

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU

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JAN 23 2013

PETER B. CARLISLE
MAYOR



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DIRECTOR

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DEPUTY DIRECTOR

496179

December 31, 2012

Gary Hooser, Director
Office of Environmental Quality Control
State of Hawai'i
235 South Beretania Street, Suite 702
Honolulu, Hawai'i 96813-2437

Dear Mr. Hooser:

Subject: Waialua Corporation Yard NPDES Improvements
Tax Map Key 6-2-012: 015
Portion Kawaihoa, North Shore District, O'ahu

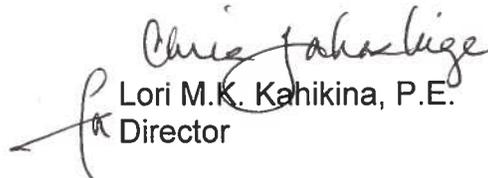
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OFFICE OF ENVIRONMENTAL
QUALITY CONTROL

The Department of Design and Construction, City and County of Honolulu, has reviewed the Draft Environmental Assessment for the subject project and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish this determination in the next Environmental Notice.

One printed copy of the Draft Environmental Assessment and a CD with the document in .pdf format are enclosed. The Environmental Notice publication form will be e-mailed to OEQC.

Should there be any questions, please contact Clyde Tomihara at 768-8468.

Very truly yours,


Lori M.K. Kahikina, P.E.
Director

LMKK:li

Enclosures

OEQC Publication Form The Environmental Notice

Instructions to Applicant or Agency:

1. Fill out this Publication Form and email to: oeqc@doh.hawaii.gov
2. Send a pdf copy of the EA / EIS and 2 hardcopies to OEQC. Mahalo.

Name of Project: Waialua Corporation Yard NPDES Improvements
Applicable Law: Chapter 343, Hawaii Revised Statutes
Type of Document: Draft Environmental Assessment
Island: O'ahu
District: North Shore
TMK: 6-2-012: 015
Permits Required: Special Management Area Permit-Major; Special District; Grubbing, Grading, and Stockpiling; Building Permit for Building, Electrical, Plumbing, Sidewalk/Driveway and Demolition, Waiver; Variance from Pollution Controls; NPDES General Permit

Name of Applicant or Proposing Agency: Department of Design and Construction
City and County of Honolulu
Address: 650 South King Street
City, State, Zip: Honolulu, Hawaii 96817
Contact and Phone: Mr. Clyde Tomihara @ 768-8488

Approving Agency: Department of Design and Construction
City and County of Honolulu
Address: 650 South King Street
City, State, Zip: Honolulu, Hawaii 96817
Contact and Phone: Mr. Clyde Tomihara @ 768-8488

Consultant: Gerald Park Urban Planner
Address: 95-595 Kaname'e Street #324
City, State, Zip: Mililani, Hawai'i 96789
Contact and Phone: T: 625-9626

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 DEPT. OF ENVIRONMENTAL QUALITY CONTROL

Project Summary: Summary of the direct, indirect, secondary, and cumulative impacts of the proposed action (less than 200 words).

See Attached Summary: [waialuacorporationyard.sum](#)

waialuacorporationyard.sum

Construction will temporarily raise fugitive dust and equipment emissions. Construction noise will be audible during site work and diminish as the buildings are erected and fitted with equipment.

Site work will expose soil thus creating opportunities for erosion (fugitive dust and suspended sediment in construction related runoff). Best Management Practices (BMPS) for erosion and drainage control during construction will be incorporated into grading plans for the proposed improvements.

Should excavation unearth subsurface archaeological sites, artifacts, or cultural deposits, work in the immediate area will cease and the proper authorities notified for disposition of the finds.

Construction vehicles hauling workers and material will contribute to traffic on roads leading to Hale'iwa and on Kamehameha Highway within the town. Material deliveries will be scheduled to minimize impacts on local vehicle traffic.

The proposed improvements support the City's actions to maintain compliance with the National Pollutant Discharge Elimination System (NPDES) program. The basis of the improvements is through the management of storm water runoff and minimizing its exposure to pollutants and spreading through the environment.

The wash water system will minimize the potential for introducing waste material into the environment. Solids and petroleum based constituents will be removed by filter media prior to entering the disposal field. Water from the separator will be filtered before percolating into the ground. Collected solids and oil and sludge will be removed as needed.

Wash water from both facilities will flow into a closed treatment system preventing contact with storm water, streams, or other bodies of water. A package recycled water treatment system will generate wash water thus minimizing the use of water in the washing process.

An expanded detention basin will capture and release runoff generated by the proposed improvements with capacity to contain runoff from other parts of the corporation yard.

Land use controls for Hale'iwa town should not be affected. The proposed improvements are confined to the Waialua Corporation Yard which is within the Community Growth Boundary for the town and the will not deviate from the design standards of the Hale'iwa Special District.

One of the three proposed structures will exceed the allowable building height of the zoning district and a height waiver will be requested. The structures will not be visible from Emerson Road and Kamehameha Highway. Some residents on the east and west sides of the corporation yard will notice visual changes when the structures are erected.

OFFICE OF ENVIRONMENTAL QUALITY CONTROL
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DRAFT ENVIRONMENTAL ASSESSMENT

**WAIALUA CORPORATION YARD
NPDES IMPROVEMENTS**

Portion Kawaiioa, North Shore District, O'ahu, Hawai'i



Prepared for

Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813

December 2012

DRAFT ENVIRONMENTAL ASSESSMENT

**WAIALUA CORPORATION YARD
NPDES IMPROVEMENTS**

Portion Kawaihoa, North Shore District, O'ahu, Hawai'i

Prepared in Fulfillment of the Requirements
of Chapter 343, Hawai'i Revised Statutes and
Hawai'i Administrative Rules, Title 11, Chapter 200
Department of Health, State of Hawai'i

Prepared for

Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813

Prepared by

Gerald Park Urban Planner
95-595 Kaname'e Street #324
Mililani, Hawai'i 96789

and

Kennedy /Jenks Consultants
3375 Koapaka Street, Suite F227
Honolulu, Hawai'i 96819

December 2012

PROJECT SUMMARY

Project: Waialua Corporation Yard NPDES Improvements

Proposing Agency: Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813

Determining Agency: Department of Design and Construction
City and County of Honolulu

Location: Portion Kawaihoa, North Shore District, O'ahu
Street Address: 62-126 and 62-130 Emerson Road
Hale'iwa, HI

Tax Map Key: 6-2-012: 015

Landowner: City and County of Honolulu

Land Area: 179,230 square feet

State Land Use Designation: Urban
General Plan: Rural
Sustainable Communities Plan: North Shore
Land Use Map: Country Town
Public Facilities Map: Rural Communities

Zoning: R-5 Residential
Special District: Hale'iwa

Existing Use: City and County of Honolulu
Corporation Yard

Need for Environmental Assessment: Chapter 343, Hawai'i Revised Statutes §343-5(1)
Propose the use of state or county lands or funds

Anticipated Determination: Finding of No Significant Impact

Contact Person: Clyde Tomihara, Project Manager
Department of Design and Construction
City and County of Honolulu
650 South King Street
Honolulu, Hawai'i 96813

Phone: 768-8468

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SECTION 1 DESCRIPTION OF THE PROPOSED ACTION

The Department of Design and Construction, City and County of Honolulu, proposes to construct improvements at the Waialua Corporation Yard located in the town of Hale'iwa, North Shore District, O'ahu, Hawai'i. The Waialua Corporation Yard is located in the Emerson Tract Subdivision and bounded by Anahulu Stream to the north, Emerson Road to the south, and residences to the east and west.

The 179,230 square foot (4.115 acres) lot bears Tax Map Key 6-2-012: 015 and is owned by the City and County of Honolulu. A Vicinity Map and Tax Map are shown on Figures 1 and 2.

A. Need for the Action

In 1994, an environmental assessment was prepared for improvements at the Waialua Corporation Yard (Park, 1994). The master site plan proposed the demolition of aged structures and replacement with a new office building, parking shed for equipment and vehicles, and a multi-purpose building. These improvements have been constructed as proposed.

The plan also proposed constructing a vehicle wash pad and associated filtration system. The wash pad was not designed and constructed. In lieu of a wash pad only, the City has expanded the overall plan to include a dewatering facility for debris collected from the City's storm drains, beaches, and streams. The new facility is designed to comply with the Clean Water Act of 1978, the National Pollutant Discharge Elimination System ("NPDES") permit system, and the City's goal to minimize the potential for pollutants to enter the environment. This environmental assessment describes the facility and discloses potential impacts associated with its construction and use.

B. Technical Characteristics

The proposed improvements will be sited entirely within the Waialua Corporation Yard generally behind the existing AES / Covered Garage Building and between the building and a pile of stacked boulders. The building site (or project site) is a rectangular shaped area of approximately 17,000 square feet (166' X 103'). Two detached structures will be constructed on the north side of the building site and aligned east-west. The area between the AES building and the proposed buildings will be paved. An existing driveway on the east will be reconstructed and paved to match the new pavement.

The proposed improvements are summarized below and a Site Plan is shown on Figure 3. Exterior elevations are shown on Figures 4 and 5.

Carport "D" will provide storage for three (3) City trucks. The stand alone structure will be erected on a concrete slab foundation and constructed of metal framing, siding, and roofing. The approximately 1,460 square foot structure will not exceed 21 feet in height.

Wash Area "A" is designated for vehicle and equipment washing activities. Washing is only surface washing of vehicles and no under carriage washing or washing the back of refuse

trucks will be allowed. A self-contained or package recycled water treatment system will be provided to treat the wash water and enable reuse reducing demands on the municipal potable water system. The existing package recycled water treatment system is old and has exceeded its useful life.

The wash area will be constructed with a poured in place concrete slab and covered by a metal roof. The wash area is approximately 1,875 square feet in size and the structure will not exceed 20 feet in height. The concrete slab and curbing will enable management of the generated wash water.

Dewatering Facility "E" will receive materials from storm drains and streams in the North Shore area collected during City maintenance activities. Materials will be deposited into a basin where large debris and solids will settle to the bottom. Liquids will be released to a filter basin for further treatment. The filter basin is filled with granular material of various sizes ranging from ¼" to 6". Water will be conveyed to a sand-oil separator before entering an underground disposal system for percolation into the ground. The disposal system will be installed under the paved area between the existing AES building and the new structure. As proposed, the disposal system has a capacity of 2,350 gallons / day.

