolulu District, please visit our website at http://www.poh.usace.army.mil/Missions/Regulatory.aspx. Please direct all general inquiries to the Regulatory Office central email account at CEPOH-RO@usace.army.mil or via phone at (808) 835-4303.

You are encouraged to provide comments on your experience with the Honolulu District Regulatory Office by accessing our web-based customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0.

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Ms. Jessie Paahana, Biologist
Regulatory Branch
Department of the Army
U.S. Army Engineering District, Honolulu
Building 230
Fort Shafter, HI 96858

Dear Ms. Paahana,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your email dated April 29, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

Per our telephone conversation on May 3, 2016, we understand that a Jurisdictional Determination is not required and further review by the U.S. Army Corps of Engineers will not be necessary.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawai'i 96850

MAR 17 2016

In Reply Refer To:
01EPIF00-2016-TA-0223

Mr. Lance Fukumoto, P.E.
Project Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

Subject: Technical Assistance for Kalaheo High School Athletic Field Improvements, Kailua, O'ahu

Dear Mr. Fukumoto:

The U.S. Fish and Wildlife Service (Service) received your letter on February 25, 2016, requesting our comments on the Draft Environmental Assessment (EA) for the proposed Kalaheo High School Athletic Field Improvements, Kailua, O'ahu [TMK: 4-4-034:024, 028 and 029]. . We understand Fukunaga & Associates, Inc. on behalf of the Department of Education has prepared the Draft EA in accordance with Chapter 343, Hawai'i Revised Statutes. The components of the proposed project includes: a natural grass regulation soccer and football field; one to four foot grade adjustment retaining walls to expand the grass field; new drainage swale and drainage system improvements; concrete ramp, walkway, bleachers and piers along the North sideline to accommodate spectators; ball-stopper nets to minimize/prevent errant soccer balls and footballs from going over the chain link fence into the highway area, brush area, and Building M (Industrial Arts) area; new football goal posts, soccer goals, scoreboard and associated electrical work; and an irrigation system, grassing and soil amendments for the new natural grass field. Due to budgetary constraints, lighting is excluded from the proposed project.

We have reviewed the information you provided and pertinent information in our files, including data compiled by the Hawai'i Biodiversity and Mapping Program as it pertains to listed species and designated critical habitat. There is no federally designated critical habitat within the immediate vicinity of the proposed project. Our data indicate the federally endangered Hawaiian stilt or ae'o (*Himantopus mexicanus knudseni*), endangered, Hawaiian common moorhen or 'alae 'ula (*Gallinula chloropus sandvicensis*), endangered Hawaiian petrel or 'ua'u (*Pterodroma sandwichensis*), and the wedge-tailed shearwater or 'ua'u kani (*Puffinus pacificus*), a seabird protected under the Migratory Bird Treaty Act [16 U.S.C. 703-712] (MBTA) could be impacted by components of your project. We offer the following comments for your consideration.

Hawaiian stilt and Hawaiian common moorhen

The Hawaiian stilt and Hawaiian common moorhen occur at various sites within the vicinity of the project area (*e.g.*, Kawainui Marsh, Hamakua Marsh). Hawaiian waterbirds, in particular, the Hawaiian stilt, is known to nest in sub-optimal locations (*e.g.*, any ponding water) if present. Hawaiian waterbirds attracted to sub-optimal habitat may suffer adverse impacts, such as predation, reduced reproductive success due to disturbance within the vicinity of a nest, injury or death from being hit by a vehicle and thus the project may create an attractive nuisance. Therefore, we recommend you design the proposed project in a manner that minimizes the amount of time standing water is present during construction, thereby, reducing the potential to attract waterbirds.

Hawaiian seabirds

Outdoor lighting, such as street lights, can adversely impact migratory seabird species (*e.g.*, wedge-tailed shearwater) found in the vicinity of the proposed project. Seabirds fly at night and are attracted to artificially lighted areas which can result in disorientation and subsequent fallout due to exhaustion or collision with objects such as utility lines, guy wires, and towers that protrude above the vegetation layer. Once grounded, they are vulnerable to predators or often struck by vehicles along roadways. Wedge-tailed shearwater nesting colonies are located on offshore islets and several locations on Oahu and every year many young shearwaters are downed and struck along Oahu roadways. Any increase in the use of night-time lighting, particularly during each year's peak fallout period (September 15 through December 15), could result in additional seabird injury or mortality.

If night-time work is proposed for your project in the future, impacts to seabirds can be minimized by shielding outdoor lights to the maximum extent possible, eliminating night-time construction, and providing all project staff with information about seabird fallout. All lights, including street lights, should be shielded so the bulb can only be seen from below and use the lowest wattage bulbs possible. Should the project include lighting in the future, the project should address all potential impacts to seabirds and outline conservation measures to minimize these impacts.

If it is determined that the proposed project may affect federally listed species, we recommend you contact our office early in the planning process so that we may assist you with the ESA compliance.

General Comments

Hawai'i's native ecosystems are heavily impacted by exotic invasive plants. Whenever possible we recommend using native species for landscaping. If native plants do not meet the landscaping objectives, we recommend choosing species that are thought to have a low risk of becoming invasive. The following websites are good resources to use when choosing landscaping plants: Pacific Island Ecosystems at Risk (http://www.hear.org/Pier/), Weed Risk Assessment for Hawai'i and Pacific Islands (http://www.botany.hawaii.edu/faculty/daehler/wra/) and Global Compendium of Weeds (http://www.hear.org/gcw/).

The proposed project may cause soil erosion and sedimentation. We are attaching the Service's recommended Best Management Practices regarding sedimentation and erosion in aquatic environments. We encourage you to incorporate the relevant practices into your project design.

We appreciate your efforts to conserve Hawaii's natural resources. If you have questions regarding these comments, please contact Leila Gibson, Fish and Wildlife Biologist (phone: 808-792-9400, email: leila_gibson@fws.gov).

Sincerely,

(for)

Aaron Nadig
Island Team Manager
O'ahu, Kaua'i, North Western Hawaiian Islands,
and American Samoa

Enclosure: Service BMPs for erosion and sediment control
CC: Department of Education

U.S. Fish and Wildlife Service
Recommended Standard Best Management Practices

The U.S. Fish and Wildlife Service (USFWS) recommends the following measures to be incorporated into project planning to avoid or minimize impacts to fish and wildlife resources. Best Management Practices (BMPs) include the incorporation of procedures or materials that may be used to reduce either direct or indirect negative impacts to aquatic habitats that result from project construction-related activities. These BMPs are recommended in addition to, and do not over-ride any terms, conditions, or other recommendations prepared by the USFWS, other federal, state or local agencies. If you have questions concerning these BMPs, please contact the USFWS Aquatic Ecosystems Conservation Program at 808-792-9400.

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats beyond the planned project area.

2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods are variable throughout the Pacific islands, we recommend contacting the relevant local, state, or federal fish and wildlife resource agency for site specific guidance.

3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. BMPs should be maintained for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.

4. All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see *http://www.haccp-nrm.org/Wizard/default.asp*) can help to prevent attraction and introduction of non-native species.

5. Project construction-related materials (fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (*e.g.*, with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.

6. Fueling of project-related vehicles and equipment should take place away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.

7. All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or non-invasive vegetation matting, hydro-seeding, etc.

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Aaron Nadig, Island Team Manager
Pacific Islands Fish and Wildlife Office
Fish and Wildlife Service
U.S. Department of the Interior
300 Ala Moana Blvd., Suite 3-122
Honolulu, HI 96814

Dear Mr. Nadig,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 17, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

We have incorporated in Section 2.6, Flora and Fauna, the information provided in your letter regarding potential impact to federally endangered species, including the Hawaiian stilt and Hawaiian common moorhen, and Hawaiian seabirds; and your recommended mitigation measures.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DAVID Y. IGE
GOVERNOR

DOUGLAS MURDOCK
Comptroller

AUDREY HIDANO
Deputy Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810-0119

MAR - 3 2016

(P)1043.6

Mr. Lance Fukumoto, P.E.
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

Subject: Draft Environmental Assessment for
Kalaheo High School Athletic Field Improvements
Kailua, Oahu, Hawaii
TMK: 4-4-034: 024, 028, 029

Thank you for the opportunity to comment on the subject project. We have no comments to offer at this time as the proposed project does not impact any of the Department of Accounting and General Services' projects or existing facilities.

If you have any questions, your staff may please contact Ms. Dora Choy of the Planning Branch at 586-0488.

Sincerely,

JAMES K. KURATA
Public Works Administrator

DC:lnn

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. James Kurata, Administrator
Public Works Division
Department of Accounting and General Services
State of Hawai'i
1151 Punchbowl Street, Room 426
Honolulu, HI 96813

Dear Mr. Kurata,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 3, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We acknowledge that you do not anticipate significant impacts to your projects or existing facilities.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

OFFICE OF PLANNING
STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
DIRECTOR
OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: http://planning.hawaii.gov/

Ref. No. P-15074

March 15, 2016

To: Kathryn S. Matayoshi, Superintendent
Department of Education

From: Leo R. Asuncion, Director

Attention: Cheng-Hsin Chang, Project Manager

Subject: Draft Environmental Assessment – Kalaheo High School Athletic Field Improvements, DOE Job Nos. Q94001-12 and Q94001-13;
Tax Map Key: (1) 4-4-034:024, 028, and 029

Thank you for the opportunity to provide comments on the Draft Environmental Assessment (Draft EA) for the proposed improvements to the Kalaheo High School Athletic Field. The Draft EA review material was transmitted to our office by letter dated February 23, 2016.

