ALAN. M. ARAKAWA
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Deputy Director

DEPARTMENT OF WATER SUPPLY
COUNTY OF MAUI
200 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793-2155
www.mauiwater.org

June 25, 2012

Mr. Gary Hooser, Director
State of Hawaii
Department of Health
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Mr. Hooser:

SUBJECT: Draft Environmental Assessment for
Piiholo Water Treatment Plant Organic Carbon Reduction Project
DWS Job No. 08-02
TMK: (2) 2-4-16:02, Piiholo, Maui, Hawaii

The County of Maui, Department of Water Supply has reviewed the Draft Environmental Assessment for the subject project, and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish notice of availability for this project in the next available OEQC Environmental Notice.

We have enclosed a completed OEQC Publication Form, one (1) copy of the document in pdf format on a CD; and one (1) hardcopy of the Draft EA. Please call M. Jeffrey Pearson at (808) 270-7681 or email Jeff.Pearson@co.maui.hi.us, if you have any questions.

Sincerely,

Dave Taylor, P.E.
Director

cc: Ivan K. Nakatsuka - ATA

OEQC Publication Form
The Environmental Notice

Name of Project:	Piiholo Water Treatment Plant Organic Carbon Reduction Project
Type of Document:	Draft Environmental Assessment
Island:	Maui
District:	Makawao
TMK:	2-4-016:002
Permits Required:	Grading permit, Building permit, NDPES permits (as applicable), Site Plan Approval for construction within a Conservation District
Name of Proposing Agency:	Department of Water Supply County of Maui 200 South High Street Wailuku, Maui, Hawaii 96793 Contact: Mr. Jeffrey Pearson Phone: (808) 270-7681
Consultant:	Austin, Tsutsumi & Associates 501 Sumner St, Suite 521 Honolulu, HI 96817 Mr. Ivan Nakatsuka (808) 533-3646
Status:	30-Day Comment Period

Project Summary:

The project involves construction of new granular activated carbon (GAC) vessels and a booster pump station within the fenced site of the existing Piiholo Water Treatment Plant (WTP). A portion of the existing fence line will be relocated to allow for the WTP upgrade, however, the upgrade will remain within the existing property. The new GAC vessels will be utilized as a filtration system to remove total organic carbon (TOC) from the water. Removal of TOC is required to ensure that the drinking water produced by the Piiholo WTP will be in compliance with future stricter Department of Health (DOH) and U.S. Environmental Protection Agency (EPA) regulations.

PIIHOLO WATER TREATMENT PLANT ORGANIC CARBON REDUCTION PROJECT DRAFT ENVIRONMENTAL ASSESSMENT

PIIHOLO, MAUI, HAWAII
TMK: (2) 2-4-016:002

June 26, 2012

Prepared for:

County of Maui
Department of Water Supply

Wailuku, Maui, Hawaii

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ORGANIC CARBON REDUCTION PROJECT
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June 26, 2012

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EXHIBITS

APPENDICES

AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

KENNETH K. KUROKAWA, P.E.
TERRANCE S. ARASHIRO, P.E.
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PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT
DRAFT ENVIRONMENTAL ASSESSMENT
Piiholo, Maui, Hawaii

EXECUTIVE SUMMARY

Applicant:	County of Maui Department of Water Supply
Type of Document:	Draft Environmental Assessment
Legal Authority:	Chapter 343, Hawaii Revised Statutes
Agency Determination:	Finding of No Significant Impact (FONSI)
Applicable Environmental Assessment review "trigger":	Use of County land and funds
Location	TMK: (2) 2-4-016:002
Accepting Authority:	Department of Water Supply County of Maui 200 South High Street Wailuku, Maui, Hawaii 96793 Contact: Mr. Jeffrey Pearson Phone: (808) 270-7681
Consultant:	Austin, Tsutsumi & Associates, Inc. 501 Sumner Street, Suite 521 Honolulu, HI 96817 Contact: Lisa Appelgate Phone: (808) 533-3646

Project Summary	The project involves construction of new granular activated carbon (GAC) vessels and a booster pump station within the fenced site of the existing Piiholo Water Treatment Plant (WTP). A portion of the existing fence line will be relocated to allow for the WTP upgrade, however, the upgrade will remain within the existing property. The new GAC vessels will be utilized as a filtration system to remove total organic carbon (TOC) from the water. Removal of TOC is required to ensure that the drinking water produced by the Piiholo WTP will be in compliance with future stricter Department of Health (DOH) and U.S. Environmental Protection Agency (EPA) regulations.

1. INTRODUCTION

1.1 PROJECT OVERVIEW

The project site is located in the Piiholo region on the island of Maui. (See Exhibit 1, Project Location, and Exhibit 2, Vicinity Map.) The project involves construction of new granular activated carbon (GAC) vessels and a booster pump station at the site of the existing Maui Department of Water Supply's (DWS's) Piiholo Water Treatment Plant (WTP), also referred to as the Lower Kula WTP.

The proposed improvements primarily involve construction of a new booster pump station and up to six new GAC vessels. (See Exhibits 3 and 4 for Site Plan and Photo Exhibit of Proposed Improvements.) As this area is currently inadequate for the proposed improvements, the following realignment/relocation work would be required:

- Realignment of a portion of an existing Maui Electric Company (MECO) overhead power line and installation of a new power pole.
- Realignment of a portion of the existing fence.
- Realignment of a portion of an existing on-site access road, and paving the road with asphalt concrete.
- Redirection of an existing drainage swale.
- Realignment of some existing piping.
- Removal of two to three pine trees, as necessary.

The GAC system would be installed as a post treatment process after filtration, and preceding disinfection and pH adjustment, and will be designed to treat up to 6.0 million gallons per day (mgd) of water. The new GAC vessels will be utilized as a filtration system to remove total organic carbon (TOC) from the water.

Removal of TOC is required to ensure that the drinking water produced by the Piiholo WTP will be in compliance with stricter Department of Health (DOH) and U.S. Environmental Protection Agency (EPA) regulations that will become effective in October 2013.

The GAC vessels will either be constructed of coated carbon steel or painted Type 304 stainless steel, color to match surroundings.

A new booster pump station with can-type vertical turbine pumps will be used to pump the water to the GAC vessels and provide for a minimum operating pressure of about 35 pounds per square inch. The pumps will be designed to pump up to 6.0 mgd, and there will be one pump to serve as a standby pump.

The GAC vessels will be installed on concrete pads. A 16-foot wide asphalt concrete (a.c.) driveway will allow for a service vehicle to mobilize between the vessels for maintenance procedures, including removal of spent GAC from the vessels and refilling the vessels with new GAC. Backwash waste from the GAC vessels will be discharged to the existing sludge lagoons, thereby eliminating the need for a GAC backwash tank and carbon filtering system.

When the GAC is at the end of its useful life, the spent carbon will be removed from the vessels and trucked to the Central Maui landfill for disposal. Carbon changeout is expected to occur two to three times per year. The useful life of the carbon will vary based on the quality of the water being processed by the vessels, and the amount of water being treated.

There will be no additional chemical injection improvements. However, there will be a need for electrical improvements associated with the booster pump station. Emergency power will not be required for the booster pumps, and therefore, the existing emergency generator system will not have to be upgraded.

The estimated cost of the proposed project is $5-$6 million.

1.2 PURPOSE OF THE ENVIRONMENTAL ASSESSMENT

This Environmental Assessment (EA) has been prepared pursuant to Hawaii Revised Statutes (HRS), Section 343-5, which states that an EA shall be required for actions which "Propose the use of state or county lands or the use of state or county funds, other than funds to be used for feasibility or planning studies for possible future programs or projects that the agency has not approved, adopted, or funded, or funds to be used for the acquisition of unimproved real property; provided that the agency shall consider environmental factors and available alternatives in its feasibility or planning studies." Since the project will be constructed on land owned by the state and leased to the county, and the construction will be paid for by county and/or state funds, an EA for this project is required.

1.3 PURPOSE AND NEED FOR THE PROJECT

The Piiholo WTP supplies water to customers in the Lower Kula area. The State of Hawaii Department of Health (DOH) and the U.S. Environmental Protection Agency (EPA) regulate the quantity of disinfection by-product (DBPs) in drinking water. Chlorine used in the disinfection process at the Piiholo WTP reacts with dissolved organic carbon (DOC) to form DBPs. DBPs include total trihalomethanes (TTHM) and haloacetic acids (HAA_5).

EPA's future Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) will require conformance at all times to the maximum contaminant levels (MCLs) for TTHM and HAA_5 of 0.08 mg/L and 0.06 mg/L, respectively, by October 2013. Although DWS has a treatment goal of maintaining regulated DBP concentrations in the distribution system at or below 50 percent of the MCL, the water in the Lower Kula distribution system occasionally does not meet the Stage 2 DBPR MCLs. Therefore, DWS is implementing this project to assure conformance to the future Stage 2 DBPR by October, 2013.

2. DESCRIPTION OF THE EXISTING ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

2.1 LAND USE

2.1.1 Existing Conditions

The project will be constructed entirely within the existing 33.62 acre easement for the Piiholo Reservoir, within which the existing Piiholo WTP is located. This easement is on state-owned property in the district of Makawao. The land is zoned conservation (resource subzone), and is entirely within the Makawao Forest Reserve. (See Exhibit 5, Aerial View of Piiholo WTP.) The project will be constructed on an area of the Piiholo WTP which has previously been graded and grassed. (Refer to Exhibit 4.)

2.1.2 Potential Impacts and Mitigation Measures

The proposed action involves construction of the upgrades at the site of the existing Piiholo WTP. Due to the project site being in a very remote conservation area, the addition of the new facility at the existing WTP site is not anticipated to have an adverse effect on nearby land uses.

2.2 CLIMATE, TOPOGRAPHY AND SOILS

2.2.1 Existing Conditions

Like most areas of Hawaii, Maui's climate is relatively uniform year-round. The coolest months on Maui are December and January. August and September are the hottest and most humid summer months. The region's tropical latitude, its position relative to storm tracts and the surrounding ocean combine to produce a stable climate. Variation in climate among different regions on Maui is largely due to local terrain.

Average temperatures at Kahului Airport range from 60 degrees Fahrenheit in February to 80 degrees Fahrenheit in August. Rainfall averages approximately 20 inches per year. Winds predominantly blow north to northeast.

Elevation at the project site is approximately 2850 feet above mean sea level (msl). The project area was previously graded during construction of the Piiholo WTP and has a slope of approximately seven (7) percent in a south to north direction.

According to information published by the U.S. Soils Conservation Service, underlying the project area are soils belonging to the Laumaia-Kaipoioi-Olinda Association. Characteristics of this association are deep, gently sloping to very steep, well-drained soils that have a moderately fine textured or medium-textured subsoil; on intermediate and high uplands. The soils developed in material weathered from volcanic ash. The natural vegetation is black wattle, eucalyptus, gosmore, kikuyugrass, pukiawe, sweet vernalgrass, white clover, and Yorkshire foggrass.

The soil type specific to the project area is Olinda loam, 12 to 20 percent slopes (OND). This soil is on smooth, intermediate to high mountain slopes. In a representative profile, the surface layer is dark reddish-brown loam about 6 inches thick. The subsoil, about 5 inches thick, is dark reddish-brown and yellowish-red silty clay loam that has subangular blocky structure. Below this is a yellowish-reddish brown silty clay loam and gravelly silty, clay loam. This is underlain by slightly weathered basic igneous rock. The soil is slightly acid in the surface layer and subsoil. Permeability is moderately slow. Runoff is slow to medium, and the erosion hazard is slight to moderate.