Solids and large debris that settle out in the first basin will be scooped up by a loader and placed on a concrete slab for additional drying. The dry material will then be trucked to the Kawaioloa Transfer Station.

The dewatering facility has a floor area of approximately 2,650 square feet and the structure will not exceed 28 feet in height. The facility will co-locate with Wash Area "A" in the same structure. A common wall will separate the two facilities.

Three material bins for storing aggregate used in road repair / maintenance will be constructed adjacent to the repaved driveway on the east. The bins are approximately 40 feet long X 10 feet wide X 5 feet high and will be constructed of concrete. The bins will be uncovered and open on one side for loading / unloading material.

The overall drainage pattern of the site will be maintained. The existing detention pond will be enlarged from approximately 2,500 square feet to approximately 5,000 square feet. The detention pond will be reconstructed to receive runoff generated by the additional impervious surfaces associated with the project. A concrete outlet structure will control the release of storm water runoff from the detention basin and to the existing 24-inch drain culvert. Water for maintenance of these systems will be drawn from an existing on-site system.

C. Economic Characteristics

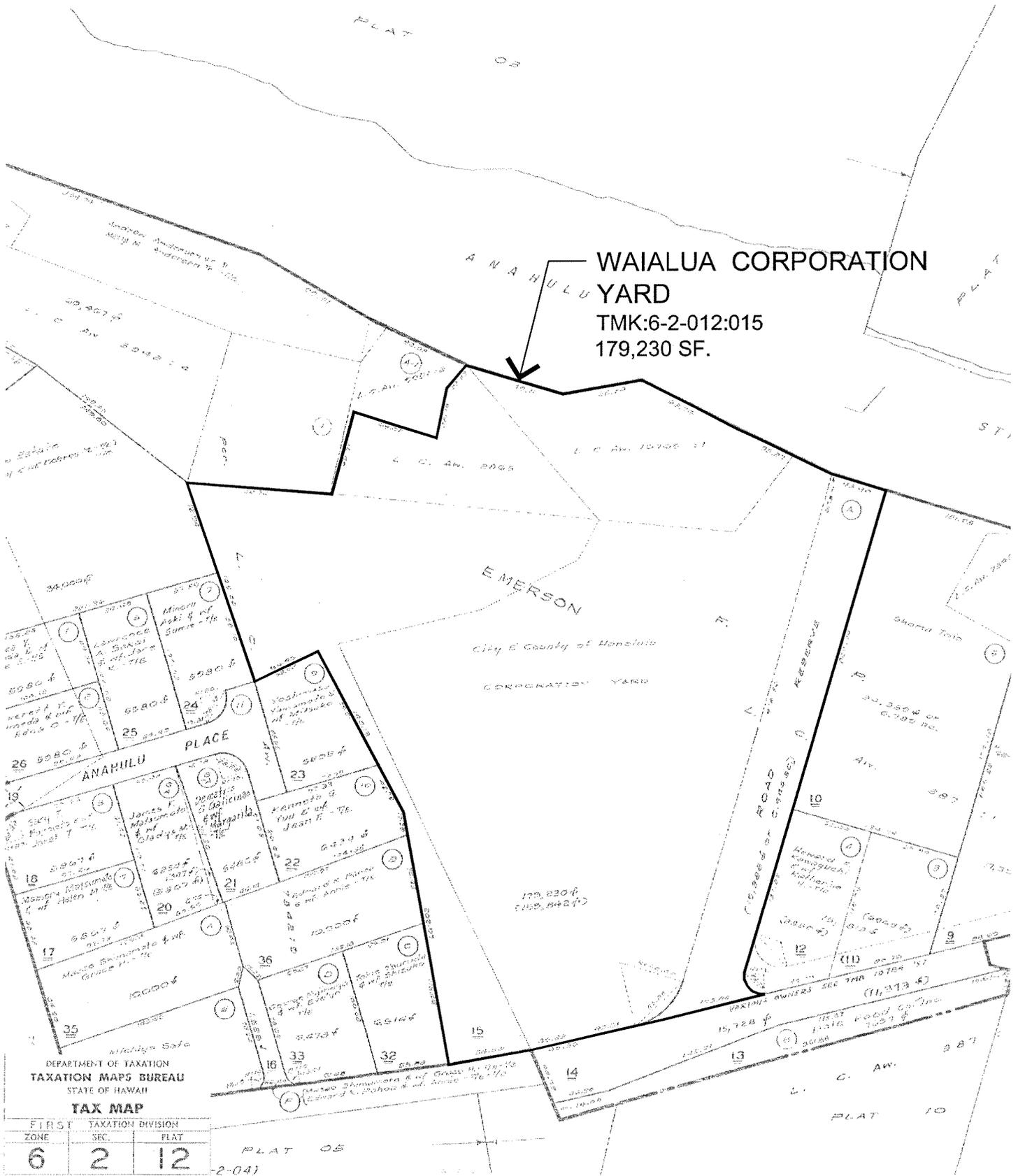
The cost of improvements is estimated at \$ 3.4 million and will be funded by the City and County of Honolulu.

The limit of ground disturbance is estimated at 1.02 acres. Of that area, approximately 32,000 square feet is associated with the wash area, dewatering facility, garage, and new paved areas and 13,000 square feet associated with the detention pond.

Construction is projected to commence in March 2014 and should be completed in one year.

D. Social Characteristics

The proposed improvements are confined to the existing corporation yard and will not displace nearby residents. An existing caretaker's residence will not be affected by the proposed action.



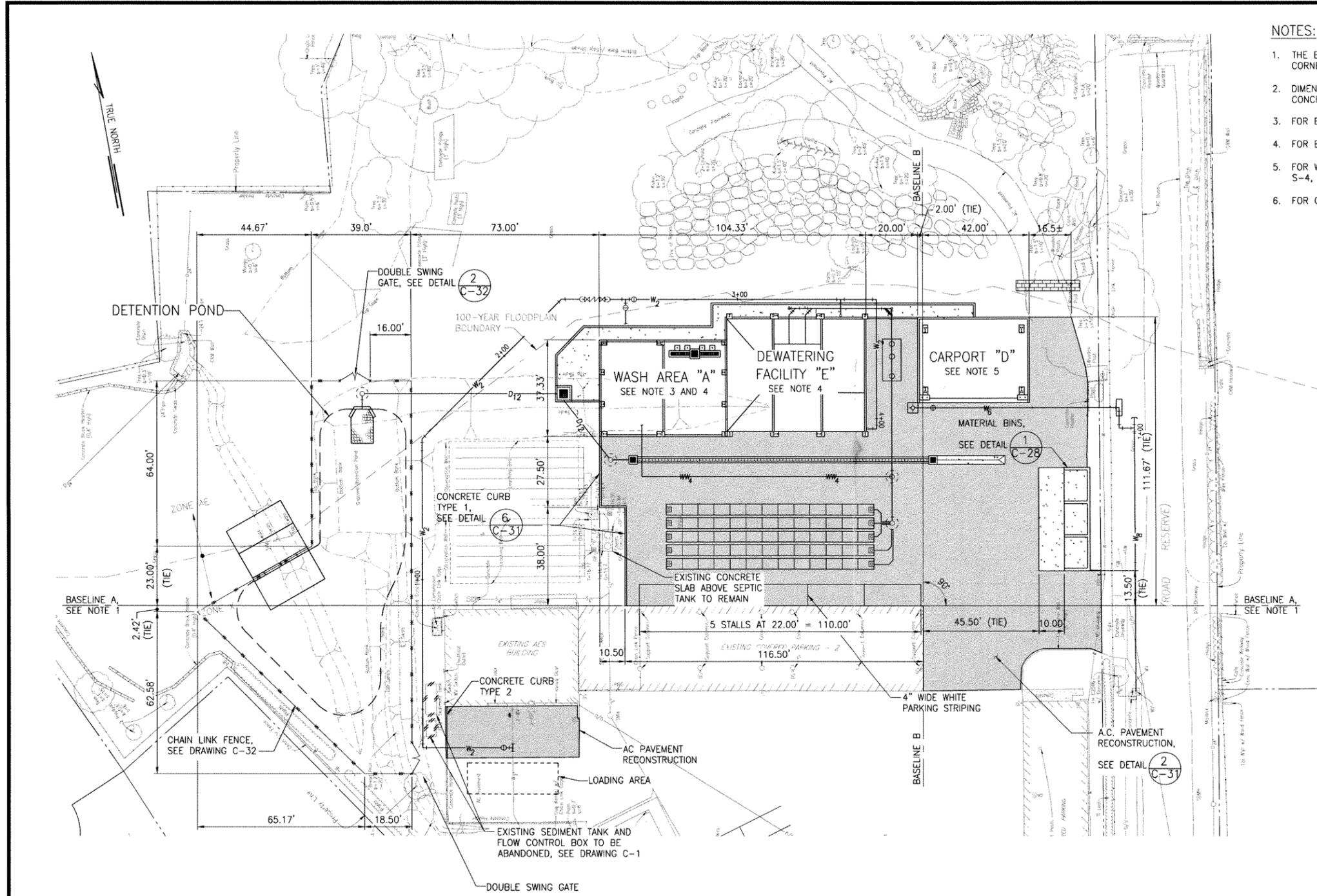
Source: City & County of Honolulu Website



Portion Kawaiiloa, North Shore District, O'ahu

Figure 2
 Tax Map
 Waiialua Corporation Yard - NPDES Improvements

DATE: 01/17/11
 PROJ. SCALE: 1"=1'
 FILE: 100704-C-3.dwg
 PLOT No: 105124



SITE PLAN

NOTES:

1. THE BASELINE A IS DEFINED AS THE LINE THROUGH THE NORTH EAST CORNER AND NORTH WEST CORNER OF THE EXISTING COVERED PARKING-2.
2. DIMENSIONS ARE TAKEN FROM THE OUTSIDE FACE OF THE STRUCTURE'S CONCRETE OR CMU WALL, OR CENTER OF CHAINLINK FENCE POST.
3. FOR ELECTRICAL SITE PLAN, SEE DRAWING E-4.
4. FOR EQUIPMENT LAYOUT WITHIN WASH AREA "A", SEE DRAWING C-11.
5. FOR WASH AREA "A" AND DEWATERING FACILITY "E", SEE DRAWINGS S-3, S-4, AND E-9.
6. FOR CARPORT "D", SEE DRAWINGS S-7 AND E-10.