It is our understanding that the State of Hawaii, Department of Education (DOE) proposes to improve the existing athletic field at Kalaheo High School. The improvements include re-grading the existing football field, landscaping and irrigation, new bleachers and walkways, and installation of a new retaining wall and drainage facilities.

Due to budgetary constraints, the DOE decided to reconstruct the field as a football/soccer field combination with bleachers, and excluded the lighting and track field from the project, which would have required additional land. The proposed project includes the following improvements:

- Athletic field improvements to provide a natural grass regulation soccer field and a natural grass football field with slope in accordance with latest National Federation of State High School rules and regulations.
- A one-foot to four-foot grade adjustment retaining walls to expand the grass field to accommodate a regulation football and soccer field with required safety clear zones.
- New drainage swale and drainage system improvements.
- Concrete ramp, walkway, bleachers and concrete piers along the North sideline to accommodate spectators.

- Installation of ball-stopper nets to minimize/prevent errant soccer balls and footballs from going over the chain link fencing into the highway area, brush area, and the Building M (Industrial Arts) area.
- Field equipment, including new football goal posts, soccer goals, scoreboard and associated electrical work.
- Irrigation system, grassing and soil amendments for new natural grass athletic field.

The Office of Planning (OP) has reviewed the transmitted material and has the following comments to offer:

1. Section 3.1, pages 3-1 to 3-2 of the Draft EA addresses the project's consistency with many of the objectives and policies of the Hawaii State Plan listed in Hawaii Revised Statutes (HRS) Chapter 226. As stated in the Draft EA, the themes applicable to this project include:

    - HRS § 226-11 – the physical environment, land based, shoreline, and marine resources;
    - HRS § 226-12 – the physical environment – scenic, natural beauty, and historic resources;
    - HRS § 226-13 – the physical environment – land, air, and water quality; and
    - HRS § 226-21 – socio-cultural advancement – education.

2. Section 2.5 (Hydrology), page 2-13; Section 2.7 (Drainage), page 2-14; and Section 2.8 (Water Quality), pages 2-14 to 2-15 examine coastal erosion/sediment loss issues during and after the construction phase; addresses surface water, wetland, and underground water concerns for the marsh and riverine area; and include a discussion on the vegetation in the area that will act as a natural filtration process to safeguard nearby Kawainui Marsh and Maunawili Stream.

3. The Draft EA did not contain an analysis on the project's conformity with the Coastal Zone Management (CZM) objectives and policies found in HRS § 205A-2. Section 3.8, page 3-15 to 3-16, of the Draft EA incorrectly limits the analysis of the CZM program to the Special Management Area and the permit required by the City and County of Honolulu, Department of Planning and Permitting.

    The Final Environmental Assessment must contain a more in-depth analysis as to how this proposed project conforms to the CZM objectives and its supporting policies set forth in HRS § 205A-2. Where a conflict or inconsistency exists, the analysis must describe the extent to which the applicant has reconciled its proposed action with this statute.

    The 10 objectives and policies listed in HRS § 205A-2 include recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses,

coastal hazards, managing development, public participation, beach protection, and marine resources.

4. As stated above, Section 3.1, pages 3-1 to 3-2 includes an analysis of the goals, objectives, and policies of the Hawaii State Plan. However, this is a State DOE sponsored project and may be compatible with State functional plans, strategic programs or projects. The Final EA should include any State functional plans, programs, project objectives, or goals that this project may impact.

If you have any questions regarding this comment letter, please contact Joshua Hekekia of our office at (808) 587-2845.

c: Lance Fukumoto, Fukunaga & Associates

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Leo R. Asuncion, Acting Director
Office of Planning
Department of Business, Economic Development and Tourism
State of Hawai'i
235 South Beretania Street, 6th Floor
Honolulu, HI 96813

Dear Mr. Asuncion,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 15, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

3. We have revised Section 3.8, Coastal Zone Management Program, to include a more in-depth analysis of compliance with the goals and objectives per HRS §205A-2. A table has been added listing the ten objectives and whether or not each is applicable to the proposed project, followed by discussion on those corresponding policies relevant to the proposed project.

4. We have revised Section 3.1, Hawaii State Plan, to include a discussion on the establishment of State functional plans, and specifically, the development of the State Education Functional Plan and the goal contained therein relevant to the proposed project. We have also included a discussion on the Statewide Master Plan for Athletic Facilities strategic plan and its relationship to the proposed project.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DAVID Y. IGE
GOVERNOR
STATE OF HAWAII

SHAN S. TSUTSUI
LT. GOVERNOR
STATE OF HAWAII

JOBIE M. K. MASAGATANI
CHAIRMAN
HAWAIIAN HOMES COMMISSION

WILLIAM J. AILA, JR.
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P. O. BOX 1879
HONOLULU, HAWAII 96805

March 7, 2016

Fukunaga & Associates, Inc.
Attn: Mr. Lance Fukumoto, P.E.
Project Engineer
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

Subject: Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Dear Mr. Fukumoto:

The Department of Hawaiian Home Lands acknowledges receiving the request for comments and input on the proposed project overview. After reviewing the materials submitted, due to its lack of proximity to Hawaiian Home Lands, we do not anticipate any impacts to our lands or beneficiaries from the project.

However, we highly encourage all agencies to consult with Hawaiian Homestead community associations and other (N) native Hawaiian organizations when preparing environmental assessments in order to better assess potential impacts to cultural and natural resources, access and other rights of native Hawaiians.

Mahalo for the opportunity to provide comments. If you have any questions, please call the Planning at 620-9517 or contact via email at dhhl.planning@hawaii.gov.

Sincerely,

Marvin Kaleo Manuel
Acting Planning Program Manager

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. M. Kaleo Manuel, Acting Planning Program Manager
Planning Office
Department of Hawaiian Home Lands
State of Hawai'i
91-5420 Kapolei Parkway
Kapolei, HI 96707

Dear Mr. Manuel,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 7, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We acknowledge that you do not anticipate significant impacts to your lands or beneficiaries.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
EMD/CWB

03004PCTM.16

March 3, 2016

Mr. Lance Fukumoto
Project Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

SUBJECT: Comments on the Draft Environmental Assessment (DEA) for the Kalaheo High School Athletic Field Improvements Kailua, Island of Oahu, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated February 9, 2016, requesting comments on your project. The DOH-CWB has reviewed the subject document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at: http://health.hawaii.gov/epo/files/2013/05/Clean-Water-Branch-Std-Comments.pdf

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), 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.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55).

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for a NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee ($1,000 for an individual NPDES permit or $500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

3. If your project involves work in, over, or under waters of the United States, it is highly recommended that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 835-4303) regarding their permitting requirements.

   Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.

4. Please note that 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. 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.

5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:

   a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects

natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.

b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g. minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.

c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.

e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

If you have any questions, please visit our website at:http://health.hawaii.gov/cwb/, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

ALEC WONG, P.E., CHIEF
Clean Water Branch

CTM:bk

c: EPO #16-062 [via e-mail only]

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Alec Wong, Chief
Clean Water Branch
Department of Health
State of Hawai'i
919 Ala Moana Blvd., Room 301
Honolulu, HI 96814

Dear Mr. Wong,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 3, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

2. A National Pollution Discharge Elimination System (NDPES) permit for Discharges of Storm Water Associated With Construction Activities will be obtained for this project.

3. The proposed project does not involve work in, over, or under waters of the United States. The Army Corps of Engineers, Regulatory Branch was consulted during this EA process and indicated that a Jurisdictional Determination is not required.

5. We believe that the proposed project will protect, restore, and sustain water quality to the maximum extent feasible. Finished contours on the athletic field will facilitate the maximum amount of storm water infiltration. Reuse of excess storm water entering the drainage system would require pumping systems and storage, which is not considered feasible. The irrigation requirement is reduced by storm water infiltration.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

Lance Fukumoto

From: Corrigan, Joan <joan.corrigan@doh.hawaii.gov>
Sent: Friday, March 25, 2016 9:56 AM
To: Lance Fukumoto
Subject: Draft Environmental Assessment Comments

SUBJECT: Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Mr. Fukumoto,

Thank you for the opportunity for the Safe Drinking Water Branch to review the subject document. We do not have any comments.

If you have any questions, feel free to email or call me.