This soil is used for pasture, woodland, and water supply. Small acreages are used for truck crops and orchards. The natural

vegetation consists of bermudagrass, brackenferm, eucalyptus, Natal redtop, puakeawe, sweet vernalgrass, and Yorkshire foggrass.

2.2.2 Potential Impacts and Mitigation Measures

The proposed project will not have an adverse effect on microclimates. Grading work will involve cut quantities of approximately 410 cubic yards of soil and fill quantities of approximately 710 cubic yards. The topographic character of the site will not be substantially altered as a result, nor is there expected to by any change in the soil composition.

2.3 FLOOD AND TSUNAMI HAZARDS

2.3.1 Existing Conditions

The National Flood Insurance Program prints Flood Insurance Rate Maps (FIRMs) showing areas of flooding. The property is located within Panel 150003 0300 B, which is not a printed panel. However, a note on the Index Panel states that the entire Panel is designated as an area of “Minimal Tsunami Inundation”.

2.3.2 Potential Impacts and Mitigation Measures

The proposed action will not be located in an area of flooding or subject to tsunami inundation. Therefore, no adverse impact to flood conditions is anticipated as a result of this project. Appropriate drainage mitigation measures will be implemented as further discussed in Section 2.12.1.

2.4 FLORA AND FAUNA

2.4.1 Existing Conditions

The project area was cleared during construction of the Piiholo Reservoir between 1968 and 1971, and again during construction of

the Piiholo WTP in 1992. Prior to construction of the Piiholo WTP, a botanical survey was conducted, which concluded that no rare, threatened or endangered plant species were present on the site. The project area is currently vegetated with introduced grassed species and pine trees.

A Pre-Assessment consultation letter for the project was sent to the U.S. Fish and Wildlife Service requesting initial comments they may have on the proposed action. In an email from the U.S. Fish and Wildlife Service, dated May 9, 2012, they noted that there are four protected species that are known to occur throughout the action area of the proposed project. (See Appendix A for email from the U.S. Fish and Wildlife Service and the response letter.) The four protected species are Newell's shearwater (*Puffinus auricularis newelli*), Hawaiian petrel (*Pterodroma sandwichensis*), Hawaiian goose (*Branta sandvicensis*), and Hawaiian hoary bat (*Lasiurus cinereus semotus*).

Newell's shearwater and the Hawaiian petrel may traverse the action area when flying between the ocean and nesting sites in the mountains during their breeding season (March through December). The Hawaiian goose (Nene) may be present in the vicinity of the proposed action at any time of the year, and the Hawaiian hoary bat roosts in both exotic and native woody vegetation.

2.4.2 Potential Impacts and Mitigation Measures

Fauna

Potential impacts on the protected species, as discussed in U.S. Fish and Wildlife Service's email, and proposed mitigation measures/responses are as follows:

Potential Impact: Nighttime artificial lighting, such as flood lighting for security and nighttime construction activities, can adversely impact

seabirds by causing disorientation which may result in collision with utility lines, buildings, fences, and vehicles. Furthermore, fledging seabirds attracted to nighttime artificial lighting have a tendency to exhaust themselves while circling the light source and become grounded. Too weak to fly, these birds become vulnerable to depredation by feral predators, such as dogs, cats, and mongoose.

Mitigation Measures: Measures to minimize the amount of glare from all outdoor lighting installations will be incorporated into the design of the lighting for the project. Outdoor lighting will utilize systems which employ the lowest possible wattage for the application, and be constructed in a manner that fully shields lighting sources and directs light downwards. Construction will take place during normal working daylight hours, and there will be no construction activities during the night.

Potential Impact: Due to its range and foraging behavior, the Hawaiian goose may be present in the vicinity of the proposed action at any time of the year.

Mitigation Measure: If a Nene appears within 100 feet of ongoing work, all activity will be temporarily suspended until the bird moves off to a safe distance of its own volition. Moreover, if any number of Hawaiian geese are observed loafing and/or foraging within the area of the proposed action during the Hawaiian goose breeding season (December through April) a biologist familiar with the nesting behavior of the Hawaiian goose will be asked to survey the area around proposed construction sites prior to the initiation of any work, or after any subsequent delay of work of three or more days (during which the birds may attempt to nest). If a nest is discovered within a radius of 100 feet of proposed construction activity, or a previously undiscovered nest is found within said radius after work begins, all work will cease immediately and the Service contacted for further

guidance. These mitigation measures will be included in the construction specifications for the project.

Potential Impact: The Hawaiian hoary bat roosts in both exotic and native woody vegetation and, while foraging, leaves young unattended in "nursery" trees and shrubs. If trees or shrubs suitable for bat roosting are cleared during the breeding season (June 1 through September 15), there is a risk that young bats could inadvertently be harmed or killed.

Mitigation Measure: The Service recommends that no trees greater than 15 feet tall be removed or trimmed during the time frame from June 1 to September 15. Construction of the project is expected to start between January and March, 2013. Therefore, the trees will be removed before June 1.

Potential Impact: Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground. When barbed wire is used in fencing, Hawaiian hoary bats can become entangled. Moreover, there is also evidence that barbed wire fences in open areas pose a greater risk to bats than barbed wire fences in forested areas.

Mitigation Measure: The relocated fence will be along a heavily forested area, which may reduce the risk to bats in the area. Ideally, the fence would not have barbed wire. However, the Piiholo WTP provides drinking water to nearby communities and providing a secure project area is critical to prevent tampering and terrorist activities. Therefore, for security reasons, the relocated fence will need to have barbed wire similar to the existing fence around the WTP.

Fauna

There are no known rare, endangered, or threatened species of flora within the vicinity of the project. Since the project will be constructed within the existing Piiholo WTP site, on already cleared and developed land, the proposed project is not anticipated to impact flora in the vicinity.

2.5 STREAMS AND WETLANDS

2.5.1 Existing Conditions

According to the United States Department of the Interior, Fish and Wildlife Service, National Wetland Inventory Map, the Piiholo Reservoir is the only wetland feature in the immediate vicinity of the project site, and is classified as a Lacustrine system. (See Exhibit 6, Wetlands Map.) Lacustrine systems include wetlands and deepwater habitats with all of the following characteristics:

- Situated in a topographic depression or a dammed river channel.
- Lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30% areal coverage;
- Total area exceeds 20 acres.

The only other wetland in the project vicinity is the forested area approximately half a mile to the east of the project site which is classified as a Freshwater Forested/Shrub Wetland, designated with the code “PFO3C”, as described below:

P: System **PALUSTRINE**: The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergent, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 ppt. Wetlands lacking such

vegetation are also included if they exhibit all of the following characteristics: 1) are less than 8 hectares (20 acres); 2) do not have an active wave-formed or bedrock shoreline feature; 3) have at low water a depth less than 2 meter (6.6 feet) in the deepest part of the basin; and 4) have a salinity due to ocean-derived salts of less than 0.5 ppt.

Subsystem:

FO: Class **FORESTED**: Characterized by woody vegetation that is 6 meters tall or taller.

3: Subclass **Broad-Leaved Evergreen**: Woody angiosperms (trees or shrubs) with relatively wide, flat leaves that generally remain green and are usually persistent for a year or more;

Modifier:

C: WATER REGIME **Seasonally Flooded**: Surface water is present for extended periods especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.

There is an unnamed gulch to the east and west of the Piiholo WTP. However, the gulch could not be inspected to determine if it was flowing, due to heavy vegetation in the area.

2.5.2 Potential Impacts and Mitigation Measures

The Piiholo Reservoir is utilized for storing surface water prior to it being treated at the Piiholo WTP. There will be no discharges from the new GAC vessels into the reservoir; therefore, the proposed project is not anticipated to have any significant impact on the wetland reservoir.

In light of the limited scope of the project and its distance from the area designated as Freshwater Forested/Shrub Wetland, the proposed project is not anticipated to have any significant impacts on the forest.

There will be no discharge of dredged material into the nearby gulch. Best Management Practices will be employed to ensure that construction actions do not affect any water within the gulch. Moreover, there will be no stockpiling or staging areas for construction in or near the gulch.

2.6 AIR AND NOISE CHARACTERISTICS

2.6.1 Existing Conditions

The only potential source of airborne emissions in the immediate vicinity of the project site is the existing Piiholo WTP. However, most of the treatment processes for the WTP are located within buildings. The sludge lagoons are located to the west of the main treatment area, and are uncovered. However, during several site visits, there was no discernible odor from the lagoons. Therefore, the air at the project site is of high quality with no point sources of airborne emissions. The relatively high quality of the air can also be attributed to the region's constant exposure to winds and rain which quickly disperse concentrations of emissions.

Existing noise at the project site is primarily attributed to day to day operations of the Piiholo WTP primarily due to pump motors.

2.6.2 Potential Impacts and Mitigation Measures

There will be a temporary impact on air and noise quality attributable to construction activities associated with site grading and equipment installation. These would, however, be limited, given the size and scope of improvements. The noise created during construction is

expected to stay within allowable levels as set forth in Hawaii Administrative Rules, Chapter 11-46 "Community Noise Control". If the noise is to exceed the maximum levels, then the Contractor shall be responsible for obtaining any necessary permits regarding construction noise. Best management practices (BMP's) will be implemented to mitigate impacts associated with construction activities.

On an ongoing post-construction operational basis, noise will be generated by the new booster pumps associated with the project. The booster pump motors will be outside and aboveground. A roof shelter will be constructed over the pumps to shield them from the elements. The noise from the pumps will be typical of a water treatment facility, and is not expected to negatively impact the operators at the WTP. Due to the remoteness of the project site, the proposed action is not expected to have a negative impact on air or noise quality beyond the WTP site.

2.7 HISTORIC AND ARCHAEOLOGICAL RESOURCES

2.7.1 Existing Conditions

The subject property is located on a parcel that has been disturbed during construction of the existing Piiholo WTP. There are no known materials of archaeological significance on the property.

2.7.2 Potential Impacts and Mitigation Measures

No impact to archaeological resources is anticipated as a result of the proposed project. However, in the event anything of cultural and/or historic significance is found during construction, all work in the area will cease and the appropriate authorities will be contacted for determination of appropriate mitigation.

2.8 CULTURAL RESOURCES

2.8.1 Existing Conditions

Current tax maps show no record of Land Commission Awards (LCAs) on the project site, which is one indicator of native Hawaiian activities or presence in the mid to later half of the nineteenth century. There are also no trails, streams, caves, native plants, or other cultural resources on the Piiholo WTP site.

2.8.2 Potential Impacts and Mitigation Measures

No impact to cultural resources is anticipated as a result of the proposed project. The site has been under control of DWS from 1968 to present, and is secured by perimeter fencing. The project will not alter the use of the site and will continue to be under the control of DWS.

2.9 SCENIC AND OPEN SPACE RESOURCES

2.9.1 Existing Conditions

The existing Piiholo WTP site is located in a remote site on the lower slopes of Haleakala surrounded by heavily forested areas. From the project site, no residences are visible. Surrounding land consists of the heavily forested Makawao Forest Reserve.