NO.	REVISION	DATE	BY	APPROVED
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 BY: _____
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 APRIL 30, 2012
 EXPIRATION DATE OF THE LICENSE

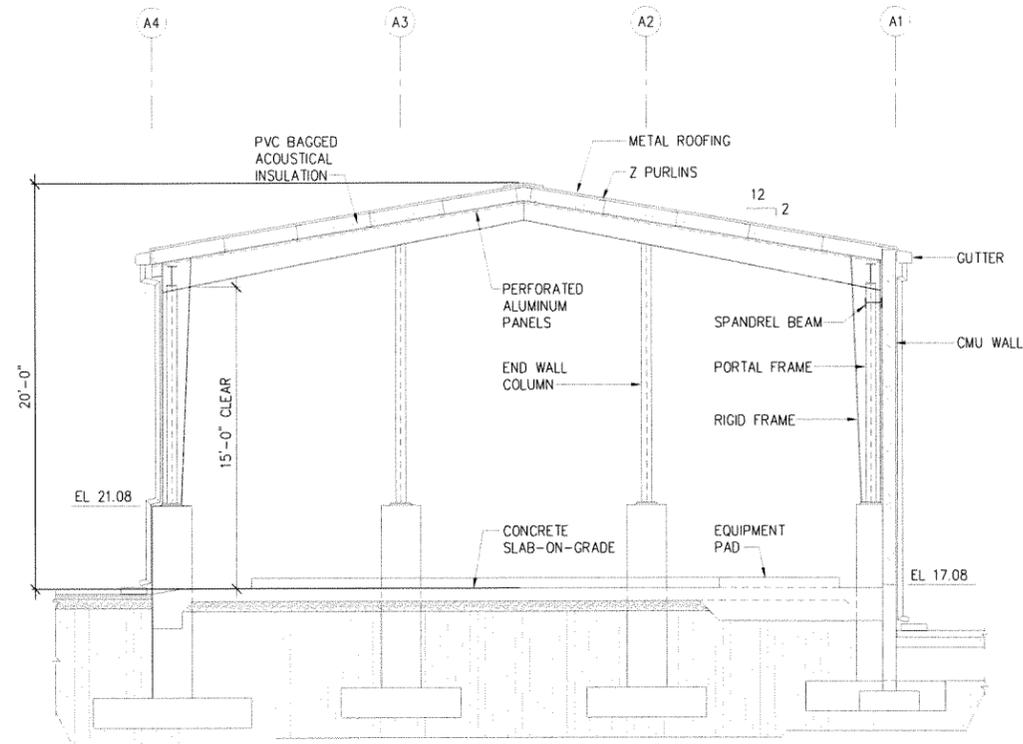
KENNEDY/JENKS CONSULTANTS

ACCEPTED BY: _____

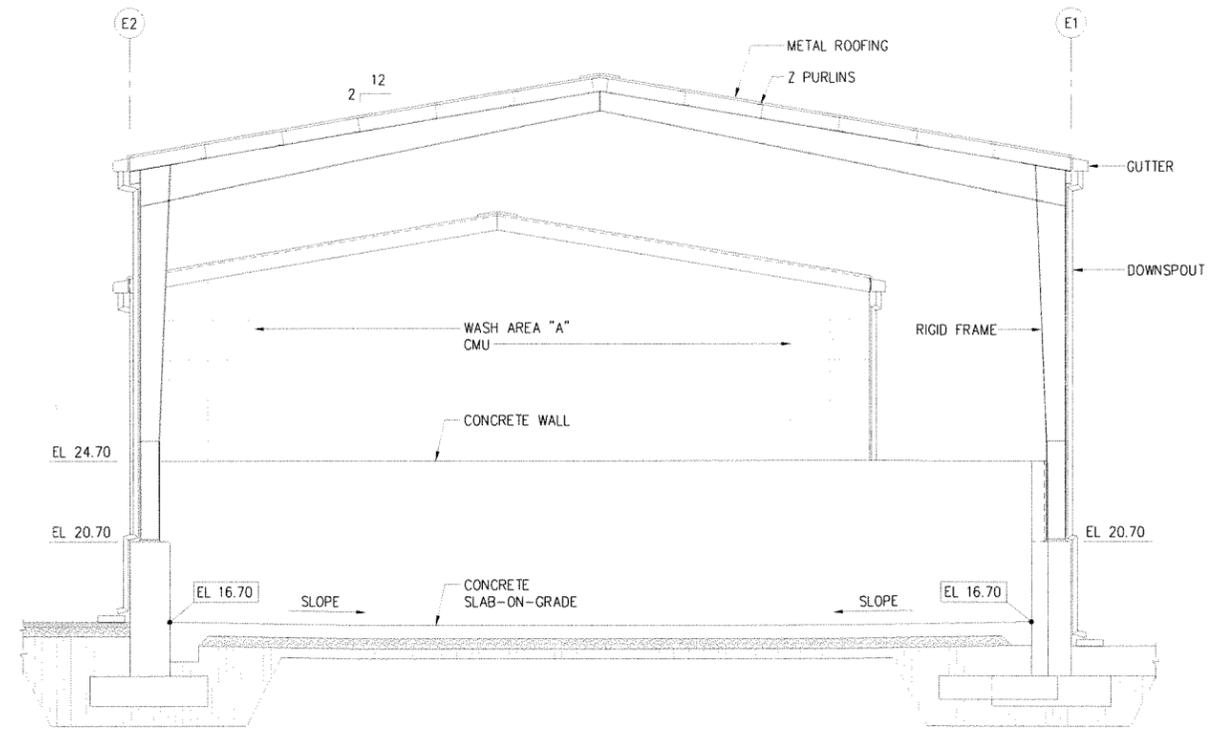
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 Figure 3

DEPARTMENT OF DESIGN AND CONSTRUCTION
 CITY & COUNTY OF HONOLULU
 WAIALUA CORPORATION YARD
 NPDES IMPROVEMENTS
 62-226 EMERSON ROAD, HALEIWA, OAHU, HAWAII
 TMK: 6-2-02-015
 SITE PLAN

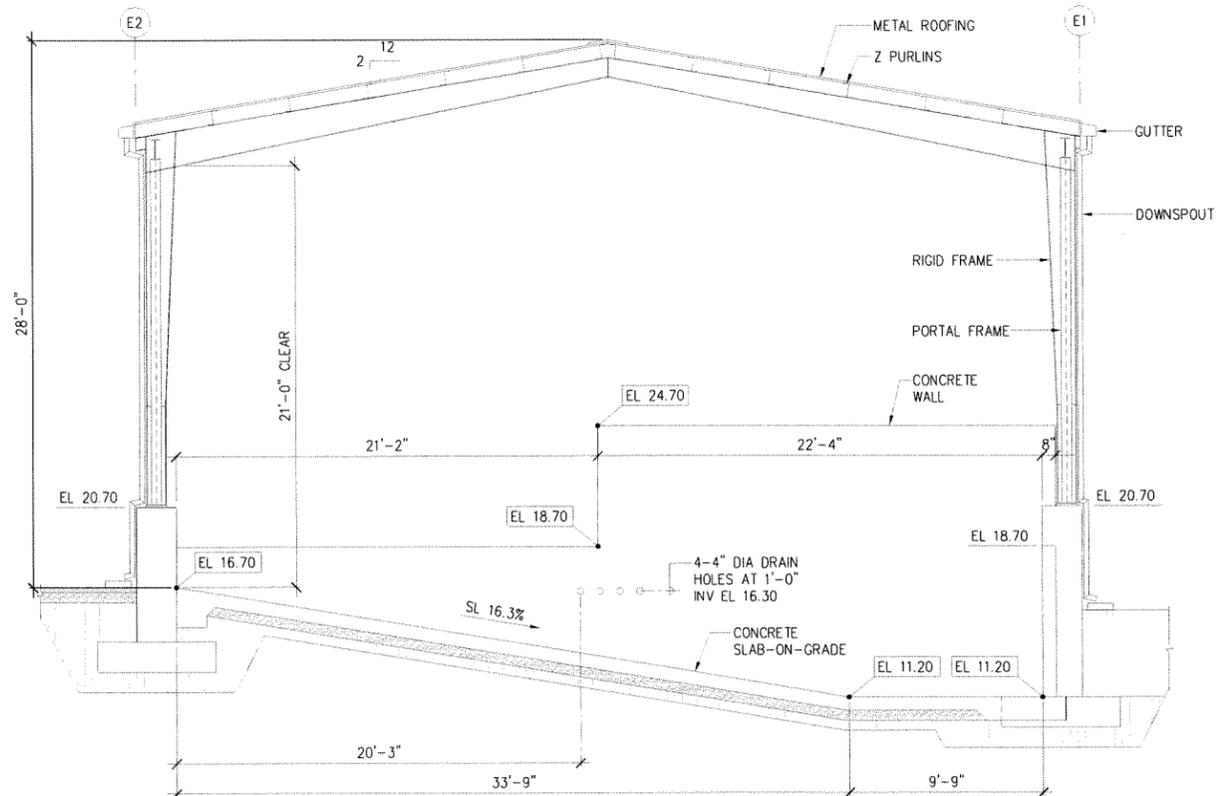
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 DRAWN BY: GY
 CHECKED BY: REF
 DATE: JANUARY 30, 2012
 PROJECT NO: I-16-11-C
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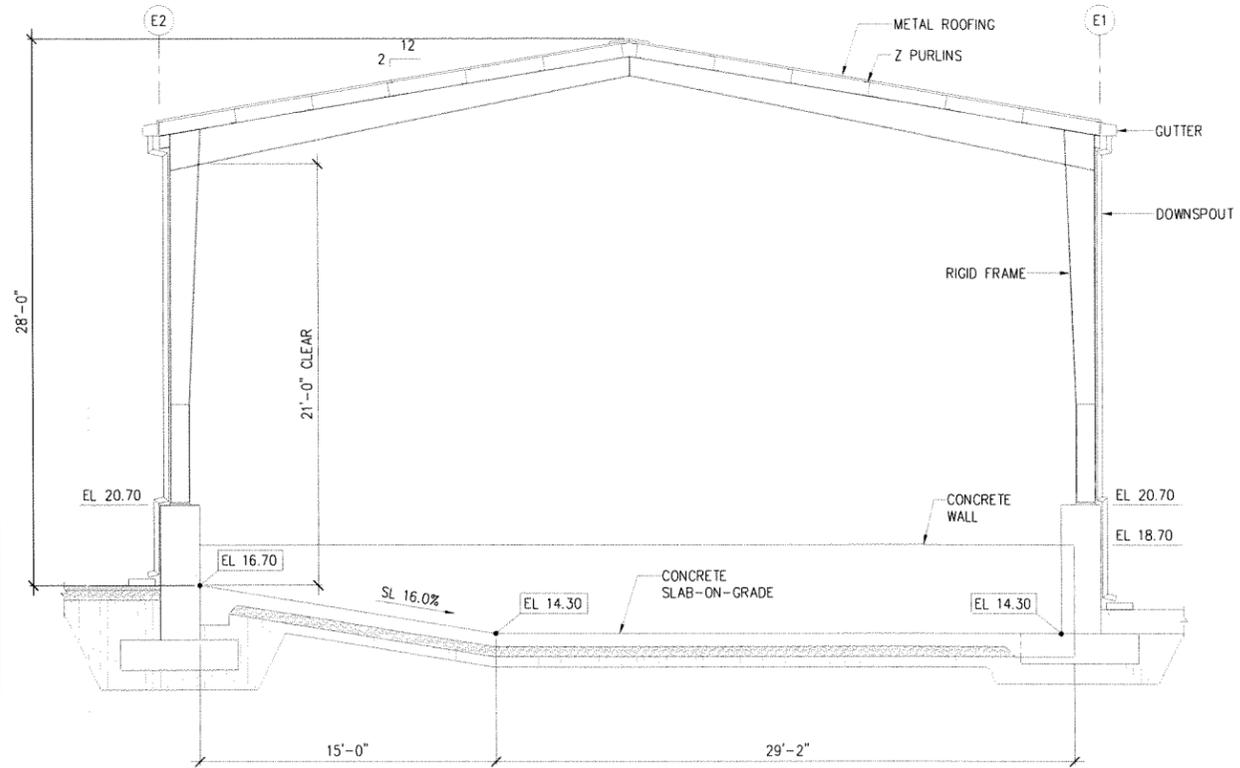
1 WASH AREA "A" - SECTION
S-10