Thank you,

Joan S. Corrigan
Environmental Engineer
Safe Drinking Water Branch | Hawaii Department of Health
919 Ala Moana Blvd., Room 308 | Honolulu, HI 96814
(808) 586-4258 Voice | (808) 586-4351 Fax

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Ms. Joan Corrigan, Environmental Engineer
Safe Drinking Water Branch
Department of Health
State of Hawai'i
919 Ala Moana Blvd., Room 308
Honolulu, HI 96814

Dear Ms. Corrigan,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your email dated March 25, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We acknowledge that you have no comments to offer at this time.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 24, 2016

Fukunaga & Associates, Inc.
Attention: Mr. Lance Fukumoto
1357 Kapiolani Blvd., Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

SUBJECT: Draft Environmental Assessment for Kalaheo High School Athletic Field Improvements; DOE Job Nos. 194001-12 and Q94001-13

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from the (a) Engineering Division and (b) Land Division – Oahu District on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

Russell Y. Tsuji
Land Administrator

Enclosure(s)
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 25, 2016

MEMORANDUM

TO: **DLNR Agencies:**
FR:
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
X Engineering Division
___Div. of Forestry & Wildlife
___Div. of State Parks
X Commission on Water Resource Management
___ Office of Conservation & Coastal Lands
TO: X Land Division – Oahu District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment for Kalaheo High School Athletic Field Improvements; DOE Job Nos. 194001-12 and Q94001-13
LOCATION: Koolaupoko; Island of Oahu; TMK: (1) 4-4-034:024, 028, 029
APPLICANT: Department of Education

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by **March 23, 2016.**

Only one (1) copy of the CD is available for your review in Land Division office, Room 220.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(✓) Comments are attached.

Signed: _____

Print Name: Carty S. Chang, Chief Engineer
Date: 3/1/16

cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/ Russell Y. Tsuji
REF: Kalaheo High School Athletic Field Improvements
Oahu.017

COMMENTS

( ) We confirm that the parcel/project site, according to the Flood Insurance Rate Map (FIRM), is located in Zones X. The National Flood Insurance Program does not regulate developments within Zones X.

(X) According to the Flood Insurance Rate Map (FIRM), the project site is located in Zone X. The National Flood Insurance Program does not regulate developments within Zone X.

( ) The correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ___.

( ) The project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

( ) The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.

( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

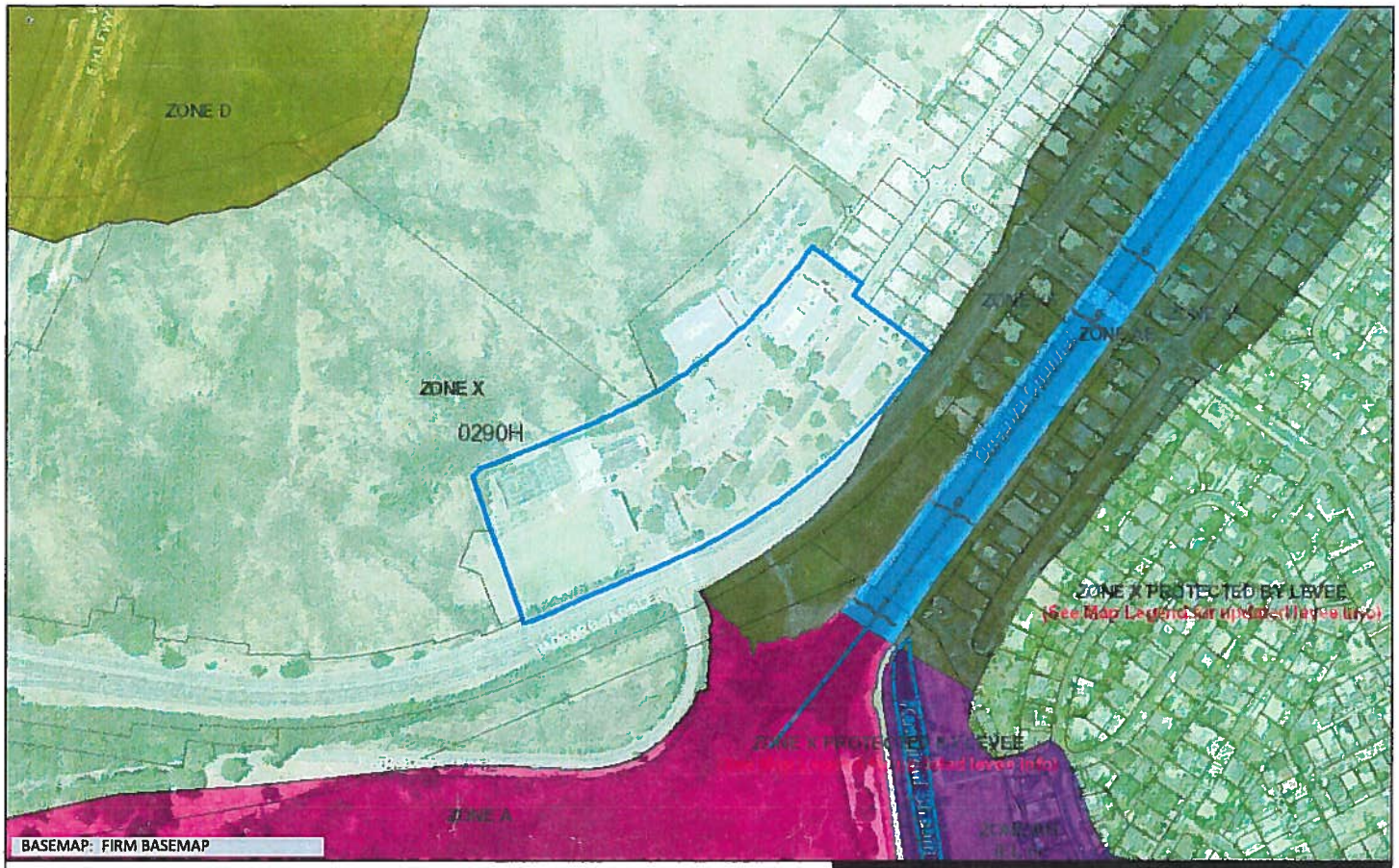
( ) Additional Comments: _____

( ) Other: _____

Should you have any questions, please call Mr. Rodney Shiraishi of the Planning Branch at 587-0258.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 3/1/16



Flood Hazard Assessment Report

www.hawaiinfip.org

TMK (1) 4-4-034:024

Property Information

COUNTY:	HONOLULU
TMK NO:	(1) 4-4-034:024
WATERSHED:	KAWAINUI
PARCEL ADDRESS:	730 ILIAINA ST KAILUA, HI 96734

Notes:

Flood Hazard Information

FIRM INDEX DATE:	NOVEMBER 05, 2014
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL:	15003C0290H
PANEL EFFECTIVE DATE:	NOVEMBER 05, 2014

THIS PROPERTY IS WITHIN A TSUNAMI EVACUTION ZONE: NO
FOR MORE INFO, VISIT: http://www.scd.hawaii.gov/

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO
FOR MORE INFO, VISIT: http://dlnreng.hawaii.gov/dam/

0 400 800 ft

Disclaimer: The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as 'PRELIMINARY', please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND
(Note: legend does not correspond with NFHL)

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100-year), also know as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

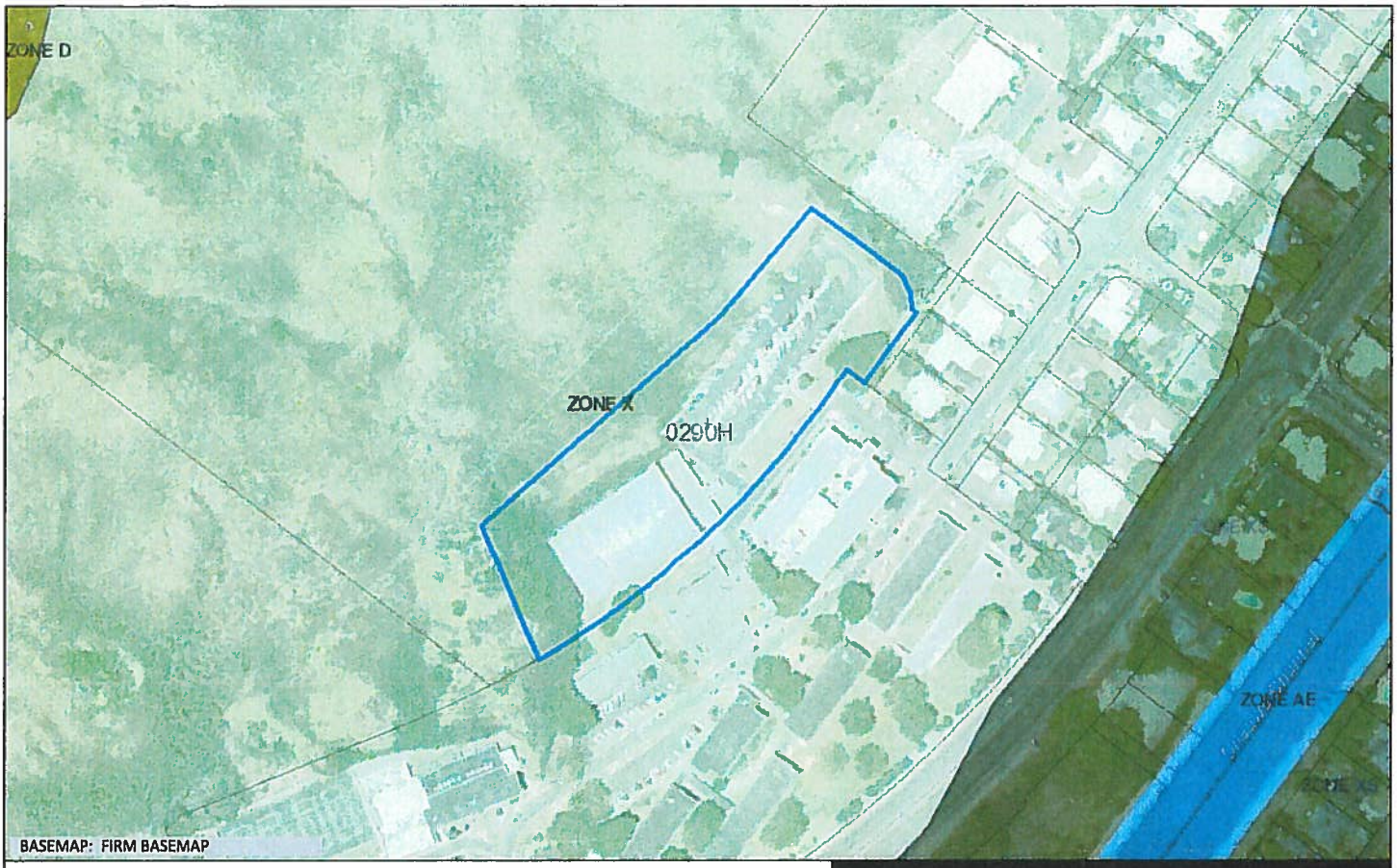
- **Zone A**: No BFE determined.
- **Zone AE**: BFE determined.
- **Zone AH**: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- **Zone AO**: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- **Zone V**: Coastal flood zone with velocity hazard (wave action); no BFE determined.
- **Zone VE**: Coastal flood zone with velocity hazard (wave action); BFE determined.
- **Zone AEF**: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- **Zone XS (X shaded)**: Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- **Zone X**: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- **Zone D**: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.