The closest hiking trail to the project site it the Kahakapao Loop Trail which travels through the Makawao Forest Reserve to the east of the Piiholo WTP.

2.9.2 Potential Impacts and Mitigation Measures

The height of the new GAC vessels will be approximately five feet taller than the existing nearby Operations Building. However, due to

the remoteness of the site, and the forest surrounding the Piiholo WTP, the WTP site is not visible from nearby roads or residences.

The addition of new equipment at the existing WTP is not expected to negatively impact views from the Kahakapao hiking trail. Therefore, the project is not anticipated to affect the scenic character of the region.

2.10 PUBLIC SERVICES

2.10.1 Existing Conditions

The County of Maui's Police Department headquarters is located in Wailuku. There are four patrol districts on the island of Maui – the Wailuku, Lahaina, Hana and Kihei districts. The project site is within the Wailuku district.

Fire prevention, suppression and protection services for the island of Maui are provided by the County Department of Fire and Public Safety. The Department provides fire and emergency services to the islands of Maui, Lanai and Molokai from 14 fire stations and a fire prevention office. The project area is serviced by the Makawao Fire Station, located near Pukalani.

Maui Memorial Medical Center is currently the only major medical facility on the island. Acute, general, and emergency care services are provided by the facility. In addition, there are private medical and dental clinics to service residents of Paia, Makawao and Pukalani.

Single-family solid waste collection service is provided once weekly by the County of Maui. Residential solid waste is disposed of at the County's Central Maui landfill, located in the Puunene region, adjacent to Ameron Hawaii's rock quarry site. Commercial waste collected by private collection companies is also disposed at the County landfill.

The main recreational facility found in the project vicinity is the Eddie Tam Memorial Center in Makawao, which consists of a community center, gymnasium, baseball fields, soccer field, tennis and basketball courts, picnic pavilions and a playground..

State of Hawaii, Department of Education schools located in the surrounding communities include Makawao Elementary School (grades K to 5), Samuel E. Kalama Intermediate School (grades 6 to 8), Pukalani Elementary School (grades K to 5) and King Kekaulike High School (grades 9 to 12).

Private schools in the area include Montessori School (grades pre-K to 8), St. Joseph School (grades pre-K to 5), Clearview Christian Girls School (grades 6 to 8), Carden Academy of Maui (grades K to 8), Haleakala Waldorf School (grades pre-K to 8) and Kamehameha Schools (grades pre-K to 12).

The University of Hawaii, Maui College in Kahului offers higher education programs.

2.10.2 Potential Impacts and Mitigation Measures

The new vessels will be filled with GAC which will need to be replaced two to three times per year, depending on the quality and quantity of the water entering the vessels and the operation time of the vessels. The spent carbon, which is not considered to be a hazardous waste, will be hauled to the County's Central Maui landfill for disposal. However, the carbon disposal is not expected to have a negative impact on the solid waste facility.

The proposed action will not impact other public services since there would be no demand for police, fire, medical, recreational or educational services.

2.11 SOCIO-ECONOMIC ENVIRONMENT

2.11.1 Existing Conditions

Maui County has experienced considerable growth in recent years. Between 2000 and 2005, the U.S. Census estimates that Maui's resident population increased from 117,644 to 129,471 – a growth of 10%. The population is expected to increase to 176,687 over the 25 year period from 2005 to 2030. (Draft Maui Island Plan, December 2009.)

Population in the Makawao-Pukalani-Kula area has also increased. The U.S. Census estimates that the population increased from 21,571 in 2000 to 23,176 in 2005 – a gain of 7.4%. The population of this area is estimated to be 29,294 in 2030. (Draft Maui Island Plan, December 2009.)

The project site is located within the Makawao Forest Reserve. The closest residences lie approximately 4,000 feet to the west along Piiholo Road. The residences are in a community of mixed residential and agricultural uses. The residential and commercial communities of Makawao and Pukalani lie to the north and west of the project site, respectively.

2.11.2 Potential Impacts and Mitigation Measures

The project will not have a significant impact on population or economy due to the project's limited size, scope and use.

2.12 INFRASTRUCTURE

2.12.1 Existing Conditions

The project is accessed from Kahakapao Road, a two-lane, two-way County road, and then from an unnamed access road through the forest reserve.

There are no County wastewater collection and transmission facilities in the project area. Wastewater generated at the Piiholo WTP is treated on-site via a septic tank and leaching field.

Water produced at the Piiholo WTP is used for servicing the plant.

The existing drainage pattern on the west side of the project site is to sheet flow from south to north across the site. On the east site of the project site, the drainage water sheet flows into a drainage swale that directs the water toward the north end of the project site, where it enters a drain inlet. The water is then directed under an on-site access road, via a culvert, and discharged at a headwall at the north end of the project, from where it sheet flows towards the existing gulch.

Electrical service to the Piiholo WTP is provided by Maui Electric Company. Telephone service at the site is provided by Hawaiian Telecom.

2.12.2 Potential Impacts and Mitigation Measures

In the short term, there will be an increase in the number of vehicle trips to the project site during the construction phase. However, traffic control measures are not anticipated to be necessary. Appropriate measures will be taken to minimize the impact of ingress and egress of heavy equipment, vehicles and materials during construction. Construction work will be performed during normal work hours, i.e.,

there will be no work performed on weekends, holidays or during the night, unless authorized by the County.

After construction, on a daily basis, the traffic flow on local roadways in the vicinity of the project site will not be impacted. There will not be a need for increasing the number of operators currently working at the site. Approximately two to three times per year, the spent carbon will be hauled to Central Maui landfill, temporarily increasing the truck traffic on local roadways.

The proposed GAC system will enhance the existing water system by removing total organic carbon from the drinking water. The addition of the GAC system is necessary to ensure that the water leaving the Piiholo WTP meets DOH and EPA drinking water requirements.

The proposed action will not contribute any wastewater to the existing on-site wastewater system. Backwash waste from the GAC vessels will be discharged to the on-site sludge lagoons.

The existing drainage swale on the east side of the existing WTP will be realigned around the new equipment. However, there will only be a minimal increase in runoff that should not impact the existing drainage downstream or on adjacent properties.

2.13 CUMULATIVE AND SECONDARY IMPACTS

A cumulative impact is defined as an impact to the environment which results from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Actions such as those that involve the construction of public facilities or infrastructure stimulate secondary impacts, such as population growth and increased demands for public services and infrastructure.

This proposed upgrade at the existing Piiholo WTP is intended to improve the quality of the drinking water from the WTP, and will not increase the capacity of the WTP. The proposed project is not part of a larger water system development proposal. There will be a small increase in electrical use associated with the new booster pumps.

3. RELATIONSHIP TO LAND USE PLANS, POLICIES AND CONTROLS

3.1 STATE LAND USE DISTRICTS

Chapter 205, Hawaii Revised Statutes, relating to the Land Use Commission, establishes four (4) major use districts in which all lands in the State are placed. These districts are designated as "Urban", "Rural", "Agricultural", and "Conservation". The subject property is located within the Resource subzone of the Conservation District. A Conservation District Use Permit (CDUP) MA-2549 was approved by the Board of Land and Natural Resources on July 14, 1992 for the Piiholo WTP (referred to as the Lower Kula WTP in the CDUP). The proposed project is considered an accessory use to the permitted land use. Therefore, a Site Plan Approval (SPA) needs to be filed with DLNR for the project, as indicated in a Memorandum from DLNR's Office of Conservation and Coastal Lands dated April 23, 2012. (See Appendix A for memorandum from DLNR and response letter.)

3.2 MAUI COUNTY GENERAL PLAN

The Maui County General Plan 2030 sets forth broad objectives and policies to help guide the long-range development of the County. The purpose of the Countywide Policy Plan is as stated below:

> "The Countywide Policy Plan provides broad goals, objectives, policies, and implementing actions that portray the desired direction of the County's future. This includes: (1) a vision statement and core values for the County to the year 2030; (2) an explanation of the plan-making process; (3) a description and background information regarding Maui County today; (4) identification of guiding principles; and (5) a list of countywide goals, objectives, policies, and implementing actions related to the following core themes:

- Protect the Nature Environment
- Preserve Local Cultures and Traditions
- Improve Education
- Strengthen Social and Healthcare Services
- Expand Housing Opportunities for Residents
- Strengthen the Local Economy]
- Improve Parks and Public Facilities
- Diversify Transportation Options
- Improve Physical Infrastructure
- Promote Sustainable Land Use and Growth Management
- Strive for Good Governance

Furthermore, this Countrywide Policy Plan will provide the policy framework for the development of the Maui Island Plan and the nine Community Plans."

The Maui County General Plan includes goals for each of the implementing actions and states objectives and policies for each. As stated above, one of the implementing actions of the Countywide Policy Plan is to Improve Physical Infrastructure. The goal of the implementing action, and the objective and policies relating to water systems are as follows:

Goal:

Maui County's physical infrastructure will be maintained in optimum condition and will provide for and effectively serve the needs of the County through clean and sustainable technologies.

Objective:

1. Improve water systems to assure access to sustainable, clean, reliable, and affordable sources of water.

Policies:

a. Ensure that adequate supplies of water are available prior to approval of subdivision or construction documents.

b. Develop and fund improved water-delivery system.

c. Ensure a reliable and affordable supply of water for productive agricultural uses.

d. Promote the reclamation of gray water, and enable the use of reclaimed, gray, and brackish water for activities that do not required potable water.

e. Retain and expand public control and ownership of water resources and delivery systems.

f. Improve the management of water systems so that surface-water and groundwater resources are not degraded by overuse or pollution.

g. Explore and promote alternative water-source-development methods.

h. Seek reliable long-term sources of water to serve developments that achieve consistency with the appropriate Community Plans.

Assessment:

The proposed action is in keeping with the following General Plan water objectives and policies stated above.

3.3 COMMUNITY PLAN

Within Maui County there are nine Community Plan regions. From a General Plan implementation standpoint, each region is governed by a Community Plan which sets forth desired land use patterns, as well as goals, objectives, policies, and implementing actions for a number of functional areas including infrastructure-related parameters. The subject property is considered to be located within the Makawao-Pukalani-Kula Community Plan region.

The subject parcel is located on lands designated as "Conservation" in the Community Plan. The proposed land use action is in keeping with the existing Piiholo WTP on the subject property.

Applicable goals, objects and policies of the Makawao-Pukalani-Kula Community Plan are cited below.

Goal:

The timely and environmentally sensitive development and maintenance of infrastructure systems which protect and enhance the safety and health of Upcountry's residents and visitors, including the provision of domestic water, utility and waste disposal services and effective transportation systems which meet the needs of residents and visitors while maintaining the region's rural character.

Objectives and Policies:

(A) The Department of Water Supply shall expand water supply and distribution systems, including catchment systems, in accordance with the directions set forth in the Makawao-Pukalani-Kula Community Plan.

(B) Encourage the construction of additional storage capacity by the Department of Water Supply, commercial developers, and individual farmers to help alleviate the inadequate water supply.

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3.4 COUNTY ZONING

The subject parcel is zoned as an “Interim Zoning District”. The proposed WTF upgrade is a permitted use within this zoning district. The project is not within a Special Management Area.