2 DEWATERING FACILITY "E" - SECTION
S-10



3 DEWATERING FACILITY "E" - SECTION
S-10



4 DEWATERING FACILITY "E" - SECTION
S-10

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Figure 4

DATE	BY	CHECKED	PROJECT
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BY			
DATE			
APRIL 10, 2012			
EXPIRATION DATE OF THE LICENSE			
NKE ASSOCIATES LLC			
ACCEPTED BY:			
DATE			
CITY & COUNTY OF HONOLULU			
DEPARTMENT OF DESIGN AND CONSTRUCTION			
WAIALUA CORPORATION YARD IMPROVEMENTS			
62-206 EMERSON ROAD, HALEIWA, OAHU, HAWAII			
WASH AREA "A" AND DEWATERING FACILITY "E" - SECTIONS			
TMK: 6-2-012-015			
DESIGN BY: SK			
DRAWN BY: DL			
CHECKED BY: GM			
DATE: FEBRUARY 17, 2012			
PROJECT NO.: I-16-11-C			
DRAWING NO.: S-10			
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SECTION 2 DESCRIPTION OF THE AFFECTED ENVIRONMENT

Since 1942, the Waiialua Corporation Yard has served as the Waiialua district office for the Divisions of Refuse Collection and Disposal and Road Maintenance, Department of Public Works (Note: The Refuse Collection and Disposal division is now part of the Department of Environmental Services and Road Maintenance part of the Department of Facility Maintenance). Refuse collection routes service North Shore communities between Mokolēia and Sunset Beach; road maintenance service extends between Mokolēia and Waimea Bay, a slightly smaller geographical area.

The corporation yard is managed by the Department of Facility Maintenance. Currently 20 personnel and administrators are assigned to the yard (Road Maintenance, 14; Refuse Collection, 6). A vehicle mechanic was previously posted at the Automotive Equipment Service (“AES”) building. The position was transferred to another corporation yard and vehicle repairs are no longer performed at the yard.

Existing structures and facilities include an office building, fueling station, covered parking sheds for vehicles and equipment, a multi-purpose storage building, caretaker’s residence, and a patio building for employee gatherings and meetings. The northwest corner of the site is free of structures and covered with grass. This area serves as open space but also detains site generated runoff.

The area immediately behind the AES / Covered Garage Building is divided into asphalt pavement on the east and an effluent disposal field on the west separated by a narrow strip of soil and grass (See Photographs 1 and 2). The asphalt pavement and grass strip comprise the building site.



Photograph 1. Building Site Looking West. Pavement and Material Storage Bins in the Foreground.



Photograph 2. View of the Soil / Grass Area Looking South. The AES Building is in the Background. The Vertical White Poles are Part of the IWS.

The pavement allows access to road maintenance material stockpiled in temporary material bins. The paved area also is used by refuse crews for manually removing refuse lodged inside the refuse truck bin. Material is deposited in on-site refuse receptacles and later hauled away for disposal.

The most prominent feature in this area is a 150-foot long by 30-foot wide stacked boulder mound on the north side of the building site. The base of this man-made feature is landscaped with assorted trees and hedge materials. Anahulu Stream, which physically forms the northern boundary of the corporation yard, flows east to west about 80-feet beyond the boulder mound.

Refuse truck exterior surfaces are washed at the Wahiawā Corporation Yard and the undercarriage and bin are washed at the Halawa Corporation Yard. Similarly, maintenance and repair of trucks and equipment are performed at either the Wahiawā or Halawa Corporation Yards.

A. Climate

The climate of Hale'iwa can be characterized as mild and dry throughout the year. Rainfall averages less than 30" annually along the Hale'iwa coastal plain with rainfall the greatest during February and the least during June and July.

The prevailing winds are from the east-southeast indicating deflection of the tradewinds blowing through the Kaua'i Channel by the Ko'olau mountain range. Temperatures range from lows near 60°F during the winter months to highs near 90°F from May to September.

B. Soils

Hiirata & Associates (2011) performed a soil investigation for this project. Nine (9) borings were drilled and analyzed. A layer of clayey soils, ranging from 6 feet to 13 feet thick was observed. A layer of basalt was observed below the clay layer in some borings. Groundwater was also observed at a depth of approximately 10 feet in one (1) boring near the east driveway. Considering the approximately 70 years of corporation yard use, the underlying soil has probably been covered with imported material used to grade or fill portions of the lot to construct the existing improvements.

C. Topography

Between Emerson Road and Anahulu Stream, approximately two-thirds of the site is covered with structures and pavement. The remainder of the corporation between the AES building and Anahulu Stream is open space. Here, the tall, elongated pile of stacked boulders forms the predominant feature on the landscape.

Ground elevation falls from south to north from a high of approximately 22 feet at Emerson Road to approximately 1 foot or less along Anahulu Stream. Interpretation of geographical and tax map data suggest that part of the north end of the property extends into Anahulu Stream.

The site is sloped to drain to a detention pond behind of and to the west of the AES building. The detention pond and land between the pond and residences to the west is grassed unimproved open space.

D. Hydrology

The southern portion of Hale'iwa is underlain by the Waialua basal water aquifer system and the northern half by the Kawailoa basal water aquifer system. The dividing line between both bodies is the deep valley fill of Anahulu Stream. Aquifer and groundwater information for the Waialua aquifer (Mink and Lau, 1990) is shown in Table 2.

Table 1. Aquifer Classification

Aquifer Code	30402116	30402121
Island Code	3 - Oahu	3 - Oahu
Aquifer Sector	04 - North	04 - North
Aquifer system	02 - Waialua	02 - Waialua
Aquifer Type, hydrogeology	1 - Basal	1 - Basal
Aquifer Condition	1 - Unconfined	2 - Confined
Aquifer Type, geology	6 - Sedimentary	1 - Flank
Status Code	12211	12312
Developmental Stage	1 - Currently Used	1 - Currently Used
Utility	2 - Ecologically Important	2 - Ecologically Important
Salinity (in mg/L Cl ⁻)	2 - Low (250-1,000)	3 - Moderate (500 -1,000)
Uniqueness	2 - Irreplaceable	1 - Irreplaceable
Vulnerability to Contamination	1 - High	2 - Moderate

Source: Mink and Lau, 1990.

The Waialua aquifer is characterized by an unconfined sedimentary aquifer above a confined dike aquifer. The sedimentary aquifer is currently being used, low in salinity, and highly vulnerable to contamination. The dike-confined aquifer also is used for drinking water, moderate in salinity, and has a moderate vulnerability to contamination. Both aquifers are ecologically important.

The caprock over the Waialua aquifer is thicker and efficient at confining the ground water than that over the Kawailoa aquifer, so the former has artesian water while the latter has little or no artesian pressure.

The occurrence of artesian springs was confirmed by field observation. Cold, clear, fresh water issues from a cistern located in the northeast corner of the property adjacent to Anahulu Stream and from several seeps along the stream bank.

There are no public water sources (wells) on the premises or in the immediate vicinity of the property. A sealed private well (Yamaguchi Well) is located about 250 feet to the east of the corporation yard (Safe Drinking Water Branch files).

Anahulu Stream, one of three streams flowing through Hale'iwa town, borders the corporation yard to the north. The two other streams, Paukauila and Opaepa, are located at the southern end of the town. Originating in the Ko'olau mountain range, Anahulu Stream has a total length of approximately 75 km and a drainage basin of approximately 9.7km² (Department of Transportation, 1980). The stream is fed by two tributaries---Kawaiki and Kawainui---both of which are diverted in their upper reaches.

Mauka of the Anahulu Stream Bridge at Kamehameha Highway, the stream is at or near sea level and is subject to tidal action resulting in brackish water conditions. In the vicinity of the corporation yard, the stream is approximately 100-120 feet wide and of unknown depth.