Flood Hazard Assessment Report

www.hawaiinfip.org

TMK (1) 4-4-034:029

Property Information

COUNTY:	HONOLULU
TMK NO:	(1) 4-4-034:029
WATERSHED:	KAWAINUI
PARCEL ADDRESS:	UNKNOWN ADDRESS KAILUA, HI 96734

Notes:

Flood Hazard Information

FIRM INDEX DATE:	NOVEMBER 05, 2014
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL:	15003C0290H
PANEL EFFECTIVE DATE:	NOVEMBER 05, 2014

THIS PROPERTY IS WITHIN A TSUNAMI EVACUTION ZONE: NO
FOR MORE INFO, VISIT: http://www.scd.hawaii.gov/

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO
FOR MORE INFO, VISIT: http://dlnreng.hawaii.gov/dam/

0 200 400 ft

Disclaimer: The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as 'PRELIMINARY', please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND
(Note: legend does not correspond with NFHL)

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100-year), also know as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- **Zone A:** No BFE determined.
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- **Zone AH:** Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- **Zone AO:** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
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- **Zone AEF:** Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- **Zone XS (X shaded):** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- **Zone X:** Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

- **Zone D:** Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.

Flood Hazard Assessment Report

www.hawaiinfip.org

TMK (1) 4-4-034:028

Property Information

COUNTY:	HONOLULU
TMK NO:	(1) 4-4-034:028
WATERSHED:	KAWAINUI
PARCEL ADDRESS:	UNKNOWN ADDRESS KAILUA, HI 96734

Notes:

Flood Hazard Information

FIRM INDEX DATE:	NOVEMBER 05, 2014
LETTER OF MAP CHANGE(S):	NONE
FEMA FIRM PANEL:	15003C0290H
PANEL EFFECTIVE DATE:	NOVEMBER 05, 2014

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FOR MORE INFO, VISIT: http://www.scd.hawaii.gov/

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO
FOR MORE INFO, VISIT: http://dlnreng.hawaii.gov/dam/

0 100 200 ft

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FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND
(Note: legend does not correspond with NFHL)

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	Zone A: No BFE determined.
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	Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
	Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

	Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities.

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED
LAND DIVISION
2016 MAR -7 AM 7:39
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 25, 2016

MEMORANDUM

TO: **DLNR Agencies:**
___Div. of Aquatic Resources
___Div. of Boating & Ocean Recreation
_X_Engineering Division
___Div. of Forestry & Wildlife
___Div. of State Parks
_X_Commission on Water Resource Management
___ Office of Conservation & Coastal Lands
_X_Land Division – Oahu District
_X_Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Draft Environmental Assessment for Kalaheo High School Athletic Field Improvements; DOE Job Nos. 194001-12 and Q94001-13
LOCATION: Koolaupoko; Island of Oahu; TMK: (1) 4-4-034:024, 028, 029
APPLICANT: Department of Education

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by **March 23, 2016.**

Only one (1) copy of the CD is available for your review in Land Division office, Room 220.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed: TChee

Print Name: Tiffany Chee
Date: 2/29/16

cc: Central Files

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Russell Y. Tsuji, Administrator
Land Division
Department of Land and Natural Resources
State of Hawai'i
1151 Punchbowl Street, Room 220
Honolulu, HI 96813

Dear Mr. Tsuji,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 24, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

We acknowledge your comment that, according to the Flood Insurance Rate Map (FIRM), the project site is located in Zone X. The National Flood Insurance Program does not regulate developments within Zone X. The FIRM map is shown in the EA as Figure 2-5.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DAVID Y. IGE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
KAPOLEI, HAWAII 96707

March 8, 2016

Mr. Chen-Hsin Chang
Department of Education
State of Hawaii
P.O. Box 2360
Honolulu, HI 96804

Log No. 2016.00449
Doc No. 1603GC03
Archaeology
History and Culture

Dear Mr. Chang:

SUBJECT: **Chapter 6E-8 Historic Preservation Review –**
Draft Environmental Assessment, DOE Jobs Nos. Q94001-12 and Q94001-13
Kalaheo High School Athletic Field Improvements
Kailua Ahupuaʻa, Koʻolaupoko District, Island of Oʻahu
TMK: (1) 4-4-034:024, 028, and 029

Thank you for the opportunity to comment and review the document titled *Draft Environmental Assessment, DOE Jobs No. Q94001-12 and Q94001-13, Kalaheo High School Athletic Field Improvements* (Fukunaga and Associates, October 2015). Our office received this submittal on February 25, 2016.

The Department of Education (DOE) proposes to improve the approximate 2.5-acre athletic field within the 19-acre school campus. Kalaheo High School is located along the northwest side of Mokapu Saddle Road and Mokapu Boulevard at the intersection with Kapaa Quarry Road and Iliana Street. The proposed improvement project will be completed in two phases. Project 1 improvements involves installation of a new drainage system, drainage swale, construction of concrete ramp, walkway, bleachers and piers, irrigation system, grassing, and installation of new grass, and installation of retaining walls. Project 2 will involve installation of bleachers for the athletic field and tennis courts.

SHPD's geographical information system (GIS) indicates that Kalaheo High School is in close proximity to Kawainui Marsh and Kaelepulu Stream. In addition, Kawainui Marsh has been determined eligible for the Hawaii Register of Historic Places and the National Register of Historic Places (September 18, 2003; Log No. 20033.1808, Doc No. 0309SC05). SHPD records also indicate numerous archaeological studies have been conducted within Kawainui Marsh and surrounding fringes which have identified and documented the presence of numerous historic properties, including human burials. Recently, two human skeletal fragments were identified in an utility trench along the fringes of Kawainui Marsh. In addition, SHPD records indicate that no archaeological inventory survey has been conducted for the subject parcels, and thus SHPD has no information on whether surface and/or subsurface archaeological historic properties are present. The USDA identifies the soils in the project area as Kawaihapai loam (Foote et al. 1972), a substrate conducive to containing historically-significant deposits, including subsurface cultural layers and human remains/burials.

In addition, SHPD's research indicates that Kawainui and Hamakua Marsh Complex is a RAMSAR registered site #1460. RAMSAR is the oldest of the modern global intergovernmental environmental agreements (treaty) created between concerned countries and Non-Governmental Organizations (NGOs) dealing with the increasing degradation of wetland habitats. RAMSAR recognizes the significance of Wetlands of International Importance. Sacred to Native Hawaiians, the Kawainui Marsh Complex is one of the largest remaining emergent wetland in Hawaiʻi and one of Hawaiʻi's largest remaining Loko Wai or freshwater fishponds.

Based on the above information SHPD has concerns that the proposed project may adversely impact potential subsurface historic properties (cultural deposits and/or human burials). A few of the nearby archaeological studies have documented the presence of cultural deposits and/or burials in both primary and context as well as in areas impacted by utility installation or improvement projects.

SHPD requests that an archaeological inventory survey (AIS) involving subsurface testing be conducted pursuant to Hawaii Administrative Rules (HAR) §13-276, by a qualified archaeologist in order to adequately determine the potential impacts of this project on archaeological historic properties, and to ensure that appropriate mitigation is implemented, if needed. The SHPD website contains a listing of local firms.

SHPD also requests that the project proponent and archaeological firm consult with our office regarding an appropriate testing strategy prior to initiating the AIS.