3.5 COASTAL ZONE MANAGEMENT AREA OBJECTIVES AND POLICIES

Pursuant to Chapter 205A, Hawaii Revised Statutes, projects are evaluated with respect to Coastal Zone Management (CZM) objectives, policies, and guidelines. It should be noted that although the subject property is not located within the County of Maui's Special Management Area (SMA), the project's relationship to applicable coastal zone management considerations has been reviewed and assessed.

3.5.1 Recreational Resources

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies:

(A) Improve coordination and funding of coastal recreational planning and management; and

(B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

(i) Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;

(ii) Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;

(iii) Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;

(iv) Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation.

(v) Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;

(vi) Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;

(vii) Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and

(viii) Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the Land Use Commission, Board of Land and Natural Resources, and county authorities; and crediting such dedication against the requirements of Section 46-6, HRS.

Assessment:

The subject property is located inland, away from the coastline. The proposed action is not, therefore, anticipated to adversely impact existing coastal recreational resources.

3.5.2 Historic Resources Objective:

Objective:

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.

Policies:

(A) Identify and analyze significant archeological resources;

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

(C) Support state goals for protection, restoration, interpretation, and display of historic resources.

Assessment:

There are no known historic deposits or any items of cultural significance which would be affected by the Piiholo WTP upgrade. In accordance with Section 6E-43.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if any significant cultural deposits or human skeletal remains are encountered, work will stop in the immediate vicinity and the State Historic Preservation Division (SHPD/DLNR) will be contacted.

3.5.3 Scenic and Open Space Resources

Objective:

Protect, preserve and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

(A) Identify valued scenic resources in the coastal zone management area;

(B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;

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

(D) Encourage those developments that are not coastal dependent to locate in inland areas.

Assessment:

The project site is not located within a significant coastal view corridor. The proposed action is not anticipated to have an adverse impact on shoreline views or open space resources.

3.5.4 Coastal Ecosystems

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

(A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;

(B) Improve the technical basis for natural resource management;

(C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;

(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; and

(E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

Assessment:

Appropriate soil erosion and drainage control measures will be implemented during construction, in order to minimize disruption to downstream coastal water ecosystems. In light of the location of the project, and limited scope and scale of the proposed action, adverse impact on coastal ecosystems is not anticipated.

3.5.5 Economic Uses

Objective:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

(A) Concentrate coastal dependent development in appropriate areas;

(B) Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and

(C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth in such areas, and permit coastal dependent development outside of presently designated areas when:

(i) Use of presently designated locations is not feasible;

(ii) Adverse environmental effects are minimized; and

(iii) The development is important to the State's economy.

Assessment:

While short-term employment opportunities during project construction will be generated, there should be no significant adverse economic impacts associated with the proposed project. The proposed action is not contrary to the objective and policies for economic use.

3.5.6 Coastal Hazards

Objective:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

Policies:

(A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;

(B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards;

(C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and

(D) Prevent coastal flooding from inland projects.

Assessment:

According to the Flood Insurance Rate Map for the area, the project site is located in an area of minimal tsunami inundation. In addition, the project site is not located within environmentally sensitive areas that are subject to natural hazards. The proposed project is not anticipated to affect the region's susceptibility to coastal hazards.

3.5.7 Managing Development

Objective:

Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

(A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;

(B) Facilitate timely processing of applications for development permits and resolve overlapping of conflicting permit requirements; and

(C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Assessment:

Opportunities for public understanding of the proposed project are provided for during processing of the Environmental Assessment (EA) in accordance with Chapter 343, HRS, notice and public review provisions. All aspects of development will be conducted in accordance with applicable Federal, State, and County standards.

3.5.8 Public Participation

Objective:

Stimulate public awareness, education, and participation in coastal management.

Policies:

(A) Promote public involvement in coastal zone management processes;

(B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and

(C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Assessment:

As noted above, the applicant conducted consultation in accordance with the Environmental Assessment requirements, Chapter 343, HRS. The proposed project does not contradict the objectives of public awareness, education, and participation.

3.5.9 Beach Protection Objective:

Objective:

Protect beaches for public use and recreation.

Policies:

(A) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;

(B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and

(C) Minimize the construction of public erosion-protection structures seaward of the shoreline.

Assessment:

The proposed project will not involve construction near shoreline areas, and is, therefore, not anticipated to have an adverse effect on the local beach environment.

3.5.10 Marine Resources Objective:

Objective:

Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

(A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;

(B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;

(C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;

(D) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and

(E) Encourage research and development of new, innovative

technologies for exploring, using, or protecting marine and coastal resources.

Assessment:

The proposed project will not have an adverse impact on coastal marine resources.

3.6 COMPLIANCE WITH THE STATE OF HAWAII'S DRINKING WATER STATE REVOLVING FUND PROGRAM

This project will be funded by Federal funds through the State of Hawaii's Drinking Water State Revolving Fund (DWSRF) program. The U.S. Congress established the DWSRF program as a new Section 1452 of the Safe Drinking Water Act (SDWA), 33 U.S.C. 300j-12, by the SWDA Amendments of 1996, Public Law 104-182. The DWSRF was established to help prevent contamination through source water protection and enhanced water system management. The proposed project is consistent with the overall program intent to prevent potential contamination. This document includes all of the environmental information required for compliance with the DWSRF program

3.7 CROSS-CUTTING FEDERAL AUTHORITIES

The following subsections address the proposed project's relationship to other Federal "cross-cutting" authorities

3.7.1 Archaeological and Historic Preservation Act (16 USC 461) and National Historic Preservation Act (16 USC 470)

The subject property is located on a parcel that has been disturbed during construction of the existing Piiholo WTP. There are no known materials of archaeological significance on the property.

A copy of this Draft Environmental Assessment (EA) will be provided to the Department of Land and Natural Resources, State Historic Preservation Division for review and comment.

3.7.2 Clean Air Act (42 USC 7401)

Air quality at the project site is good. The only anticipated impacts are short-term impacts associated with construction activities. There are no long-term impacts associated with the operation of the proposed project.

A copy of this Draft EA will be provided to the State Department of Health for review and comment.

3.7.3 Coastal Barriers Resources Act (16 USC 3501)

According to the State Department of Health, this act does not apply to the State of Hawaii at this time. Nonetheless, the project area is located approximately six miles inland from the coastline and is not anticipated to adversely impact coastal resources.

3.7.4 Coastal Zone Management Act (16 USC 1451)

Section 3.5 addresses the project's relationship to the Hawaii Coastal Zone Management Program. The proposed project is not located within the County of Maui's Special Management Area and is not anticipated to have any adverse impact upon coastal resources.

A copy of this Draft Environmental Assessment (EA) will be provided to the State Department of Business, Economic Development, and Tourism, which oversees the Office of Coastal Zone Management, for review and comment.

3.7.5 Endangered Species Act (16 USC 1531)

The Endangered Species Act, as amended, provides broad protection for species of flora and fauna that are listed as rare, endangered, or threatened. This Act mandates that federal agencies seek to conserve such species and use their authorities in furtherance of the Act's purpose.

There are no known rare, endangered, or threatened species of flora in the vicinity of the project site. There are four protected species of fauna that are known to occur throughout the action area of the proposed project. The potential impacts of the project on the species, and mitigation measures are discussed in Section 2.4.2.

A copy of this Draft Environmental Assessment (EA) will be provided to the U.S. Fish and Wildlife Service and the State Department of Land and Natural Resources for review and comment.

3.7.6 Environmental Justice (Executive Order 12898)

Executive Order 12898 calls upon federal agencies to attempt to identify and address disproportionately high and adverse human health or environmental effects of programs, policies, or actions upon minority and low-income populations.

Section 3 discusses the anticipated impacts of the proposed project. No human health or environmental effects are anticipated for all segments of the population. The project will improve human health by providing for a higher degree of water treatment at the facility to meet stricter state and federal drinking water safety standards.

3.7.7 Farmland Protection Policy Act (7 USC 4201)

The Farmland Protection Policy Act is intended to minimize the extent to which federal programs contribute to the unnecessary and

irreversible conversion of farmland to nonagricultural uses, while assuring that federal programs are administered in such a way as to be compatible with other programs and policies concerning farmland protection.

The proposed project will be constructed at the existing Piiholo WTP on an already developed portion of the site. There will be no conversion of farmland to nonagricultural uses. The proposed project will encompass approximately 1 acre in size, which represents less than one tenth of one percent of the approximately 245,000 acres of State Agricultural district lands on the island of Maui. Therefore, adverse impacts to agricultural productivity are not anticipated as a result of the proposed action.

A copy of this Draft Environmental Assessment (EA) will be provided to the Natural Resources Conservation Service, which has the leadership in administering the Farmland Protection Policy Act, for review and comment.

3.7.8 Fish and Wildlife Coordination Act (16 USC 661)

The Fish and Wildlife Coordination Act, as amended, authorizes the Secretaries of Agriculture and Commerce to require consultation with the U.S. Fish and Wildlife Service and the State agency responsible for fish and wildlife, when any body of water is proposed to be impacted by any agency under a federal permit or license. Consultation is to be undertaken to prevent any adverse impact to wildlife resources.

The project will not result in any impacts to any bodies of water or fish populations. As noted previously, there are four protected species of fauna that are known to occur throughout the action area of the proposed project. The potential impacts of the project on the species, and mitigation measures are discussed in Section 2.4.2.

A copy of this Draft Environmental Assessment (EA) will be provided to the U.S. Fish and Wildlife Service and the State Department of Land and Natural Resources for review and comment.

3.7.9 Floodplain Management (Executive Order 11988, As Amended By Executive Order 12148)

The subject property lies well outside of any floodplain, on lands designated as "minimal tsunami inundation" by the Flood Insurance Rate Map. The project is consistent with all applicable regulations and guidance relating to floodplain management.

3.7.10 National Historic Preservation Act (16 USC 470)

The subject property is located on a parcel that has been disturbed during construction of the existing Piiholo WTP. There are no known materials of archaeological significance on the property. In accordance with Section 6E-43.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if any significant cultural deposits or human skeletal remains are encountered, work will stop in the immediate vicinity and the State Historic Preservation Division (SHPD/DLNR) will be contacted.

3.7.11 Protection of Wetlands (Executive Order 11990, As Amended by Executive Order 12608)

According to the United States Department of the Interior, Fish and Wildlife Service, National Wetland Inventory Map, the Piiholo Reservoir is the only wetland feature in the immediate vicinity of the project site, and is classified as a Lacustrine system. (Refer to Exhibit 6, Wetlands Map.)

The only other wetland in the project vicinity is the forested area approximately half a mile to the east of the project site which is classified as a Freshwater Forested/Shrub Wetland.

The proposed project is not expected to have a negative impact on the wetlands. There are not any resources on the project site that are vital to the wildlife that use wetlands elsewhere on the island.

A copy of this Draft Environmental Assessment (EA) will be provided to the U.S. Fish and Wildlife Service and the State Department of Land and Natural Resources for review and comment.

3.7.12 Safe Drinking Water Act (42 USC 300f)

The Safe Water Drinking Act (SDWA) is the principal, federal law that ensures the quality of drinking water. Under this act, the Environmental Protection Agency (EPA) sets standards for drinking water quality and oversees those who implement said standards. All public water systems are required to meet these water quality standards. According to the EPA, there are no sole source aquifers on the island of Maui.

The purpose of the project is to remove TOC from the water, which is required to ensure that the drinking water produced by the Piiholo WTP will be in compliance with future stricter EPA regulations. The proposed improvements will be implemented in accordance with Federal water quality standards.