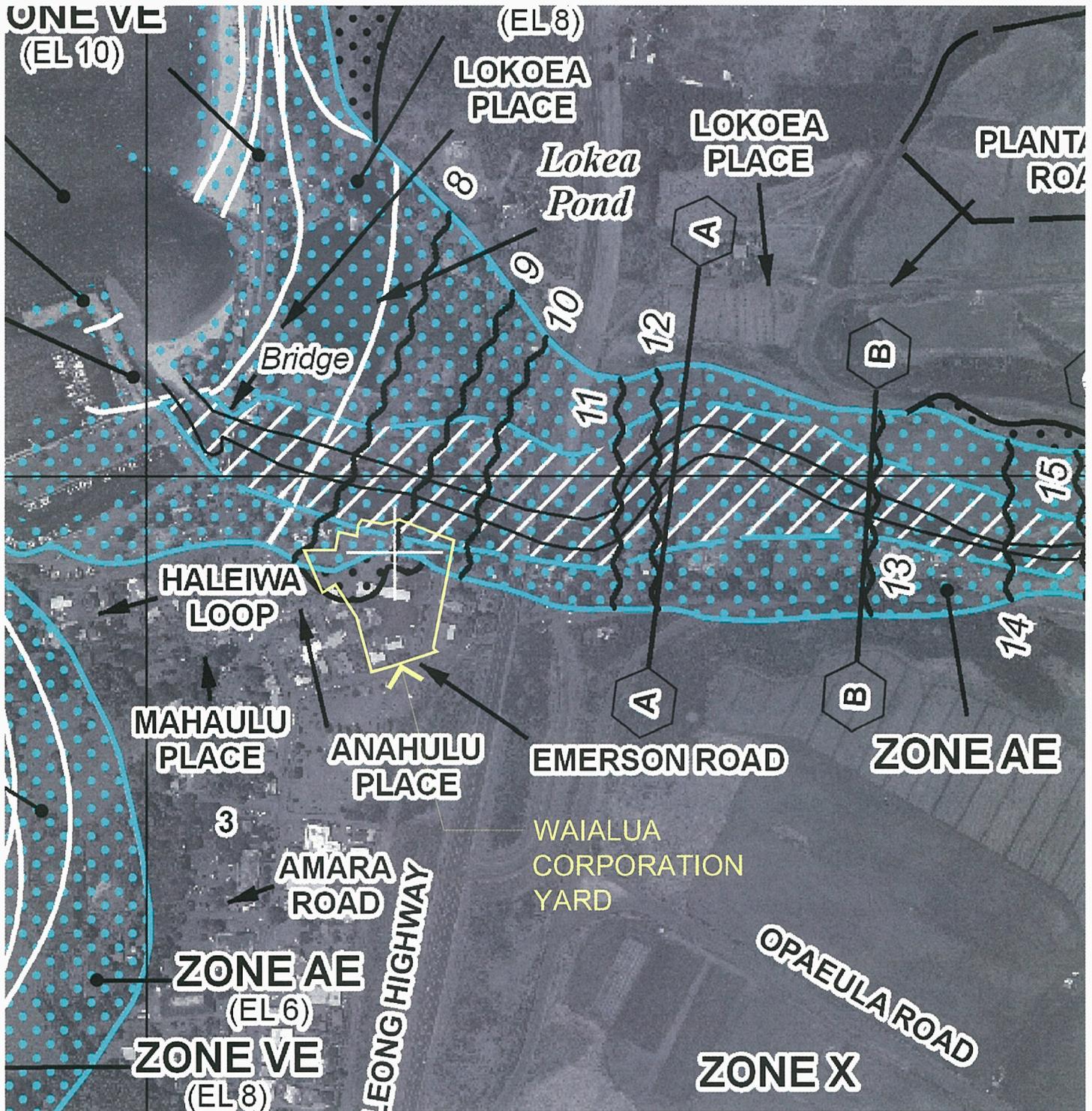
E. Flood Hazard

The Flood Insurance Rate Map for the area designates four (4) flood zones for the property (See Figure 6). A Floodway is demarcated for Anahulu Stream and portions of the property within the stream are within the Floodway. The base flood height is between 9 and 10 feet above sea level.

Land adjoining Anahulu Stream but outside the Floodway is designated Zone AE which is a special flood hazard area subject to inundation by the 1% annual chance flood; base flood elevations determined. The 1% annual chance flood is the 100-year flood and the base flood elevation ranges from 8 to 10 feet.

The northwest corner is identified as Zone XS which is defined as "areas of 0.2% chance flood; areas of 1% annual chance flood with average depths of less than 1 foot ... ". The 0.2% annual chance flood is the 500 year flood.

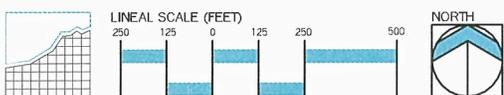
In general, there are no structural improvements located within the flood hazard zones identified above. The exception is the western half of the AES building which extends into Zone XS. The stacked boulder mound on the north and associated landscape improvements and grassed open areas on the west also are in Zone XS.



Source: Federal Emergency Management Agency
 Flood Insurance Rate Map Map Number
 15003C0105H, Date: Jan. 19, 2011.

Legend

-  Special Flood Hazard Zone Subject to Inundation by the 1% Annual Chance Flood
-  Zone A No Base Flood Elevations Determined.
-  Zone AE Base Flood Elevation Determined.
-  Zone VE Coastal Flood Zone with Velocity Hazard (Wave Action); Base Flood Elevations Determined.
-  Floodway Areas in Zone AE
-  Other Flood Areas
-  Zone X 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.
-  Other Areas
-  Zone X Areas Determined to be Outside the 0.2% Annual Chance Floodplain.



Gerald Park
 Urban Planner
 October 2012

Portion Kawaiioa, North Shore District, O'ahu

Figure 6
 Flood Insurance Rate Map
 Waialua Corporation Yard - NPDES Improvements

In general, property and improvements south of the AES building are within Zone X which is defined as “areas determined to be outside the 0.2% annual chance floodplain.”

The proposed NPDES improvements are sited in Zones “X” and “XS” which are areas outside of the 100 year flood zone and areas of the 500 year flood, respectively.

F. Historical Resources

Surface archaeological features were not observed on the property and none have been reported in reference materials at the State Historic Preservation Division, Department of Land and Natural Resources. Any historical or cultural features that may have occurred on the ground surface have long been removed.

Since 1994, excavation for new structures at the corporation yard has not revealed the presence of subsurface features.

The Hale‘iwa Special District (1981) later codified as Section 21-9.90 of the Land Use Ordinance, City and County of Honolulu identifies one historic structure near the corporation yard (Exhibit 21-9.17). The structure is labeled as “(11) Old adobe house on the Emerson site, TMK 6-2-12:10” and situate across the road reserve directly east of the corporation yard.

G. Flora and Fauna

Breadfruit, torch ginger and groundcover are planted on the north side of the AES Building. The plant materials are common to the area and the island of Oahu. None are listed or proposed for listing as rare, threatened or endangered species.

To the west of the building site, the detention pond and surrounding area is planted in Bermuda grass.

H. Storage Tanks

Corporation yard vehicles are fueled at a fuel area building located just inside the driveway from Emerson Road. Gasoline is stored in two underground storage tanks (1,000 gallons each) and a third tank holds diesel (2,500 gallons). The tanks were installed in 1992 following removal of two older tanks and are slated for replacement under a separate project. Fuel is pumped through three above-ground dispensers.

An above ground 1,150 gallon propane gas tank is located behind the fuel area building.

I. Land Use Controls

The Waiialua Corporation Yard like almost all of Hale‘iwa town is classified Urban by the State Land Use Commission. Land classified Urban is under jurisdiction of the counties and their respective land use controls.

The principal planning document for O‘ahu is the General Plan for the City and County of Honolulu. The general plan “is a comprehensive statement of objectives and policies which sets forth the long-range aspirations of O‘ahu's residents and the strategies or actions to achieve them. It is the focal point of a comprehensive planning process that addresses

physical, social, economic and environmental concerns affecting the City and County of Honolulu (General Plan, 1992)."

The general plan sets forth objectives and policies in eleven functional areas that can be achieved within a 20-year time span. Key to the general plan is its population distribution policies and a conceptual map depicting the pattern of development for the island. Population distribution for the North Shore is projected at 1.7% of the total 2025 island wide population (Ordinance No. 02-205, CD1) and is within the 1.6 – 1.8% range established by earlier versions of the general plan.

The conceptual pattern of development map designates Waialua – Hale'iwa as Rural. A second area is also designated Rural generally between Waimea and Kawela Bays. The coastal strip between Hale'iwa and Waimea Bay is also designated Rural.

The Rural designation is important because the implementing plan for the North Shore, the North Shore Sustainable Communities Plan, is based on maintaining the rural character of the region, agricultural resources and activities, open space and recreational resources, and country town atmosphere (NSSCP, 2011).

As a policy tool, the NSSCP delineates a Community Growth Boundary which directs future growth to built-up areas inside the boundary. Infilling of these areas is intended to accommodate housing needs, places of employment, and maintain the 1.7% proportion of the island wide population to the year 2025.

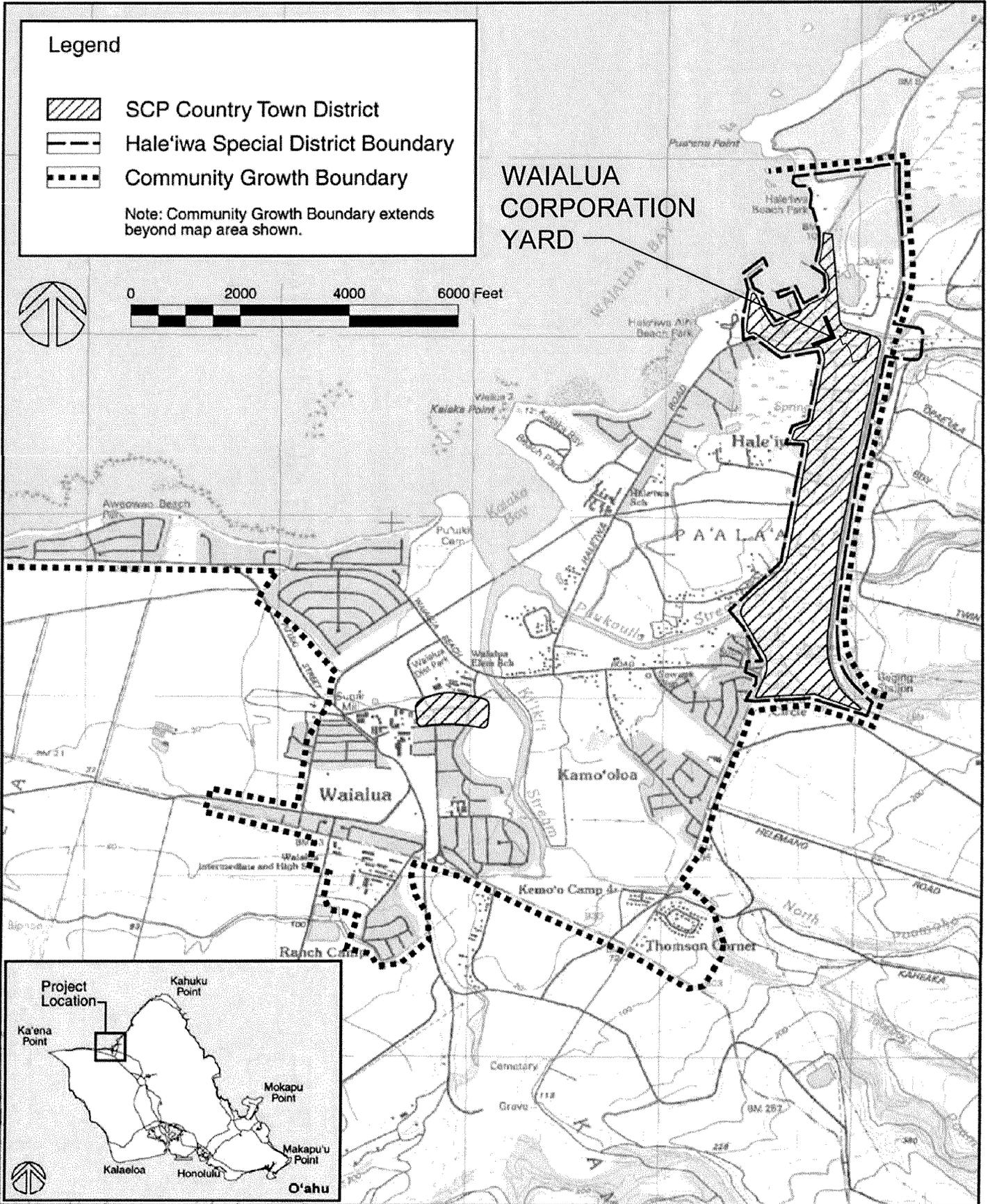
Hale'iwa town is entirely within the Community Growth Boundary. In general, the Community Growth Boundary reaches *mauka* to *makai* from the Joseph P. Leong Highway to the seashore. The Community Growth Boundary "defines, protects, and contains communities in areas which the General Plan designates "rural" and which exhibit the physical characteristics of rural lifestyles. The boundary provides adequate lands for facilities needed to support established communities, and protects such communities from more intense land uses and patterns of development associated with more urban areas. The Community Growth Boundary also preserves areas outside the boundary for agriculture or other resource or open space values (Ordinance 11-3)".