SHPD looks forward to receiving and reviewing an AIS report meeting the requirements of HAR §13-276-5, as well as any subsequent mitigation plans, as appropriate, based on the survey findings, **prior to project related work proceeding**. SHPD will notify you when the required reports and/or plans have been reviewed and accepted and project work may proceed.

Please contact Kaʻāhiki Solis at (808) 692-8030 or at Sheleigh.Solis@hawaii.gov for any concerns regarding History and Culture, including consultation with Native Hawaiian Organizations (NHOs), cultural sites and burials. Please contact me at Susan.A.Lebo@hawaii.gov or at (808) 692-8019 for any questions concerning archaeological resources or this letter.

Aloha,

Susan A. Lebo

Susan A. Lebo, PhD
Archaeology Branch Chief

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 3, 2016

Susan A. Lebo, Ph.D.
Archaeology Branch Chief
State Historic Preservation Division
Department of Land & Natural Resources, State of Hawaii
Kakuhihewa Building
601 Kamokila Blvd., Suite 555
Kapolei, HI 96707

Re: Chapter 6E-8 Historic Preservation Review –
Kalaheo High School Athletic Field Improvements
Draft Environmental Assessment
DOE Jobs Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Dear Dr. Lebo:

Thank you for your letter dated March 8, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We also very much appreciate you and Dr. Jane Allen meeting with us at your office on April 27, 2016 to go over the proposed development plans. We acknowledge your concerns that the proposed project may adversely impact potential subsurface historic properties (cultural deposits and/or human burials) based upon knowledge of nearby archaeological studies that have documented the presence of cultural deposits and/or burials in both primary and context as well as in areas impacted by utility installation or improvement projects. However, as we discussed at your office, the current project plans would likely limit exposure to such cultural deposits/burials as planned ground altering activities will be conducted mostly in fill layers, with excavations not being very deep within this built environment.

Per our conversation last week, we would like to offer additional information regarding the project area that we believe demonstrates the reduced likelihood of adverse impact of the project on potential subsurface historic properties.

The original field and play courts north of the field were constructed in 1965 as shown on Figure 1 on what appears to be undisturbed land. In 1975, the field was extended to the west along with installation of a retaining wall adjacent the northwest corner of the field as shown on Figure 2. Existing and finished contours are also shown.

As evident by the original and finished contours on Figure 1, a considerable portion of the existing athletic field was constructed on fill of depths up to 10 feet, increasing

towards the south and the east. Trenching for the proposed project to install subsurface irrigation infrastructure is not expected to extend greater than 2 feet in depth as shown on Figures 3 and 4 and therefore is not expected to have any impact on subsurface historic properties in the portion of the field constructed on fill of depths 2 feet and greater. Circular footings to support the proposed scoreboard and goal posts may extend into native soils. Excavation to install these structures will be closely monitored by field crew, and if anything of cultural significance is identified, work will cease immediately and our archaeological consultant, Scientific Consultant Services, Inc., will be summoned to the site to identify the find.

Furthermore, sections of the project area were previously cut down up to 15 feet from original grades. As shown on Figures 1 and 2, these areas of cut were located between the existing field and the play courts and in the vicinity of the retaining wall adjacent the northwest corner of the field. Some of the footings for the proposed bleachers and part of the proposed retaining wall will be founded on ground that has been previously cut over 10 feet from original grades as shown on Figures 3 and 4. Therefore, impacts to subsurface historic properties of installation of these structures are not expected.

In light of this additional information, we respectfully request that your reconsider your recommendation that an archaeological inventory survey (AIS) involving subsurface testing be conducted for this project.

Please contact our office if you have any questions or concerns.

Regards,

Lance B. Fukumoto
Project Engineer

Encl.

PHONE (808) 594-1888

FAX (808) 594-1938

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
560 N. NIMITZ HWY., SUITE 200
HONOLULU, HAWAI'I 96817

HRD 16-7774

March 7, 2016

Mr. Lance Fukumoto, P.E.
Project Engineer
Fukunaga & Associates, Inc.
1357 Kapi'olani Boulevard, Suite 1530
Honolulu, Hawai'i 96814

Re: Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua Ahupua'a, Ko'olaupoko Moku, O'ahu Mokupuni
TMK: (1) 4-4-034:024, 028, 029

Aloha Mr. Fukumoto:

The Office of Hawaiian Affairs (OHA) received your letter dated February 23, 2016, on the above-titled project. Given the project descriptions provided, our agency has no comments at this time. Should you have any questions, please contact Everett Ohta at 594-0231 or everetto@oha.org.

'O wau iho nō me ka 'oia 'i'o,

Kamana'opono M. Crabbe, Ph.D.
Ka Pouhana, Chief Executive Officer

KC:acm

**Please address replies and similar, future correspondence to our agency:*
Dr. Kamana'opono Crabbe
Attn: OHA Compliance Enforcement
560 N. Nimitz Hwy., Ste. 200
Honolulu, Hawai'i 96817

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Kamana'opono M. Crabbe, Chief Executive Officer
Office of Hawaiian Affairs
560 N. Nimitz Hwy, Suite 200
Honolulu, HI 96817

Dear Mr. Crabbe,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 7, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We acknowledge that you have no comments to offer at this time.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843

March 15, 2016

Mr. Lance Fukumoto
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

Subject: Your Letter Dated February 23, 2016 Requesting Comments on the Draft Environmental Assessment for the Proposed Kalaheo High School Athletic Field Improvements – Tax Map Key: 4-4-034: 024, 028, 029

Thank you for the opportunity to comment on the proposed athletic field improvements.

The existing water system is adequate to accommodate the proposed athletic field improvements. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply (BWS) reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

The developer should investigate the feasibility of using non-potable water for irrigation of the proposed athletic field improvements. If non-potable water is either unavailable or infeasible, a report of the investigation including proposed irrigation demands should be submitted to us before we will consider the use of potable water.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

The proposed project is subject to BWS Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the Building Permit Applications.

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.

Very truly yours,

For ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Ernest Y. W. Lau, Manager and Chief Engineer
Board of Water Supply
City and County of Honolulu
630 S. Beretania St.
Honolulu, HI 96813

Dear Mr. Lau,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 15, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

There is no source of non-potable water available in the area to supply the irrigation demands. The irrigation system for the proposed project will replace the existing irrigation system for the athletic field. Existing demands for the existing irrigation system are not known; however, anticipated maximum "off peak" demands for the proposed system are a flow rate of 72 GPM and an average day demand of 21,165 GPD. These details have been articulated in Section 2.14, Utilities.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

KIRK CALDWELL
MAYOR

GEORGE I. ATTA, FAICP
DIRECTOR

ARTHUR D. CHALLACOMBE
DEPUTY DIRECTOR

2016/ELOG-463 (AB)

March 24, 2016

Mr. Lance Fukumoto
Fukunaga and Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

SUBJECT: Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
730 Iliaina Street - Kailua
Tax Maps 4-4-34: 24, 28, 29

The following comprises the Department of Planning and Permitting (DPP) comments on the Draft Environmental Assessment (EA) for the subject Project.

A. Land Use Permits Division (LUPD) Comments:

1. The Project Summary should indicate that a portion of the Project is within the State Conservation District.

2. Please provide a general description of the various structures being proposed (bleachers, ball stopper, goal post, soccer goal, and scoreboard), including anticipated height, lot coverage, and installation method. A general site plan should show the anticipated location of these structures.

3. Site plans should clearly show the Land Use Ordinance (LUO Revised Ordinances Hawaii (ROH) Chapter 21) zoning district boundaries.

4. Please clarify Section 3.7, "City and County of Honolulu Zoning." This section should discuss specifically how the Project conforms to the standards of the LUO, including the development standards for the R-7.5 Residential and P-2 General Preservation Districts.

5. If a Special Management Area (SMA) Use Permit is required, the permit application materials should include the Final EA along with a separate narrative with information specifically focused on the Project's potential coastal impacts and proposed mitigative measures, in compliance with ROH Chapter 25 and Hawaii Revised Statutes, Chapter 205-A.

6. If any of the proposed improvements do not meet the standards of the LUO, a Waiver permit may be required.

Please contact Alex Beatty of our Land Use Approvals Branch at 768-8032 should you have any questions concerning LUPD comments.

B. Civil Engineering Branch (CEB) Comments: Provide a list of required permits/approvals. A grading permit will be required. Please contact Mel Takakura at 768-8104 should you have any questions concerning the CEB comments.

Thank you for the opportunity to review and comment on the subject Draft EA.

Very truly yours,

FOR. George I. Atta, FAICP
Director

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. George Atta, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

Dear Mr. Atta,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 24, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

1. As explained in Section 3.2, State Land Use Law, per the Land Use Commission, the entire project area is within the Urban State Land Use District.

2. Section 1.4, Project Description, has been revised to include details such as length, width, height, depth, and installation where applicable; for the various structures. Figure 1-1 shows the location of these structures.

3. Figure 1-1 has been revised to show the zoning district boundaries.

4. Section 3.7, City and County of Honolulu Zoning, has been revised to include the Land Use Ordinance description of the Residential district and how the proposed project conforms to its development standards.