3.7.13 Wild and Scenic Rivers Act (16 USC 1271)

According to the National Wild and Scenic Rivers System, there are no wild and scenic rivers in Hawaii. As a result, the State Department of Health noted that this act does not apply to the State of Hawaii at this time.

3.7.14 Essential Fish Habitat Consultation Process Under the Magnuson-Stevens Fishery Conservation and Management Act (16 USC 1801)

The project will be located approximately six miles inland from the coastline and is not anticipated to adversely impact any essential fish habitat situated near the coastline.

4. SUMMARY OF ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

The proposed project will result in certain unavoidable construction-related environmental impacts as outlined in Section 2.

In the short term, construction associated with the project will generate noise impacts. These impacts will be limited to the immediate vicinity of the project construction areas. Sound attenuating construction equipment will be used, where practicable, to mitigate noise impacts caused by construction.

Unavoidable air quality impacts will also arise as a result of construction activities, such as the generation of dust and other airborne pollutants. Appropriate best management practices (BMPs) will be incorporated in the construction process to mitigate adverse impacts, such as frequent watering of exposed surfaces and regular maintenance of construction equipment to minimize construction-related impacts.

The proposed action will involve a commitment of fuel, labor, funding, and material resources; however, the commitment of resources will be justified, given the eventual benefits to be realized through the completion of this project.

On an ongoing post-construction operational basis, noise will be generated by the new booster pumps associated with the project. The booster pump motors will be outside and aboveground. A roof shelter will be constructed over the pumps to shield them from the elements. However, due to the remoteness of the project site, the proposed action is not expected to have a negative impact on air or noise quality beyond the Piiholo WTP site.

In the long term, the construction of the project is not anticipated to result in any significant, long-term adverse environmental effects.

5. ALTERNATIVES TO THE PROPOSED ACTION

The applicant has looked at a variety of options in accommodating the proposed project.

5.1 PREFERRED ALTERNATIVE

The proposed action represents the preferred alternative. The project involves construction of a new booster pump station and GAC vessels for removal of organic carbon from the water being produced at the Piiholo WTP.

5.2 NO ACTION ALTERNATIVE

As mentioned in Section 1.3, EPA's future Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) will require conformance at all times to the maximum contaminant levels (MCLs) for total trihalomethanes and haloacetic acids by October 2013. Occasionally, the water in the Lower Kula distribution system occasionally does not meet the future Stage 2 DBPR MCLs. Therefore, DWS is implementing this project to assure conformance with the future regulations. The no action alternative would not address this treatment issues. The Piiholo WTP upgrades represented by the proposed action are needed to meet future DOH and EPA drinking water requirements and ensure public health, safety, and welfare.

Similar to the no action alternative, the postponed action alternative does not address the water system issues, since conformance with the future regulations is required by October 2013.

5.3 ALTERNATIVE TREATMENT PROCESSES

An alternative treatment process manufactured by Orica Watercare, Inc., which is a proprietary magnetic ion exchange (MIEX) process, was also considered for TOC removal. A pilot study to compare the GAC and MIEX processes was started in July 2011 at the Piiholo WTP. Both processes were proven to be effective in removing TOC from the water. However, results of the pilot study showed that the GAC was the preferred process. Therefore, DWS has decided

to pursue upgrading the WTP to achieve higher DOC removal using the GAC process.

6. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The development of the proposed project would involve the commitment of funds. In addition, labor and material resources would be expended as part of the project's construction phase. On an on-going basis, power will be needed to operate the booster pumps, and the granular activated carbon will require replacement three to four times per year. Commitments of these resources are considered irreversible and irretrievable. These commitments, however, are also considered appropriate in the context of providing drinking water that will meet future federal and state requirements for safe drinking water.

7. SIGNIFICANCE CRITERIA ASSESSMENT

The "Significance Criteria", Section 12 of the HAR, Title 11, Chapter 200, "Environmental Impact Statement Rules", were reviewed and analyzed to determine whether the proposed action will have significant impacts on the environment. The following criteria and preliminary analysis are provided.

7.1 Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.

There are no known archaeological features on the project site. In accordance with Section 6E-43.6, HRS and Chapter 13-300, Hawaii Administrative Rules, if any significant cultural deposits or human skeletal remains are encountered, work will stop in the immediate vicinity and the SHPD will be contacted.

The project entails the use of approximately one acre of conservation land, at the already developed site of the Piiholo WTP.

7.1.1 Curtails the range of beneficial uses of the environment.

The subject project is at the site of the existing Piiholo WTP. The proposed action involves removal of two or three pine trees and construction of a new booster pump station and GAC filters. Given the limited size and scope of the proposed action, there would be no consequent curtailment of the range of beneficial uses of the environment.

7.1.2 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 State's Environmental Policy and Guidelines are set forth in Chapter 344, HRS. The proposed action is consistent with the policies and guidelines of Chapter 344, HRS.

7.1.3 Substantially affects the economic welfare, social welfare, and cultural practices of the community or State.

The construction of the project will not have a significant impact on community economic or social welfare parameters.

7.1.4 Substantially affects public health.

No adverse impact to public health is anticipated to result from the proposed project. The proposed action is needed to improve the quality of the drinking water from the Piiholo WTP to meet DOH and EPA drinking water regulations.

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

There will be no adverse effect on public services, such as police, fire, medical, educational, or waste collection services. Moreover, the proposed project will not impact population parameters.

7.1.6 Involves a substantial degradation of environmental quality.

The project will not have a substantial impact on environmental quality.

7.1.7 Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.

The proposed action does not involve a commitment to larger actions nor will it have a significant cumulative impact on the environment. Best management practices will be employed to minimize and avoid environmental impacts.

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

Construction activities will result in short-term air quality and noise impacts. Dust control measures, such as regular watering and sprinkling, and installation of dust screens, will be implemented to minimize wind-blown emissions. Noise impacts will occur primarily from construction equipment. Equipment mufflers or other noise attenuating equipment, as well as proper equipment and vehicle maintenance, will be used during construction activities.

Construction noise impacts will be mitigated through compliance with the provisions of the State of Hawaii, Department of Health Administrative Rules Title 11, Chapter 46, “Community Noise Control". These rules require a noise permit if the noise levels from construction activities are expected to exceed the allowable levels set forth in the Chapter 46 rules. No long-term air or water quality or ambient noise level impacts are anticipated.

On an ongoing post-construction operational basis, noise will be generated by the new booster pumps associated with the project. The booster pump motors will be outside and aboveground. A roof shelter will be constructed over the pumps to shield them from the elements.

7.1.9 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.

The subject property is located within the Makawao Forest Reserve. However, the project will be located at the existing Piiholo WTP on already developed land. Therefore, the project will not result in damage to an environmentally sensitive area. The project lands are

wholly within an area of minimal tsunami inundation. No other foreseeable environmental effects attributed to environmentally sensitive areas are anticipated in conjunction with the project.

7.1.10 Substantially affects scenic vistas and viewplanes identified in county or state plans or studies.

The existing Piiholo WTP site is located in a remote site on the lower slopes of Haleakala surrounded by heavily forested areas. From the project site, no residences are visible. Surrounding land consists of the heavily forested Makawao Forest Reserve.

The closest hiking trail to the project site it the Kahakapao Loop Trail which travels through the Makawao Forest Reserve to the east of the Piiholo WTP

The height of the new GAC vessels will be approximately five feet taller than the existing nearby Operations Building. However, due to the remoteness of the site, and the forest surrounding the Piiholo WTP, the WTP site is not visible from nearby roads or residences.

The addition of new equipment at the existing WTP is not expected to negatively impact views from the Kahakapao hiking trail. Therefore, the project is not anticipated to affect the scenic character of the area or impinge upon view corridors.

7.1.11 Requires substantial energy consumption.

The proposed action will involve construction of a new booster pump station. Currently, the design consists of four booster pumps, with the intention of operating three pumps, with the fourth pump acting as standby. The pumps are expected to have 60 horsepower motors. Based on a maximum operating time of 24 hours per day, the estimated power usage would be between 700 and 800 kilowatt hours

per day. In the context of regional energy consumption, a minimal impact to energy is anticipated.

In addition, coordination with Maui Electric Company (MECO) will be undertaken during the electrical plans preparation phase of work to ensure all operational parameters are addressed for the proposed project.

Based on the foregoing analysis, the Department of Water Supply concludes that the proposed action will result in a Finding of No Significant Impact (FONSI).

8. LIST OF PERMITS AND APPROVALS

The proposed action calls for the following governmental approvals:

County of Maui

1. Grading permit
2. Building permit

State of Hawaii

1. National Pollutant Discharge Elimination System Permit (as applicable)
2. Site Plan Approval for construction within a Conservation District

9. AGENCIES AND ORGANIZATIONS CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT

The following agencies and organizations were consulted during the preparation of the Draft Environmental Assessment. Agency comments and responses to substantive comments are included in Appendix A.

1. Mr. George Young, Chief
   Regulatory Branch
   U.S. Department of the Army
   U.S. Army Engineer District, Honolulu
   Building 230
   Fort Shafter, Hawaii 96858-5440

2. Mr. Loyal Mehrhoff
   Pacific Islands Manager
   U.S. Fish and Wildlife Service
   300 Ala Moana Blvd., Room 3-122,
   Box 50088
   Honolulu, Hawaii 96813

3. Ms. Ranae Ganske-Cerizo, District Conservationist
   Natural Resources Conservation Service
   U.S. Department of Agriculture
   700 Hookele Street, Suite 202
   Kahului, Hawaii 96732
   Mr. Ed Reinhardt, President
   Maui Electric Company, Ltd.
   P.O. Box 398
   Kahului, Hawaii 96733

4. Mr. William J. Aila Jr., Chairperson
   State of Hawaii
   Department of Land and Natural Resources
   P.O. Box 621
   Honolulu, Hawaii 96809

5. Ms. Theresa Donham, Chief
   State of Hawaii
   Department of Land and Natural Resources
   State Historic Preservation Division
   Archaeological Branch
   601 Kamokila Boulevard, Room 555
   Kapolei, Hawaii 96707

6. Dr. Kamana'opono Crabbe, Chief Executive Officer
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

7. Ms. Lorreta J. Fuddy, Director
State of Hawai'i
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96814

8. Mr. Alec Wong, Chief
State of Hawaii
Department of Health
Environmental Management Division
Clean Water Branch
919 Ala Moana Blvd., Room 301
Honolulu, Hawaii 96814

9. Ms. Joanna Seto, Chief
State of Hawaii
Department of Health
Environmental Management Division
Safe Drinking Water Branch
919 Ala Moana Blvd., Room 308
Honolulu, Hawaii 96814

10. Dr. Lorrin Pang, M.D.
District Health Officer
State of Hawai'i
Department of Health
District Health Office
54 High Street
Wailuku, Hawaii 96793

11. Ms. Jo Anne Johnson Winer, Director
County of Maui
Department of Transportation
2145 Kaohu Street
David Trask Building, Suite 102
Wailuku, Hawaii 96793

12. Mr. David Goode, Director
County of Maui
Department of Public Works
200 South High Street
Kalana O Maui Building, 4th Floor
Wailuku, Hawaii 96793