The North Shore SCP Land Use Map designates Hale'iwa (and the Waialua Corporation Yard) Country Town. This designation applies to the town "core" which essentially is both sides of Kamehameha Highway through the town from Weed Circle on the south to Hale'iwa Beach Park on the north.

The corporation yard is within the Hale'iwa Special District and the proposed improvements are subject to the design controls established for the District (Land Use Ordinance, Section 21-9.90). Special District Exhibit 21-9.18 delineates Anahulu Stream as a significant waterway and land on both sides of the stream within the Special District as "significant sites".

The Community Growth, Country Town, and Special District Boundaries for Hale'iwa town are shown on Figure 7.

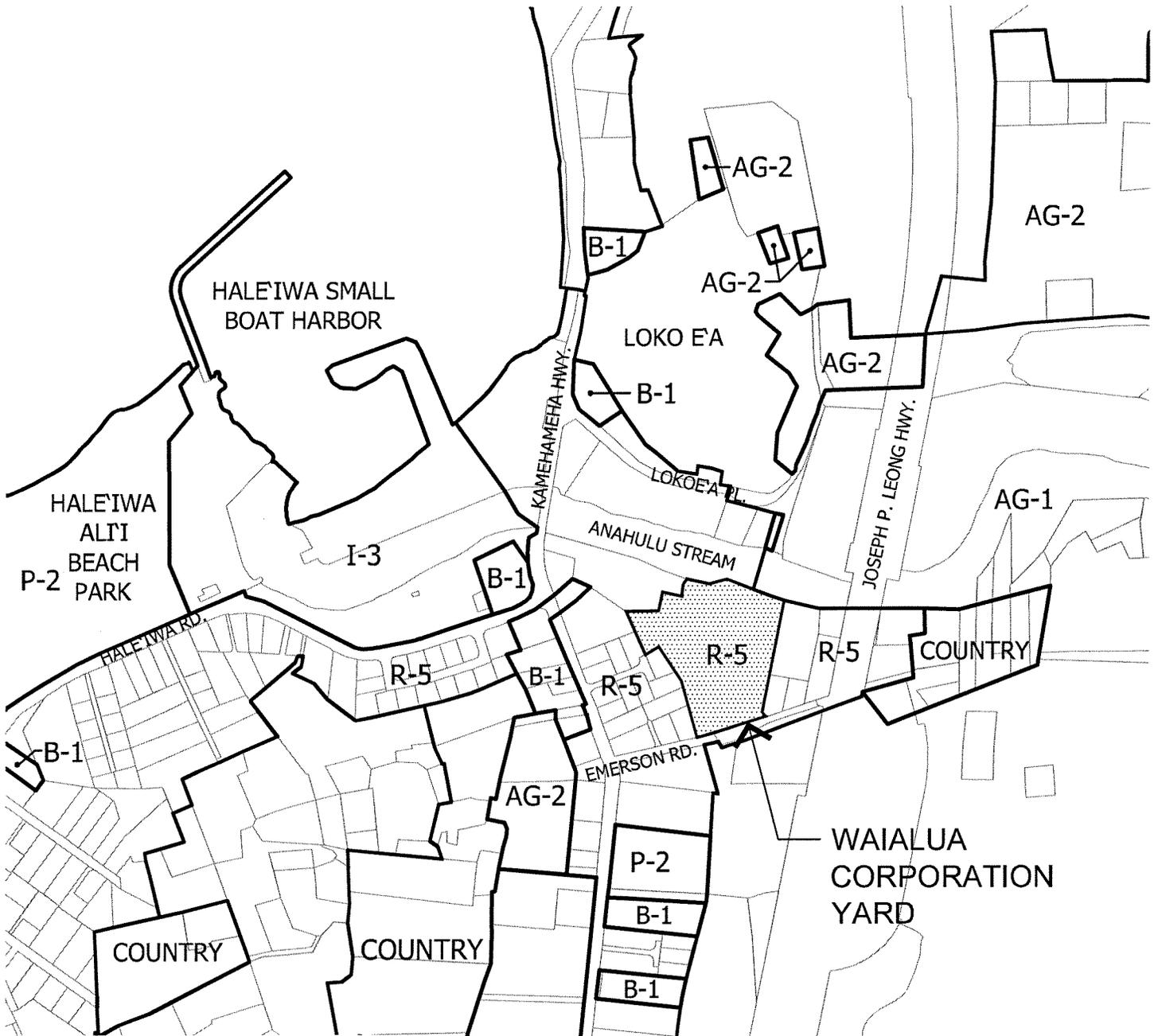
The corporation yard is zoned R-5 Residential (See Figure 8). Public uses and structures are principal permitted uses in the R-5 zoning district.



Source: City & County of Honolulu, Department of Planning & Permitting
North Shore Sustainable Communities Report Adopted May 2011.

Figure 7
SCP Plan / Special District Boundaries
Waialua Corporation Yard - NPDES Improvements

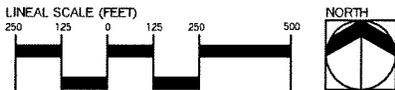




Legend

- B-1 NEIGHBORHOOD BUSINESS DISTRICT
- R-5 RESIDENTIAL (5,000 SF. LOT MINIMUM)
- AG-1 RESTRICTED AGRICULTURE DISTRICT
- AG-2 GENERAL AGRICULTURE DISTRICT
- Country COUNTRY DISTRICT
- P-2 GENERAL PRESERVATION DISTRICT
- I-1 LIMITED INDUSTRIAL DISTRICT
- I-3 WATERFRONT INDUSTRIAL DISTRICT

Source: City & County of Honolulu, Department of Planning & Permitting
Zoning Map 20, Ord. 86-121, Oct. 22, 1986



Portion Kawaihoa, North Shore District, O'ahu

Figure 8
Zoning Map
Waialua Corporation Yard - NPDES Improvements

The property lies within the County delineated Special Management Area (“SMA”) as shown on Figure 8. No development can take place within the SMA until the development is reviewed by the Department of Planning and Permitting (“DPP”). Per Chapter 25, Revised Ordinances of Honolulu, the DPP can determine (a) the development is exempt from the requirements of the chapter, (b) issue a SMA Minor Permit if the development has a fair market value of less than \$500,000 and will not significantly affect the SMA, or (c) require a SMA Major Permit if the proposal has a fair market value exceeding \$500,000 or which may have substantial adverse effects on SMA resources.

The Honolulu City Council approves SMA Major Permits by Resolution.

J. Public Facilities

1. Roads

The corporation yard is accessed from Emerson Road which connects portions of the Emerson Tract Subdivision with Kamehameha Highway. The two-lane, two-way road varies in pavement width and right-of-way. Fronting the corporation yard, the road has a 25-foot wide pavement a portion of which is used for off-street parking by corporation yard workers. The posted speed limit is 25 miles per hour.

Kamehameha Highway, a two lane two-way road, links North Shore communities with communities in Central Oahu and Ko’olauloa. Passing through Hale’iwa town, it intersects Emerson Road about 300 feet *makai* of the corporation yard. Left and right turning movements onto Kamehameha Highway is stop sign controlled.

The Joseph P. Leong Highway (F.A.P. No. F-083-1(23)) passes approximately 300 feet to the east of the corporation yard. The Highway cuts off direct access on Emerson Road to Kamehameha Highway from areas *mauka* of the Highway. Vehicle access into town from these areas is from the Joseph P. Leong Highway.