5. A Special Management Area Use (Major) Permit will be required for this project. Details will be coordinated with the Department of Planning and Permitting.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, THIRD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

KIRK CALDWELL
MAYOR

MICHAEL D. FORMBY
DIRECTOR

MARK N. GARRITY, AICP
DEPUTY DIRECTOR

TP2/16-645257R

March 23, 2016

Mr. Lance Fukumoto, P.E.
Project Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

SUBJECT: Draft Environmental Assessment (DEA) for Kalaheo High School Athletic Field Improvements, Kailua, Oahu, Hawaii

In response to your letter dated February 23, 2016, we have the following comments:

1. The DEA should discuss any short-term traffic impacts the project may have on any surrounding City roadways and measures to mitigate these impacts.

2. The area Neighborhood Board, as well as the area residents, businesses, emergency personnel (fire, ambulance and police), Oahu Transit Services, Inc. (TheBus), etc., should be kept apprised of the details of the proposed project and the impacts that the project may have on the adjoining local street area network.

3. Construction materials and equipment should be transferred to and from the project site during off-peak traffic hours (8:30 a.m. to 3:30 p.m.), but not during school dismissal periods for the safety of the students and to minimize any possible disruption to traffic on the local streets.

Thank you for the opportunity to review this matter. Should you have any questions, please contact Renee Yamasaki of my staff at 768-8383.

Very truly yours,

Michael D. Formby
Director

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Michael D. Formby, Director
Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, HI 96813

Dear Mr. Formby,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 23, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

Section 2.15, Transportation, has been revised to include a brief discussion on the path of travel to the project site, and the character of construction vehicle traffic and its anticipated impact. Comments 2 and 3 from your letter have been added to Section 2.14 along with the recommendation that these be addressed by the contractor during construction.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

HONOLULU FIRE DEPARTMENT

CITY AND COUNTY OF HONOLULU

636 South Street
Honolulu, Hawaii 96813-5007
Phone: 808-723-7139 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd

KIRK CALDWELL
MAYOR

MANUEL P. NEVES
FIRE CHIEF

LIONEL CAMARA JR.
DEPUTY FIRE CHIEF

March 15, 2016

Mr. Lance Fukumoto, P.E.
Project Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

Subject: Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
Tax Map Keys: 4-4-034: 024, 028, and 029

In response to your letter dated February 23, 2016, regarding the above-mentioned subject, the Honolulu Fire Department determined that there will be no significant impact to fire department services.

Should you have questions, please contact Battalion Chief Terry Seelig of our Fire Prevention Bureau at 723-7151 or tseelig@honolulu.gov.

Sincerely,

Socrates D. Bratakos

SOCRATES D. BRATAKOS
Assistant Chief

SDB/TC:bh

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Socrates D. Bratakos, Assistant Chief
Honolulu Fire Department
City and County of Honolulu
636 South Street
Honolulu, HI 96813

Dear Mr. Bratakos,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 15, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We acknowledge that you do not anticipate significant impacts to fire department services.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

POLICE DEPARTMENT

CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET · HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 · INTERNET: www.honolulupd.org

KIRK CALDWELL
MAYOR

LOUIS M. KEALOHA
CHIEF

MARIE A. McCAULEY
CARY OKIMOTO
DEPUTY CHIEFS

OUR REFERENCE MT-DK

March 7, 2016

Mr. Lance Fukumoto, P.E.
Project Engineer
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

This is in response to your letter of February 23, 2016, requesting comments on a Draft Environmental Assessment (EA) for the Kalaheo High School Athletic Field Improvements project located in Kailua.

The Honolulu Police Department (HPD) has reviewed the information provided and has concerns regarding the safe flow of vehicular traffic along Mokapu Saddle Road in the area of Kapaa Quarry Road. Although the Draft EA mentions road or lane closures are not expected during the construction, the HPD recommends that the contractor provide a sufficient amount of traffic control devices (e.g., cones, flag persons, special duty officers, etc.) to accommodate construction vehicles and motorists traveling in the area during the daytime hours to avoid any traffic congestion. These traffic control devices will ensure a safe means of ingress/egress for the construction vehicles, motorists, and pedestrians in the vicinity.

If there are any questions, please call Major Gordon Gomes of District 4 (Kailua-Kaneohe-Kahuku) at 723-8639.

Thank you for the opportunity to review this project.

Sincerely,

LOUIS M. KEALOHA
Chief of Police

By
MARK TSUYEMURA
Management Analyst VI
Office of the Chief

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Louis M. Kealoha, Chief of Police
Honolulu Police Department
City and County of Honolulu
801 South Beretania St.
Honolulu, HI 96813

Dear Mr. Kealoha,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 7, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

Section 2.15, Transportation, has been revised to indicate your recommendation that the contractor provide a sufficient amount of traffic control devices (e.g. cones, flag persons, special duty officers, etc.) to accommodate construction vehicles and motorists traveling in the area during the daytime hours to avoid any traffic congestion. Furthermore, Section 2.16, Police Services, has been revised to include the requirement that the contractor coordinate with the Honolulu Police Department during construction.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

Lance Fukumoto

From: Fukunaga Office
Sent: Friday, February 26, 2016 3:38 PM
To: Lance Fukumoto
Subject: FW: Kalaheo High School Athletic Field Improvements - Draft EA

See below email

Thank you,
Jasmyn Honda
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Ste. 1530
Honolulu, HI 96814
Phone: (808) 944-1821
Fax: (808) 946-9339
Email: jhonda@fukunagaengineers.com

From: Liu, Rouen [mailto:rouen.liu@hawaiianelectric.com]
Sent: Friday, February 26, 2016 3:22 PM
To: Fukunaga Office <office@fukunagaengineers.com>
Cc: Kuwaye, Kristen <kristen.kuwaye@hawaiianelectric.com>
Subject: Kalaheo High School Athletic Field Improvements - Draft EA

Dear Mr. Lance Fukumoto,

Thank you for the opportunity to comment on the subject project. Hawaiian Electric Company has no objection to the project. Should HECO have existing easements and facilities on the subject property, we will need continued access for maintenance of our facilities. We appreciate your efforts to keep us apprised of the subject project in the planning process. As the proposed Kalaheo High School Athletic Field project comes to fruition, please continue to keep us informed. Further along in the design, we will be better able to evaluate the effects on our system facilities.
If you have any questions, please call me at 1-808-543-7245.

Sincerely,
Rouen Q. W. Liu
Permits Engineer
Hawaiian Electric Company, Inc.
Tel: (808) 543-7245
Email: Rouen.liu@hawaiianelectric.com

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Rouen Q. W. Liu, Permits Engineer
Hawaiian Electric Company, Inc.
820 Ward Ave., 4th floor
Honolulu, HI 96814

Dear Mr. Liu,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your email dated February 26, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

The contractor will be required to coordinate with Hawaiian Electric Company prior to, and during, construction.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

Hawaiian Telcom

March 24, 2016

Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814
Attention: Mr. Lance Fukumoto, P.E.

Dear Mr. Fukumoto:

Subject: **Draft Environmental Assessment**
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the subject project.

There are no apparent conflicts with Hawaiian Telcom's underground facilities within the project site. However, field locating should be done prior to any work commencing.

If you have any questions or require assistance in the future on this project, please call me at 546-7761.

Sincerely,

Les Loo
Network Engineer – OSP Engineering
Network Engineering & Planning

cc: File [Kaneohe]

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Les Loo, Network Engineer - OSP Engineering
Network Engineering & Planning
Hawaiian Telecom, Inc.
1177 Bishop Street
Honolulu, HI 96813

Dear Mr. Loo,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 24, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We acknowledge that you do not have any facilities in the area and have no comments to offer at this time.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

Lance Fukumoto

From: Fukunaga Office
Sent: Friday, February 26, 2016 8:02 AM
To: Lance Fukumoto
Subject: FW: Kalaheo High School Athletic Field Improvements - DOE job# Q94001-12 & Q94001-13

See below email.

Thank you,
Jasmyn Honda
Fukunaga & Associates, Inc.
1357 Kapiolani Blvd., Ste. 1530
Honolulu, HI 96814
Phone: (808) 944-1821
Fax: (808) 946-9339
Email: jhonda@fukunagaengineers.com

From: Lam, Raymond [mailto:raymond.lam@twcable.com]
Sent: Friday, February 26, 2016 7:06 AM
To: Fukunaga Office <office@fukunagaengineers.com>
Subject: Kalaheo High School Athletic Field Improvements - DOE job# Q94001-12 & Q94001-13

Lance,
FYI

Oceanic Time Warner Cable has no facilities in the area and have no comments related to this project.