13. Mr. Kyle Ginoza, Director
County of Maui
Department of Environmental Management
2200 Main Street
One Main Plaza Building, Suite 100
Wailuku, Hawaii 96793

14. Mr. Jeffrey A. Murray, Fire Chief
County of Maui
Department of Fire and Public Safety
200 Dairy Road
Kahului, Hawaii 96732

15. Mr. Glenn Correa, Director
County of Maui
Department of Parks and Recreation
700 Hali‘a Nakoa Street
War Memorial Complex
Wailuku, Hawaii 96793

16. Mr. William Spence, Director
County of Maui
Department of Planning
250 South High Street
Kalana Pakui Building, Suite 200
Wailuku, Hawaii 9679

17. Mr. Gary Yabuta, Chief
County of Maui
Police Department
55 Mahalani Street
Wailuku, Hawaii 96793

18. Mr. Ed Reinhardt, President
Maui Electric Company, Ltd.
P.O. Box 398
Kahului, Hawaii 96733

MAUI COUNTY COUNCIL MEMBERS

19. Mr. Danny A. Mateo
Council Chair
Kalana O Maui Building
200 South High Street
Seventh Floor
Wailuku, Hawaii 96793

Residency Area: Molokai

20. Mr. Joseph Pontanilla
Council Vice-Chair
Kalana O Maui Building
200 South High St.
Eighth Floor
Wailuku, Hawaii 96793

Residency Area: Kahului

21. Ms. Gladys C. Baisa
Council Member
Kalana O Maui Building
200 South High St.
Eighth Floor
Wailuku, Hawaii 96793

Residency Area: Pukalani, Kula, Ulupalakua

22. Mr. Robert Carroll
Council Member
Kalana O Maui Building
200 South High St.
Eighth Floor
Wailuku, Hawaii 96793

Residency Area: East Maui

23. Ms. Elle Cochran
Council Member
Kalana O Maui Building
200 South High St.
Eighth Floor
Wailuku, Hawaii 96793

Residency Area: West Maui

24. Mr. Donald G. Couch. Jr.
Council Member
Kalana O Maui Building
200 South High St.
Eighth Floor
Wailuku, Hawaii 96793

Residency Area: South Maui

25. Mr. G. Riki Hokama
Council Member
Kalana O Maui Building
200 South High St.
Seventh Floor
Wailuku, Hawaii 96793

Residency Area: Lanai

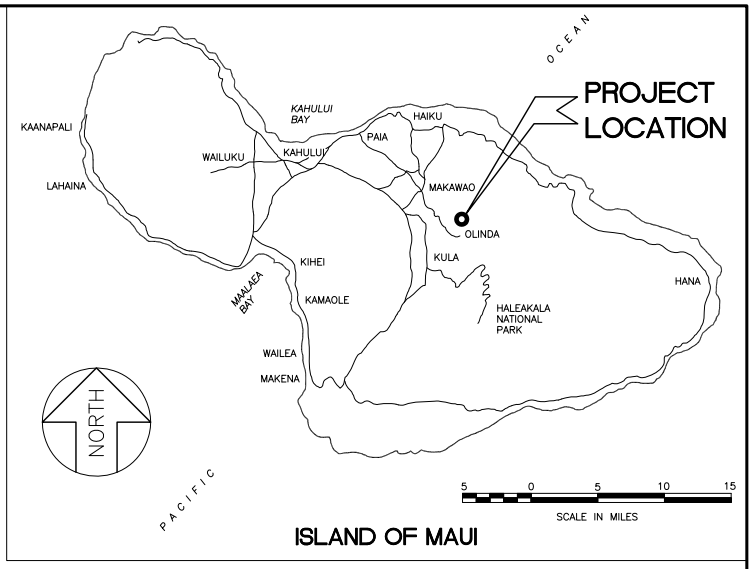
26. Mr. Michael P. Victorino
Council Member
Kalana O Maui Building
200 South High St.
Eighth Floor
Wailuku, Hawaii 96793

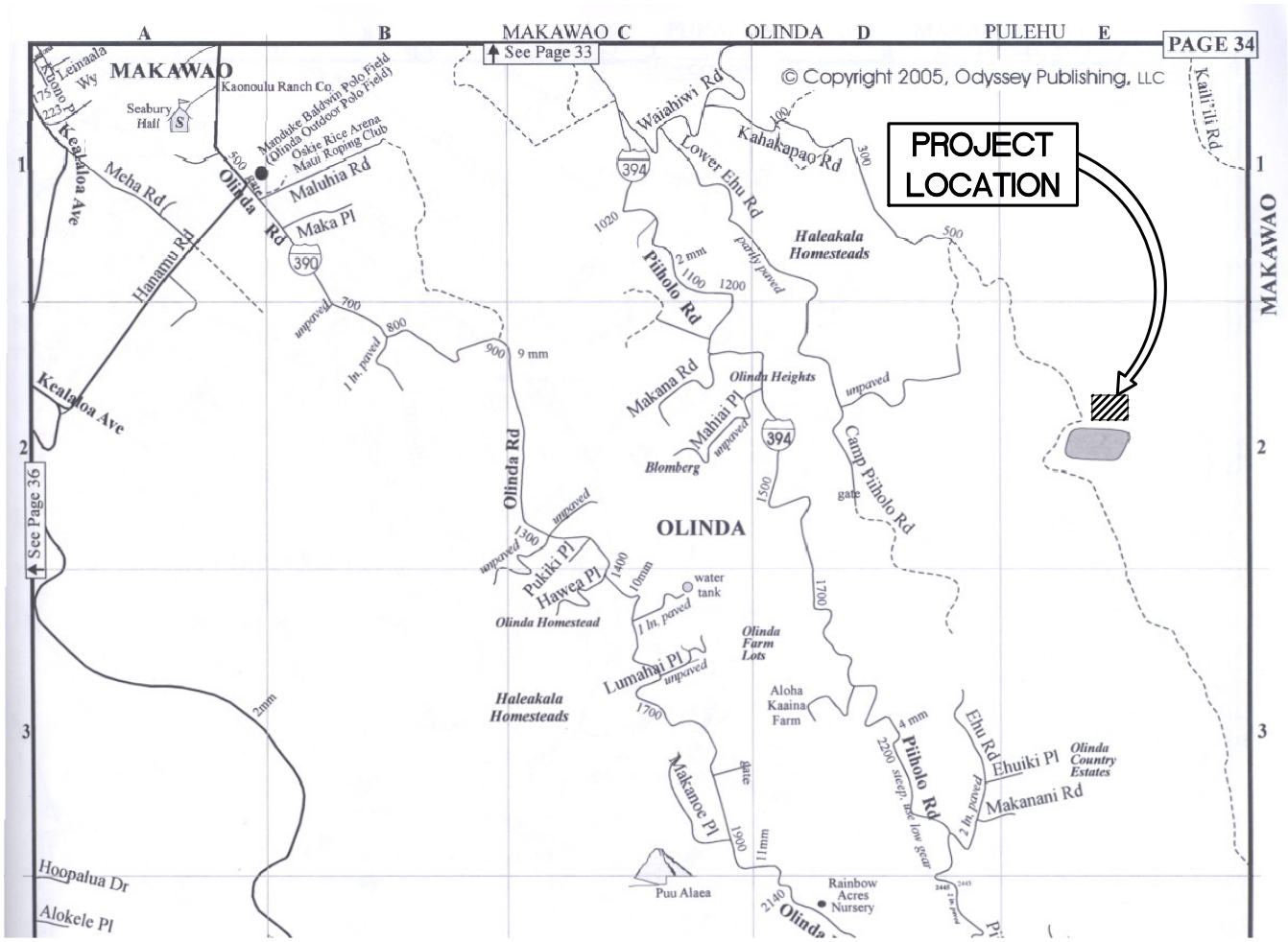
Residency Area: Wailuku, Waihee, Waikapu

27. Mr. Mike White
Council Member
Kalana O Maui Building
200 South High St.
Eighth Floor
Wailuku, Hawaii 96793

Residency Area: Makawao, Haiku, Paia

EXHIBITS





MAUI DEPARTMENT OF WATER SUPPLY

ENVIRONMENTAL ASSESSMENT FOR
PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT

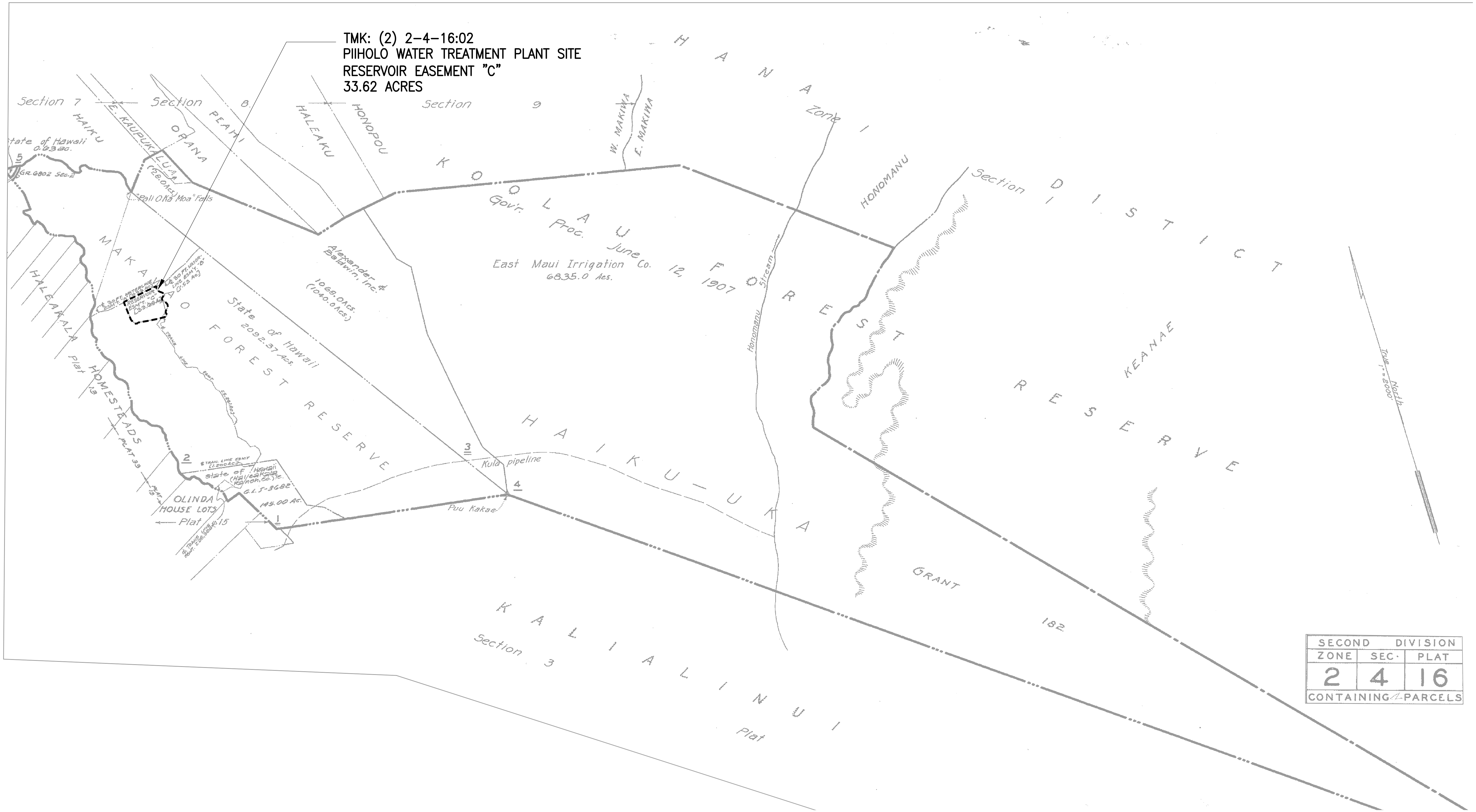
PIIHOLO, MAKAWAO, MAUI, HAWAII

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU • WAILUKU • HILO, HAWAII

PROJECT LOCATION MAP

EXHIBIT 1

FILENAME: C:\2 – WORK FILES\PROJECT FOLDERS\2010\10–110 – PIIHOLO WTP GAC\DESIGN\EA\EXHIBITS\EX–1 – LOCATION MAP.DWG Apr 03, 2012–12:56 PM