2. Water

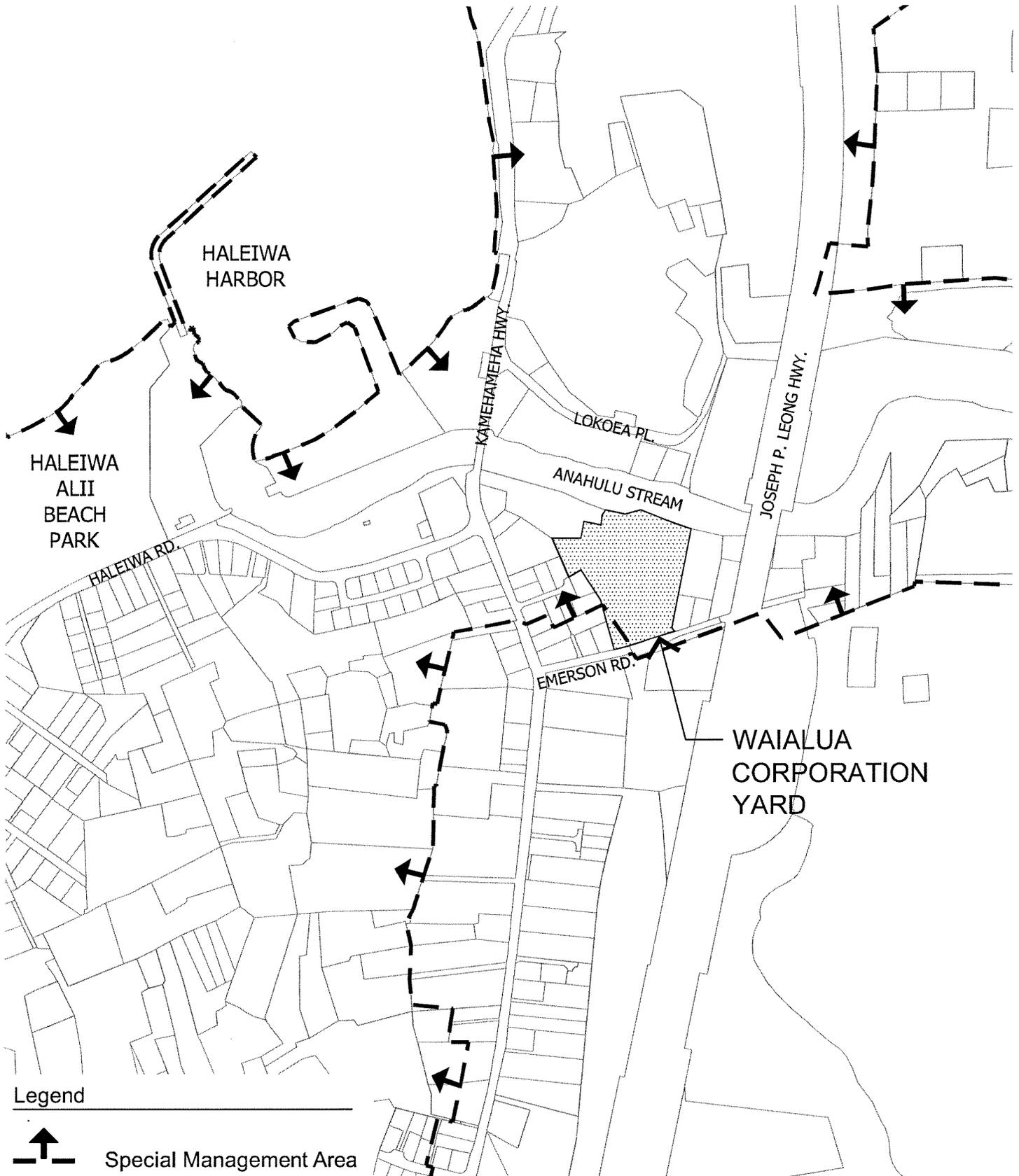
Domestic water is provided by the Honolulu Board of Water Supply. Water is drawn through a 2” meter from an 8” line in Emerson Road.

Water for the proposed facilities is tapped off of an existing 2” water line located south of the AES building. The existing 8” water line in the road reserve will be extended to provide a fire hydrant near Carport “D”.

3. Wastewater

Hale’iwa town is not serviced by a municipal wastewater treatment system. Individual wastewater systems are the primary means of wastewater treatment and disposal.

An existing Individual Wastewater System (“IWS”) services the corporation yard restroom, shower, and caretaker’s residence. Consisting of a septic tank and disposal field, the system has a treatment capacity of 667 gallons per day. The IWS is located behind and to the northwest of the AES Building and will not be relocated or affected by the proposed improvements.



Source: Hawaii Statewide GIS Program, <http://hawaii.gov/dbedt/gis/download.htm>

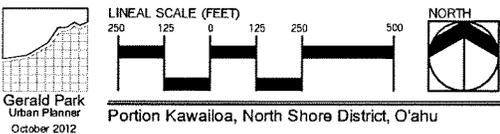
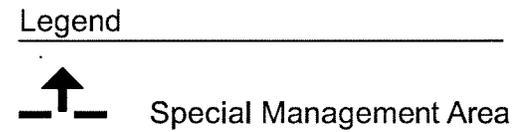


Figure 9
Special Management Area Map
Waialua Corporation Yard - NPDES Improvements

4. Drainage

In general the corporation yard is sloped to drain from south to northwest. A grass swale on the west side of the AES building collects and conveys runoff to a grass detention pond abutting the western end of the IWS disposal field. The detention pond is about 4 to 5 feet lower in elevation (11 feet) than the IWS disposal field and areas adjoining the AES building (15 to 16 feet).

The existing detention pond was reconstructed to accommodate the additional site runoff because of the additional impervious area constructed for this project.

From the detention pond, water is released off-site through a 24-inch culvert.

5. Power and Communication

Electrical power and telephone services are provided by overhead systems from Emerson Road.

6. Police and Fire Protection

Police protection originates from the Wahiawā Police Station in the town of Wahiawā about 10 miles to the southwest. The Hale'iwa Fire Station is located on Hale'iwa Beach Road about 3 miles from the corporation yard.

The existing 8" water line in the road reserve will be extended and a fire hydrant will be installed near Carport "D" to provide fire protection for the proposed facilities.

A caretaker resides on the property and provides security during non-working hours.

SECTION 3 SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS AND MEASURES TO MITIGATE ADVERSE EFFECTS

A. Assessment Process

The scope of the project was discussed with staff of the Department of Design and Construction, the superintendent of the Waiialua Corporation Yard, the consulting engineer, and consultants comprising the design team. State and County agencies were contacted for information relative to their areas of expertise. Time was spent in the field noting site conditions. From the discussions, field investigations, and literature search, existing conditions and features were identified which could affect or be affected by the project. These conditions are:

- The corporation yard has been at this location since 1942;
- The property has been extensively modified by grading, building construction, asphalt and concrete pavements, landscaping, and stockpiled materials;
- No change in existing use is considered by the proposed action;
- There are no archaeological or cultural resources on the premises;
- There are no rare, threatened, or endangered flora on the premises;
- Corporation yard property within Anahulu Stream is designated Floodway and land adjacent to the stream within the 0.1% annual chance flood plain; and
- The proposed improvements will not place additional demands on utility systems.

In evaluating the planned facilities and potential environmental impacts, it is concluded that the proposed facilities are relatively small scale, low-intensity improvements and can be constructed without adverse short-term environmental impacts. Environmental impacts resulting from construction can and will be mitigated by adherence to existing public health regulations, approved building and site work plans, best management practices, historic authorities, and construction permits.

B. Short-term Impacts

1. Air Quality

Construction will temporarily affect ambient air quality. Demolition and site work activities will raise fugitive dust that can settle in adjoining areas. Grading will be limited to the area where the new structure is to be placed and this should aid in controlling dust. The general contractor will employ on and off-site dust control measures to prevent demolition, work site, and construction equipment and activities from becoming significant dust generators. Control measures shall comply with Chapter 60.1, Air Pollution Control, Title 11, State Department of Health (and revisions thereto).

Most construction equipment and vehicles are diesel powered and emit exhaust emissions typically high in nitrogen dioxide and low in carbon monoxide. The Federal and State nitrogen dioxide standard ---100mg/m³ per annum---which is an annual standard, is not likely to be exceeded during construction. Carbon dioxide emissions should be less than that generated by automobile traffic on adjoining streets. Aldehyde odors from diesel equipment may be detected but should be dispersed by the prevailing winds.

2. Noise

Like fugitive dust, construction noise cannot be avoided. The building site is located in an paved area that is free of structures. Because of this “openness” construction noise will be audible in adjoining residential environs. Exposure to noise will vary by construction phase, the duration of each phase, and the type of equipment used during the different phases. Maximum sound levels in the range of 82-96 db(A) measured at 50 feet from the source would be generated by heavy machinery during demolition and site work. After site work is completed, reductions in sound levels, frequency, and duration can be expected as the structure is framed and sided. Noise from interior improvements will then be confined to inside the structure. An acoustical consultant is part of the design team and has been consulted for recommendations throughout the design.

Community Noise Control regulations establish maximum permissible sound levels for construction activities occurring within “acoustical” zoning districts. Based on the residential zoning for the site, the project is classified as a Class A zoning district for noise control purposes. The maximum permissible daytime (7 a.m. to 10 p.m.) sound level in the district is 55 dBA and 45 dBA during nighttime hours for stationary noise sources and equipment related to construction (Chapter 46, Community Noise Control, 1996).

In general, construction activities cannot exceed the permissible noise levels for more than ten percent of the time within any twenty-minute period except by permit or variance. Any noise source that emits noise levels in excess of the maximum permissible sound levels cannot be operated without first obtaining a noise permit from the State Department of Health. Although the permit does not attenuate noise per se it regulates the hours during which excessive noise is allowed. The contractor will be responsible for obtaining and complying with conditions attached to the permit.

Work will be scheduled between the hours of 7:00 AM to 3:30 PM Mondays through Fridays. The projected construction period will limit construction noise to a short period of time. The contractor will also ensure that construction equipment with motors is properly equipped with mufflers in good operating condition.

Construction noise will be audible over the entire development period. All construction activities will comply with Chapter 46 Noise Control for Oahu, Administrative Rules, Department of Health, State of Hawaii.

3. Erosion and Drainage

Site work, although limited in area, will expose soil thus creating opportunities for erosion (fugitive dust and suspended sediment in construction related runoff). Approximately 1.02 acres will be graded. Earthwork quantities are estimated at 796 cubic yards of excavation and 20 cubic yards for embankment. Grubbing, grading, and stockpiling excavated or imported material will be performed in accordance with Chapter 14, Article 14 of the Revised Ordinances of Honolulu, 1990, as amended. Furthermore the work shall be done in accordance with the Rules Relating to Soil Erosion Standards and Guidelines.

Best Management Practices (BMPS) for erosion and drainage control during construction will be incorporated into grading plans. BMPs will include erecting silt fences around the work site to coincide with the limits of grading, grassing all exposed graded areas after grading work is completed, erecting gravel bag berms with absorbent socks at paved areas

to minimize petroleum products from flowing offsite, and constructing stabilized construction access pads at the entrances to the building site to protect roads and driveways from mud, dirt, and rocks. An erosion control mat will be installed near the detention pond to stabilize the proposed channel near the detention pond. The contractor may implement other BMPs based on field conditions and their experience in working with similar work sites.

Site work will exceed one acre thus a NPDES General Permit Authorizing Discharges of Storm Water Associated with Construction Activity will be required from the State Department of Health.