Thank You,

Raymond Lam
OSP Engineer
Oceanic Time Warner Cable
Office: (808)625-8457
Cell: (808)285-9460

1357 KAPIOLANI BLVD. / SUITE 1530 / HONOLULU, HI 96814 / PH. (808) 944-1821 / FAX (808) 946-9339 / office@fukunagaengineers.com

May 6, 2016

Mr. Raymond Lam, OSP Engineer
Engineering
Oceanic Time Warner Cable
200 Akamainui Street
Mililani, HI 96789

Dear Mr. Lam,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your email dated February 26, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. We acknowledge that you do not have any facilities in the area and have no comments to offer at this time.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
File:

EPO 16-062

March 8, 2016

Mr. Lance Fukumoto
Fukunaga & Associates, Inc.
1357 Kapiolani Boulevard, Suite 1530
Honolulu, Hawaii 96814

Dear Mr. Fukumoto:

SUBJECT: Draft Environmental Assessment (DEA) for Kalaheo High School Athletic Field Improvements

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/Non-343-EA-EIS-Notices/2016-02-23-OA-Chapter-25-DEA-Kalaheo-High-School-Athletic-Field-Improvements.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. EPO has recently prepared draft Environmental Health Management Maps for each county. They are online at: http://health.hawaii.gov/epo/egis

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

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 Office of Environmental Quality Control (OEQC) viewer at: http://eha-web.doh.hawaii.gov/oeqc-viewer This viewer geographically shows where previous Hawaii Environmental Policy Act (HEPA) {Hawaii Revised Statutes, 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.

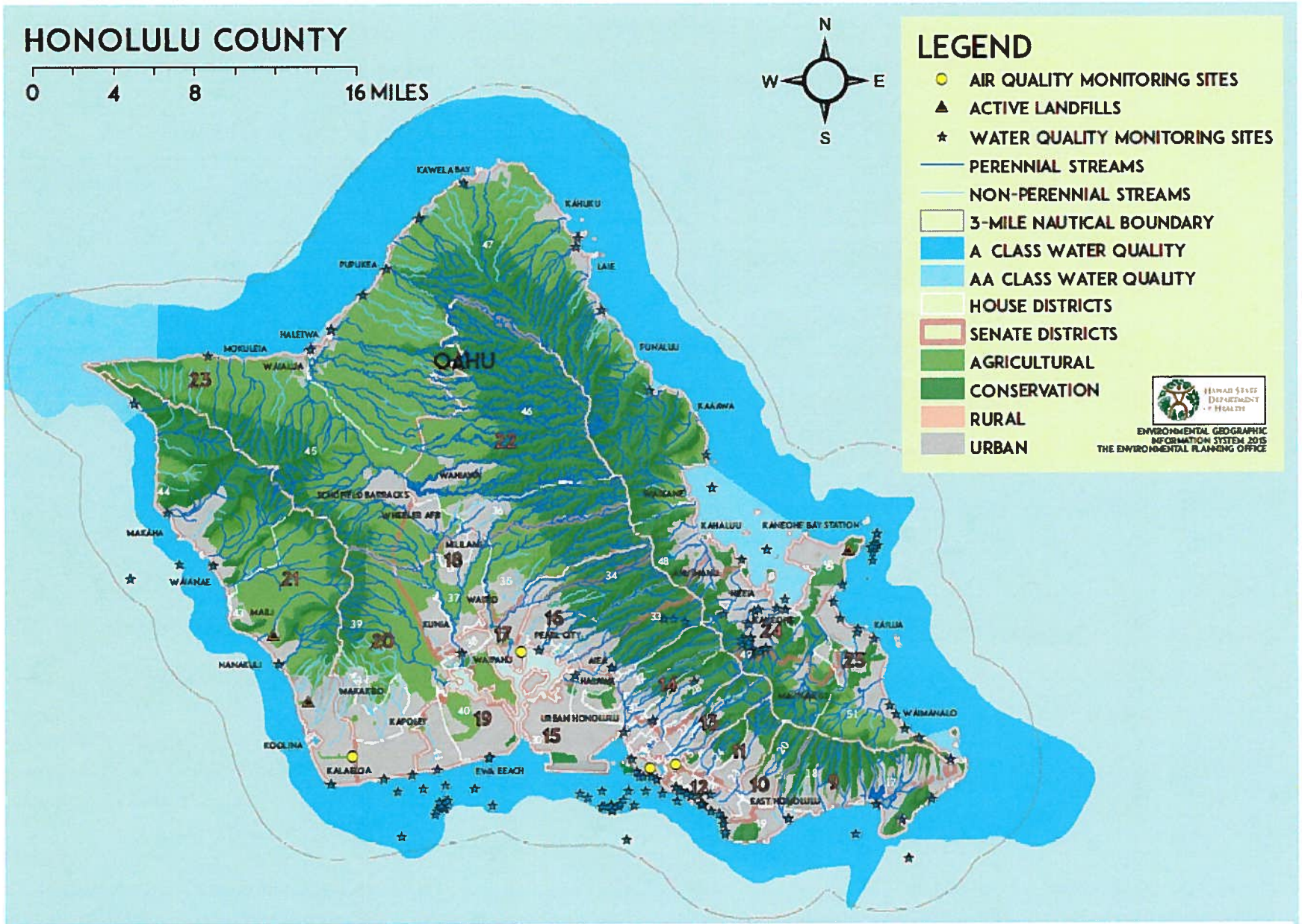
Mahalo nui loa,

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

LM:nn

Attachment 1: EPO Draft Environmental Health Management Map
Attachment 2: Recycled Water Use Map
Attachment 4: OEQC Viewer Map of Area
Attachment 4: U.S. EPA EJSCREEN Report

c: Cheng-Hsin Chang, DOE
DOH: CWB {via email only}



ENVIRONMENTAL HEALTH MANAGEMENT ON OAHU

MAP INTENDED FOR ILLUSTRATIVE PURPOSES ONLY. SITE LOCATIONS ARE APPROXIMATE.


Recycled Water Use Maps
Iliaina St, Honolulu, Hawaii, USA
Search result
730 Iliaina St, Honolulu, Hawaii, 96734
Show more results
Legend
Parcels - Hawaii Statewide - Parcels_Statewide
reuse_mngment_Zones
No Restrictions
Conditional
Restricted
esri
Esri, HERE, DeLorme, NGA, USGS

hawaii.gov Stay Connected

OEQC Viewer

730 Iliaina street

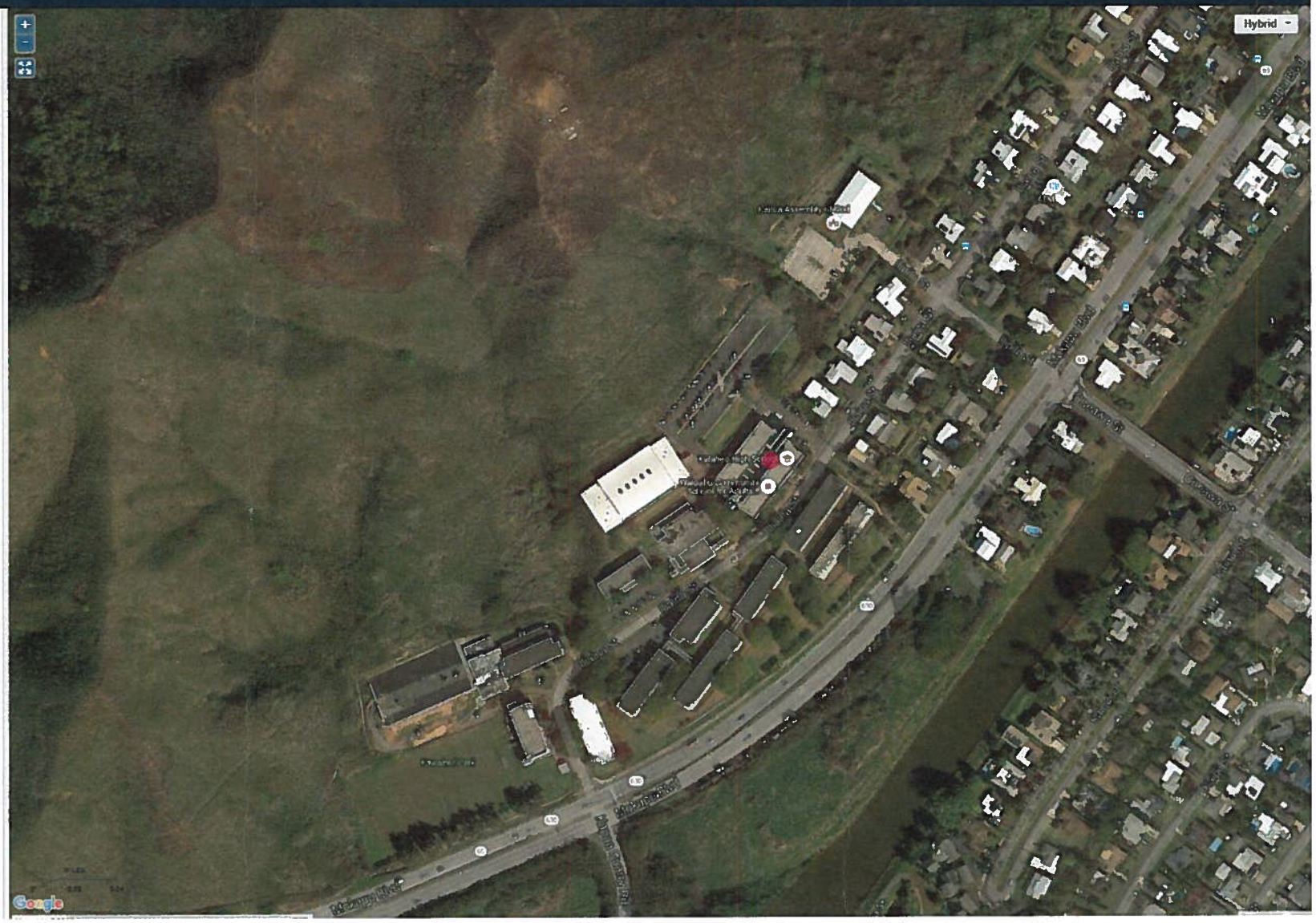
0 sites found

Results | Filter

Map Location

730 Iliaina St, Kailua, HI 96734, USA

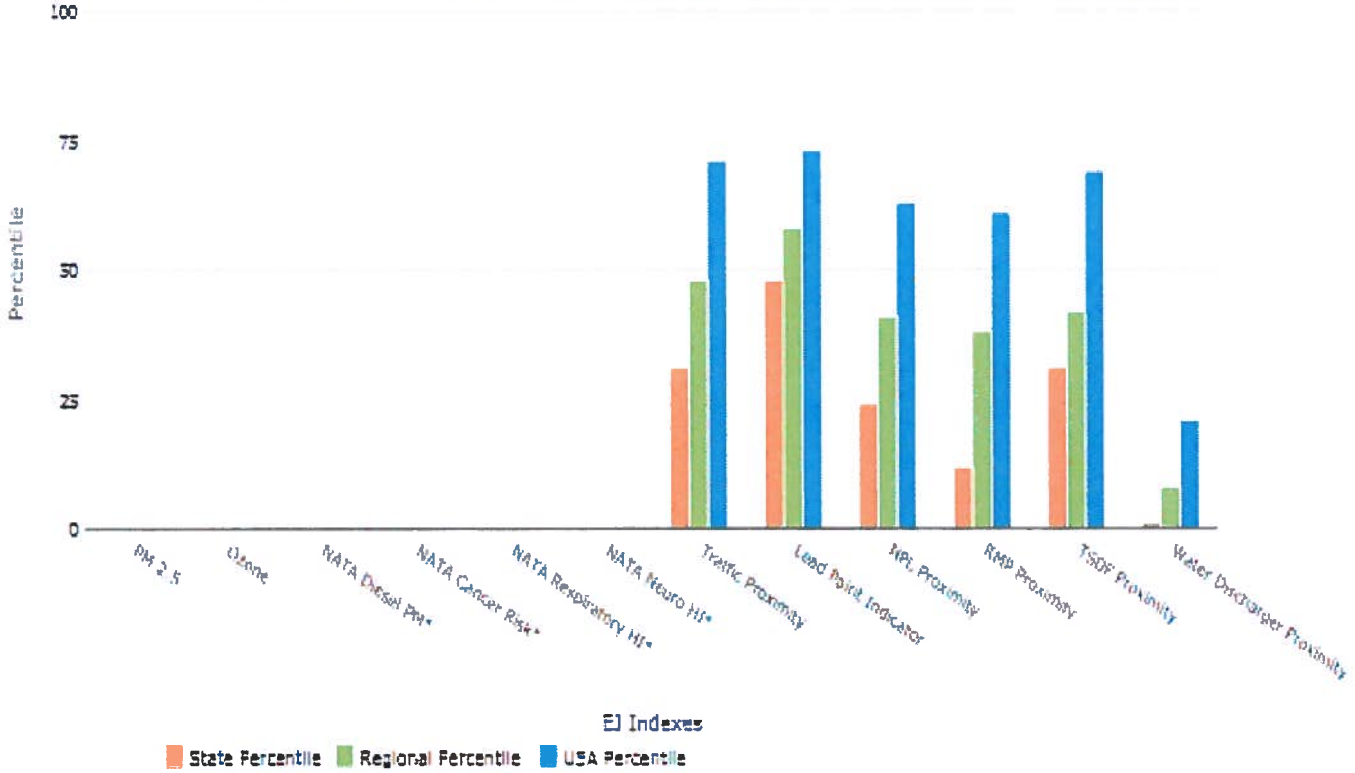
Show sites with no location



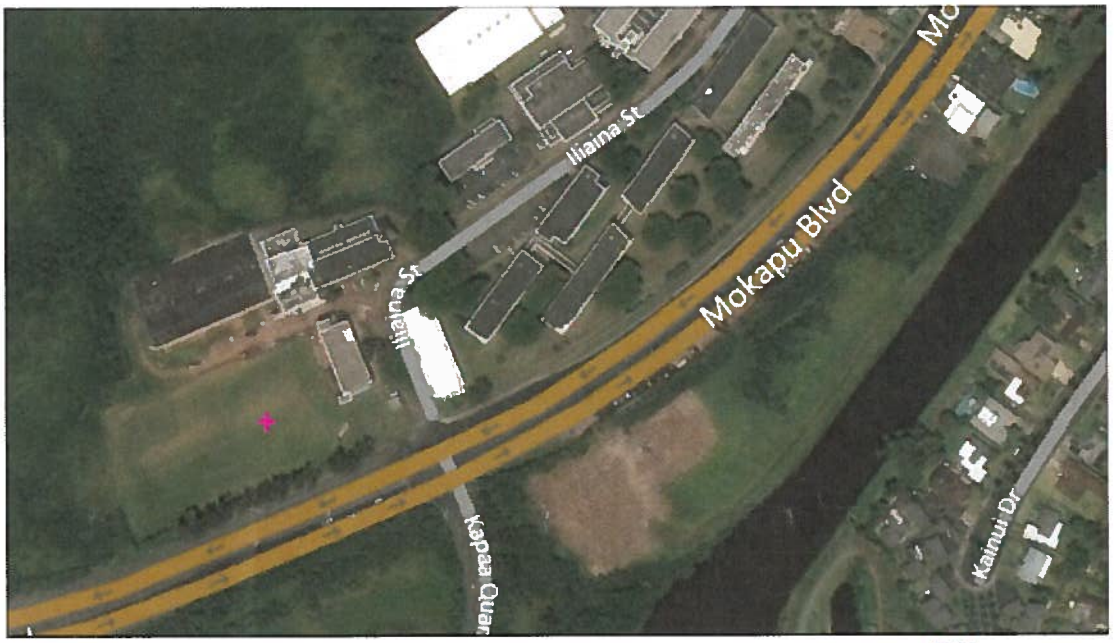
1 mile Ring Centered at 21.407070,-157.759037
HAWAII, EPA Region 9
Approximate Population: 11694

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
EJ Indexes			
EJ Index for Particulate Matter (PM 2.5)	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	45	71
EJ Index for Lead Paint Indicator	48	58	73
EJ Index for NPL Proximity	24	41	63
EJ Index for RMP Proximity	12	38	61
EJ Index for TSDF Proximity	31	42	69
EJ Index for Water Discharger Proximity	1	8	21

EJ Index for the Selected Area Compared to All People's Block Groups in the State/Region/US



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.



March 6, 2016

✚ Digitized Point

Selected Variables	Raw data	State Average	%ile in State	EPA Region Average	%ile in EPA Region	USA Average	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in ug/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 (ug/m³)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Air Toxics Cancer Risk (risk per MM)*	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)	73	250	48	190	47	110	67
Lead Paint Indicator (% pre-1960s housing)	0.45	0.17	87	0.25	74	0.3	71
NPL Proximity (site count/km distance)	0.039	0.092	38	0.11	34	0.096	43
RMP Proximity (facility count/km distance)	0.061	0.18	22	0.41	10	0.31	18
TSDF Proximity (facility count/km distance)	0.065	0.092	49	0.12	51	0.054	79
Water Discharger Proximity (count/km)	0.84	0.33	92	0.19	97	0.25	94
Demographic Indicators							
Demographic Index	37%	51%	11	46%	39	35%	62
Minority Population	56%	77%	14	57%	47	38%	72
Low Income Population	19%	25%	42	35%	30	34%	29
Linguistically Isolated Population	1%	6%	26	9%	20	5%	46
Population with Less Than High School Education	7%	10%	45	18%	31	14%	34
Population under Age 5	6%	6%	49	7%	44	7%	48
Population over Age 64	17%	14%	63	12%	78	13%	73

*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: https://www.epa.gov/national-air-toxics-assessment.

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

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May 6, 2016

Ms. Laura McIntyre, Program Manager
Environmental Planning Office
Department of Health
State of Hawai'i
919 Ala Moana Blvd., Room 312
Honolulu, HI 96814

Dear Ms. McIntyre,

SUBJECT: Comments on Draft Environmental Assessment
Kalaheo High School Athletic Field Improvements
DOE Job Nos. Q94001-12 and Q94001-13
Kailua, Oahu, Hawaii

Thank you for your letter dated March 8, 2016 in response to our request for review of and comment on the Draft Environmental Assessment for the subject project. In response to your comments:

The information indicated in your letter will be utilized to the extent possible in the planning of the proposed project. Notably, the e-Permitting Portal will be utilized to prepare an NPDES permit application.

We appreciate your time and effort in the Environmental Review process. You will also be provided copies of the Final EA when published. Please contact the undersigned at (808) 944-1821 if you have any questions or concerns.

Regards,

Lance Fukumoto

Lance Fukumoto, P.E.
Project Engineer

cc. Cheng-Hsin Chang, Department of Education, State of Hawaii