Best Management Practices also will be implemented pursuant to City and County of Honolulu Rules Relating to Storm Drainage Standards, Section II, Storm Water Quality.

4. Historical Features

Should excavation unearth subsurface archaeological sites, artifacts, or cultural deposits, work in the immediate area will cease and the proper authorities notified for disposition of the finds. If the burials appear to be less than 50 years old, the Honolulu Police Department will be notified. If the burials appear to be more than 50 years old, then the State Historic Preservation Officer will be notified. As a matter of protocol, both agencies will probably be notified for inspection and disposition of the finds.

5. Flora

Ornamental landscape plantings adjoining the AES building on its north side will be removed and may be relocated elsewhere on-site. Several trees fronting the boulder pile will be demolished. Grass will be grubbed to make way for the enlarged detention basin but graded areas will be replanted with grass.

6. Solid Waste

Construction debris will be hauled off-site to an approved disposal site. Trucks hauling debris will be covered to minimize dust and flying debris.

7. Traffic

Construction vehicles hauling workers and material will contribute to traffic on roads leading to Hale'iwa and on Kamehameha Highway within the town. Material deliveries will be scheduled to minimize impacts on local vehicle traffic. Material unloading will occur on-site so as not to interfere with traffic circulation on Emerson Road.

C. Long-term Impacts

The proposed improvements support the City's actions to maintain compliance with the National Pollutant Discharge Elimination System (NPDES) program. The basis of the improvements is through the management of storm water runoff and minimizing its exposure to pollutants and spreading through the environment.

Major washing of vehicle undercarriages, refuse truck bins, and other vehicles / equipment is and will continue to be performed at the Halawa Corporation Yard. Similarly, equipment

and vehicle maintenance, servicing, and repairs will continue to be performed at the above mentioned corporation yard.

The wash water system will minimize the potential for introducing waste material into the environment. The treatment system will remove solids and petroleum based constituents from wash water before reuse. The dewatering facility will remove solids and debris from material collected from storm drains and streams. A sand-oil separator will remove solids and petroleum based constituents which pass through the dewatering facility's filter media prior to entering the disposal field. Water from the separator will be filtered before percolating into the ground. Collected solids and oil and sludge will be removed for proper disposal and the underground filters periodically checked and replaced as needed.

Vehicle washing and dewatering activities will take place in a designated contained area only. Wash water from both facilities will flow into a closed treatment system preventing contact with storm water, streams, or other bodies of water. A package recycled water treatment system will generate wash water thus minimizing the use of water in the washing process.

Pre-wash and washing procedures will assure that vehicles are properly "prepped" and washed using environmentally friendly cleaners and solutions.

The expanded detention basin will capture and release runoff generated by the proposed improvements with capacity to contain runoff from other parts of the corporation yard. The basin will be grassed and will function and resemble the existing detention basin.

As stated in the earlier EA for the Waiialua Corporation Yard, "[N]o increase in the number of employees or vehicles assigned to the yard are anticipated. Equipment and manpower changes are primarily a function of community need rather than an improvement project such as the proposed action" (Park 1994). This statement applies to the improvements proposed at this time.

The proposed vehicle wash area will have positive effects on operations in that trucks don't have to go to Wahiawā for periodic washing saving time, fuel, and ordinary wear and tear.

Anahulu Stream is a recognized floodway and sections of the corporation yard adjoining the stream are susceptible to flooding. Because municipal resources are summoned during and following flood events, the City and County of Honolulu strives to place its protective facilities (particularly fire stations) outside of established flood zones. At the Waiialua Corporation Yard, all of the vehicles are garaged in structures outside of the Analulu Stream flood zone providing vehicles and crews response capability to North Shore communities and island-wide if needed.

Consistent with city policy, the proposed structures are sited outside of flood zones delineated on the FIRM for the area. However, it cannot be stated with certainty that flood water will not reach the improvements. In the event of a flood, vehicles and mobile equipment can be moved but the structures cannot. Under worst case conditions, structural damages can be anticipated. It is anticipated that the boulder mound will help protect the structures from potential significant structural damage and water drained to the detention pond.

Vehicle washing and dewatering operations will be suspended temporarily and resume when conditions return to near pre-flood conditions and equipment can be safely brought back on-line.

Land use controls for Hale'iwa town should not be affected. The proposed improvements are confined to the Waiialua Corporation Yard which is within the Community Growth Boundary for the town. The proposed structures will resemble the newer existing structures at the corporation yard and will not deviate from the design standards of the Hale'iwa Special District.

The proposed structures are compliant with the development standards for the zoning lot. Although the structures will increase the overall lot coverage for the property the added area is below the allowable coverage for the residential zoning district (See Table 2). At the proposed building site, the structures do not encroach into the rear yard; Carport "D" which is approximately 32 feet away from a road reserve does not encroach into the 15 foot side yard for the lot.

Carport "D" and Wash Area "A" structures will not exceed the allowable building height of 25 feet. A height waiver will be requested to allow the height of the dewatering facility structure (28 feet) to exceed the 25-foot height limit for the zoning district.

Table 2. Lot Coverage

<u>Allowable*</u>	<u>Existing</u>	<u>Proposed</u>	<u>Total</u>
89,615 SF	13,520 SF	6,007 SF	19,527 SF

*50% of zoning lot (179,615 SF)

The structures will not be visible from Emerson Road. There is little vehicle and pedestrian traffic on the road and existing buildings and trees will effectively screen the new buildings from view. In addition, the corporation yard is generally not visible to most of the public who are not aware of its location. Some residents on the east and west sides of the corporation yard will notice visual changes when the structures are erected. Over time, the structures will blend with the utilitarian appearance of the existing buildings and become part of the corporation yard landscape.

SECTION 4 ALTERNATIVES TO THE PROPOSED ACTION

A. No Action

A No Action alternative would preclude short and long term environmental impacts disclosed in this assessment. The alternative would not achieve the purpose of the project and the City's goal of minimizing pollutants from entering the environment.

B. Alternate Site Plan

The improvements are proposed in an unimproved section of the corporation yard away from adjoining residences to the east and west. The only other location outside the 100-year flood plain where the proposed facilities can be collectively housed is in the vicinity of the open grass area on the west. At this location, the facility will be in proximity to residences where noise might be a concern. In addition, the open, grass area is integral to controlling runoff. Covering the area with impervious surfaces would remove its function for retaining surface flow on-site, detaining runoff, filtering sediments, and percolation.

SECTION 5 PERMITS AND APPROVALS

Permits and approvals required to construct the improvements are listed below. Additional permits and approvals may be required pending final construction plans.

City and County of Honolulu

Honolulu City Council
Special Management Area Use Permit

Department of Planning and Permitting
Grubbing, Grading, and Stockpiling Permit
Building Permit for Building, Electrical, Plumbing, Sidewalk/Driveway and Demolition Work
Special District Permit
Waiver (Building Height)

State of Hawai'i

Department of Health
Variance from Pollution Controls (Noise Permit)
NPDES General Permits
Discharges Associated with Construction Activities

**SECTION 6
AGENCIES AND ORGANIZATIONS TO BE CONSULTED
IN THE PREPARATION OF THE ENVIRONMENTAL ASSESSMENT**

City and County of Honolulu

Board of Water Supply
Department of Environmental Services
Department of Facility Maintenance
Department of Planning and Permitting

State of Hawai'i

Department of Health
Environmental Planning Office
Department of Land and Natural Resources
Historic Preservation Division

Organizations

Hawaiian Electric Company
Hawaiian TelCom
Oceanic Time Warner
The Gas Company
Kamehameha Schools
North Shore Neighborhood Board No. 27
Waialua Public Library (Placement)

SECTION 7 DETERMINATION OF SIGNIFICANCE

Chapter 200 (Environmental Impact Statement Rules) of Title 11, Administrative Rules of the State Department of Health, establishes criteria for determining whether an action may have significant effects on the environment (§11-200-12). The relationship of the proposed project to these criteria is discussed below.

1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

Natural or cultural resources are not known to be associated with the corporation yard property.

2) Curtails the range of beneficial uses of the environment;

The proposed improvements will not curtail the range of beneficial uses of the environment. The building site allows the use of the environment for a maintenance function that should minimize the potential for introducing pollutants into a wider environment.

3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in chapter 344, Hawaii Revised Statutes, and any revisions thereof and amendments thereto, court decisions or executive orders;

The project will not conflict with long-term environmental policies, goals, and guidelines of the State of Hawai'i.

4) Substantially affects the economic or social welfare of the community or State;

The project will not substantially affect the economic or social welfare of the State.

5) Substantially affects public health;

Public health should not be adversely affected by the proposed project. Existing public health regulations and county ordinances pertaining to construction will mitigate potential construction related impacts on the physical environment and minimize effects on persons residing next to the corporation yard.

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

Substantial secondary impacts are not anticipated.

7) Involves a substantial degradation of environmental quality;

Environmental quality will not be degraded by the proposed improvements. Design of the improvements and adhering to procedural measures for using the wash systems should minimize the introduction of pollutants into the environment.

8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The project is not a precursor for larger actions.

9) Substantially affects a rare, threatened or endangered species, or its habitat;

Rare, threatened or endangered flora and fauna and their habitat are not found on the premises. Flora growing on the property are common to the island of O'ahu and the State of Hawai'i.

10) Detrimentally affects air or water quality or ambient noise levels;

Ambient air quality will be affected temporarily by fugitive dust and combustion emissions but can be controlled by measures stipulated in this Assessment. Construction noise will be audible during site preparation work but should diminish once as the structures are erected. All construction activities will comply with air quality and noise pollution regulations of the State Department of Health.

Best management practices (BMPs) will be implemented to control pollutant discharge into the environment. The site work contractor will be responsible for determining appropriate BMPs that fits the needs of the project, the site, and environmental conditions.

In the long-term, the wash and filtration systems will minimize the potential for pollutants to enter the environment.

11) Affects an environmentally sensitive area such as a flood plain, tsunami zone, erosion prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

Several flood hazard zones have been identified for the Waialua Corporation Yard. Anahulu Stream and land near the stream are designated Floodway and Zone AE or land subject to the 0.1% annual chance flood (100-year flood). In recognition of the flood hazard zones, the proposed improvements are located outside of the hazard areas.

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

Scenic vistas and view planes will not be affected by the proposed improvements.

13) Requires substantial energy consumption.

Electrical energy will be required to power to energize the wash equipment. Energy demands will be determined during the design stage of the project.

REFERENCES

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