TMK: (2) 2-4-16:02
PIIHOLO WATER TREATMENT PLANT SITE
RESERVOIR EASEMENT "C"
33.62 ACRES
HANA DISTRICT
KOOLAU FOREST RESERVE
Gov'r. Proc. June 12, 1907
East Maui Irrigation Co.
6835.0 Acs.
Alexander & Baldwin, Inc.
1066.0 Acs.
(1040.0 Acs.)
State of Hawaii
2092.37 Acs.
MAKAWAO FOREST RESERVE
HAIKU-UKA
KALIALINUI
GRANT 182
Kula pipeline
Puu Kakae
OLINDA HOUSE LOTS
HALEAKALA HOMESTEADS
Section 7
Section 8
Section 9
Section 3
Section 1
HAIKU
E. KAUPUKALUA
OPANA
PEAHI
HALEAKU
HONOPOU
W. MAKIWA
E. MAKIWA
HONOMANU
Honomanu Stream
KEANAE
Zone 1
Pali Oha'Moa' Falls
145.00 Ac.
SECOND DIVISION
ZONE | SEC. | PLAT
2 | 4 | 16
CONTAINING 4 PARCELS

TAX MAP

APPROX. SCALE: 1" = 4000'

0 1

1 INCHES AT FULL SIZE
(If NOT 1-inches : Scale Accordingly)

MAUI DEPARTMENT OF WATER SUPPLY

ENVIRONMENTAL ASSESSMENT FOR
PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT

PIIHOLO, MAKAWAO, MAUI, HAWAII

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU • WAILUKU • HILO, HAWAII

TAX MAP

EXHIBIT

2

FILENAME: C:\2 - WORK FILES\PROJECT FOLDERS\2010\10-110 - PIIHOLO WTP GAC\DESIGN\EA\EXHIBITS\EX-2 - TAX MAP.DWG Mar 28, 2012-12:11 PM

MATCH EXIST. FENCE

END ROAD "A"
MATCH EXIST.
GRAVEL ROAD

END A.C. PAVEMENT
W/ CONC. CURB
BEGIN GRAVEL ROAD

EXISTING 1.5 MG
TREATED WATER TANK

GAC VESSELS (2 EACH)

GAC VESSEL,TYP.
(4 EACH)

REALIGNED ROAD

BOOSTER
PUMPS

EXIST.
WEIR
BOX

STA. 0+93.8 DRIVEWAY "B"
END DRIVEWAY "B"

REMOVE TREE

POTENTIAL
FUTURE
FILTERS

RELOCATED FENCE

REMOVE TREE

MATCH EXIST. FENCE

REALIGN OVERHEAD ELECTRIC LINE

EXISTING
BUILDING

building

EXISTING
FILTER

EXISTING
PARKING
LOT

BEGIN ROAD "A"
MATCH EDGE EXIST. PARKING
LOT PAVEMENT

portable
tractor shed

EXISTING PIIHOLO WTP

SITE PLAN
SCALE: 1" = 40'

NORTH

0 1

1 INCHES AT FULL SIZE
(If NOT 1–inches : Scale Accordingly)

MAUI DEPARTMENT OF WATER SUPPLY

ENVIRONMENTAL ASSESSMENT FOR
PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT

PIIHOLO, MAKAWAO, MAUI, HAWAII

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU • WAILUKU • HILO, HAWAII

SITE PLAN

EXHIBIT
3

FILENAME: C:\2 – WORK FILES\PROJECT FOLDERS\2010\10-110 – PIIHOLO WTP GAC\EA\DRAFT\EXHIBITS\EX-3 – SITE PLAN.DWG Jun 26, 2012-7:29 AM

VIEW OF EXISTING BUILDINGS AND TREATED WATER TANK SHOWING APPROXIMATE LOCATIONS OF PROPOSED IMPROVEMENTS

0 1

1 INCHES AT FULL SIZE
(If NOT 1-inches : Scale Accordingly)

MAUI DEPARTMENT OF WATER SUPPLY

ENVIRONMENTAL ASSESSMENT FOR
PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT

PIIHOLO, MAKAWAO, MAUI, HAWAII

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU • WAILUKU • HILO, HAWAII

PHOTO EXHIBIT OF PROPOSED IMPROVEMENTS

EXHIBIT

4

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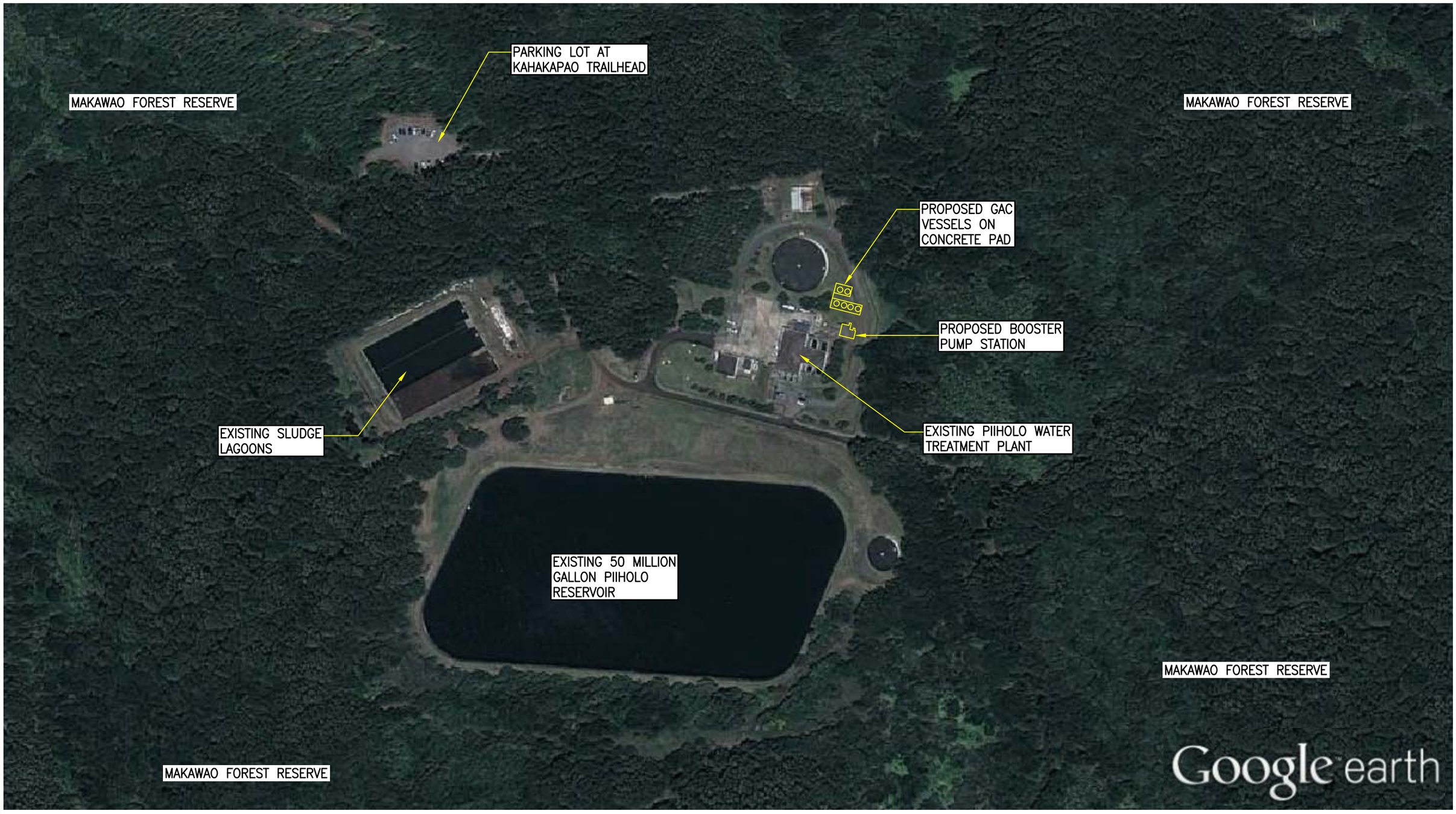


NORTH

AERIAL VIEW OF PIIHOLO WTP

APPROX. SCALE: 1" = 200'

0 1

1 INCHES AT FULL SIZE
(If NOT 1-inches : Scale Accordingly)

MAUI DEPARTMENT OF WATER SUPPLY

ENVIRONMENTAL ASSESSMENT FOR
PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT

PIIHOLO, MAKAWAO, MAUI, HAWAII

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU • WAILUKU • HILO, HAWAII

AERIAL VIEW OF PIIHOLO WTP

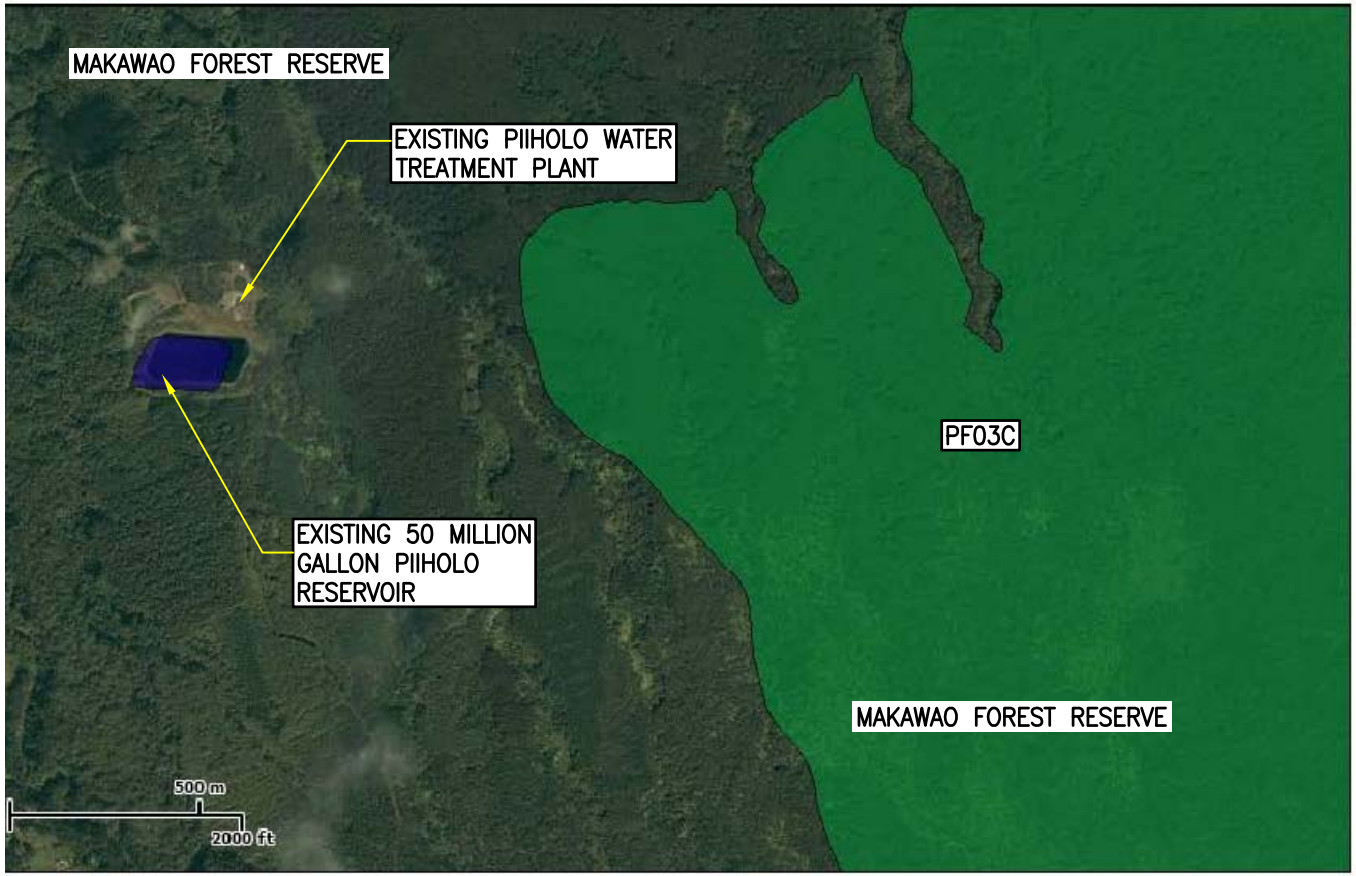
EXHIBIT

5

FILENAME: C:\2 - WORK FILES\PROJECT FOLDERS\2010\10-110 - PIIHOLO WTP GAC\EA\EXHIBITS\EX-5 - AERIAL VIEW.DWG May 11, 2012-10:42 AM

U.S. Fish and Wildlife Service

National Wetlands Inventory



Piiholo wetlands map

Apr 18, 2012

Wetlands

- Freshwater Emergent
- Freshwater Forested/Shrub
- Estuarine and Marine Deepwater
- Estuarine and Marine
- Freshwater Pond
- Lake
- Riverine
- Other

Riparian

- Herbaceous
- Forested/Shrub

NORTH

NOT TO SCALE

0 1

1 INCHES AT FULL SIZE
(If NOT 1-inches : Scale Accordingly)

MAUI DEPARTMENT OF WATER SUPPLY

ENVIRONMENTAL ASSESSMENT FOR
PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT

PIIHOLO, MAKAWAO, MAUI, HAWAII

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS • HONOLULU • WAILUKU • HILO, HAWAII

WETLANDS MAP

EXHIBIT 6

FILENAME: C:\2 – WORK FILES\PROJECT FOLDERS\2010\10-110 – PIIHOLO WTP GAC\EA\EXHIBITS\EX-6 – WETLANDS MAP.DWG May 11, 2012-11:16 AM

APPENDICES

APPENDIX A

LETTERS RECEIVED FROM AGENCIES AND ORGANIZATIONS CONSULTED DURING THE PREPARATION OF THE DRAFT ENVIRONMENTAL ASSESSMENT AND RESPONSES TO SUBSTANTIVE COMMENTS

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
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

May 3, 2012

Austin, Tsutsumi & Associates, Inc.
Attention: Ivan K. Nakatsuka, Vice-President
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

via email: atahnl@atahawaii.com

Dear Mr. Nakatsuka:

SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment for Piiholo Water Treatment Plant Organic Carbon Reduction Project

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 (a) Land Division – Maui District, (b) Commission on Water Resources Management, (c) Office of Conservation & Coastal Lands, (d) Engineering Division, and (e) Division of Forestry & Wildlife 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

4/25/12

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED
LAND DIVISION
2012 APR 20 P 3:22
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

RECEIVED
COMMISSION ON WATER RESOURCE MANAGEMENT
2012 APR 12 PM 2:21

April 11, 2012

MEMORANDUM

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

FYR:

TO:

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment for Piiholo Water Treatment Plant Organic Carbon Reduction Project
LOCATION: Piiholo, Island of Maui; TMK: (2) 2-4-016:002
APPLICANT: Maui Department of Water Supply (DWS)

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by May 1, 2012.

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: RKChang
Date: 4/19/12

cc: Central Files

FILE ID: KHD 3547.3
DOC ID: 9189

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
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

RECEIVED
MAUI DISTRICT
LAND DIVISION
2012 APR 12 PM 12:37

April 11, 2012

MEMORANDUM

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

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment for Piiholo Water Treatment Plant Organic Carbon Reduction Project
LOCATION: Piiholo, Island of Maui; TMK: (2) 2-4-016:002
APPLICANT: Maui Department of Water Supply (DWS)

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by May 1, 2012.

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: _____
Date: 4/12/12

cc: Central Files

tm MA-12-226

COHP MA-2549 926

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED
VATION

2012 APR 11 P 3:49

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
LAND DIVISION
2012 APR 24 A 9:41
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

April 11, 2012

MEMORANDUM

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

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment for Piiholo Water Treatment Plant Organic Carbon Reduction Project
LOCATION: Piiholo, Island of Maui; TMK: (2) 2-4-016:002
APPLICANT: Maui Department of Water Supply (DWS)

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by May 1, 2012.

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: _____
Date: 4.23.2012

cc: Central Files

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

REF:OCCL:TM

Correspondence: MA 12-226

APR 23 2012

MEMORANDUM

TO: Russell Tsuji, Administrator
Land Division

FROM: Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands

SUBJECT: Pre-Assessment for the Draft Environmental Assessment for the Piilolo Water Treatment Plant Organic Carbon Reduction Project Located at Piiholo, Maui, TMK: (2) 2-4-016:002

The Office of Conservation and Coastal Lands (OCCL) has reviewed the subject information. A draft Environmental Assessment (EA) is being prepared for the Piilolo Water Treatment Plant (WTP) to construct a granular activated carbon vessels and booster pump station within the fenced existing WTP. The vessels are to be used as a filtration system to remove total organic carbon from the water. This is required to adhere to stricter State and Federal drinking water standards.

The OCCL notes the subject area lies within the Resource subzone of the Conservation District. Our records indicate Conservation District Use Permit (CDUP) MA-2549 was approved by the Board of Land and Natural Resources on July 24, 1992 for the Lower Kula Water Treatment Plant. Although the proposed project does not share the permitted facilities name, review of the CDUP indicates this is the same facility adjacent to the Piiholo Reservoir within Easement C of the parcel. Perhaps some discussion should be included explaining that the *Lower Kula Water Treatment Plant* is the *Piiholo Water Treatment Plant* in the draft EA.

The proposed land use appears to be an accessory use to the permitted land use. Pursuant to the Hawaii Administrative Rules (HAR) §13-5-22 P-8 STRUCTURES AND LAND USES, EXISTING minor alterations, replacement or reconstruction of existing structures and facilities under a previously approved conservation district use permit requires the filing for Site Plan Approval (SPA).

For Site Plan Approval, please file the first three pages of our Conservation District Use Application (CDUA). You will find our CDUA and Chapter 13-5, HAR, the rules and regulations of the Conservation District on line at hawaii.gov/dlnr/occl . Should you have any questions regarding this correspondence, contact Tiger Mills of our Office at (808) 587-0382.

C: MDLO
County of Maui, DP

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
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

April 11, 2012

MEMORANDUM

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

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment for Piiholo Water Treatment Plant Organic Carbon Reduction Project
LOCATION: Piiholo, Island of Maui; TMK: (2) 2-4-016:002
APPLICANT: Maui Department of Water Supply (DWS)

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by May 1, 2012.

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: _____
Date: 4/27/12

cc: Central Files

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/LydiaMorikawa
RE: DEPreAssessmentPiiholoWaterTreatmentPlant
Maui.568

COMMENTS

( ) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ___.

(X) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone X. The Flood Insurance Program does not have any regulations for developments within Flood Zone X.

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

( ) Please note that 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.

Please 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:

( ) Mr. Mario Siu Li at (808) 768-8098 or Ms. Ardis Shaw-Kim at (808) 768-8296 of t he City and County of Honolulu, Department of Planning and Permitting.

( ) Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public Works.

( ) Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.

( ) Mr. Wynne Ushigome at (808) 241-4890 of the County of Kauai, Department of Public Works.

( ) The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any 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 Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 4/24/12

→ FOR Section –
FOR Resource
Forest
Water

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

WILLIAM J. AILA, JR.
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

April 11, 2012

MEMORANDUM

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

RECEIVED
LAND DIVISION
2012 MAY -1 P 3:13
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment for Piiholo Water Treatment Plant Organic Carbon Reduction Project
LOCATION: Piiholo, Island of Maui; TMK: (2) 2-4-016:002
APPLICANT: Maui Department of Water Supply (DWS)

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by May 1, 2012.

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: Paul J Conry
Date: 4/30/12

cc: Central Files

AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

KENNETH K. KUROKAWA, P.E.
TERRANCE S. ARASHIRO, P.E.
DONOHUE M. FUJII, P.E.
STANLEY T. WATANABE
IVAN K. NAKATSUKA, P.E.
ADRIENNE W. L. H. WONG, P.E., LEED AP

Job No. 10-110

May 4, 2012

Mr. Samuel J. Lemmo, Administrator
State of Hawaii
Department of Land and Natural Resources
Office of Conservation and Coastal Lands
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Lemmo:

Subject: **Pre-Assessment Consultation for Draft Environmental Assessment**
Piiholo Water Treatment Plant Organic Carbon Reduction Project
DWS Job No. 08-02
TMK: (2) 2-4-16:02, Piiholo, Maui, Hawaii

Thank you for your memorandum dated April 23, 2012, commenting on the proposed action. As noted in your memorandum, the proposed action requires filing for Site Plan Approval since the project lies within the Resource subzone of the Conservation District. For Site Plan Approval, the Maui Department of Water Supply (DWS) will file the first three pages of your Conservation District Use Application (CDUA) and pertinent construction drawings of the proposed site improvements, grading, etc.

As suggested in your memorandum, a discussion will be included in the Environmental Assessment explaining that the former Lower Kula Water Treatment Plant (for which a Conservation District Use Permit was approved in 1992) is now known as the Piiholo Water Treatment Plant.

Thank you again for your input. Please do not hesitate to call me or Lisa Appelgate at (808) 533-3646 if you have any questions.

Sincerely,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

By
IVAN K. NAKATSUKA, P.E.
Vice President

cc: Russell Tsuji – DLNR Land Division
Jeff Pearson – Maui DWS

IKN:lla

REPLY TO:
501 SUMNER STREET, SUITE 521 • HONOLULU, HAWAII 96817-5031
PHONE (808) 533-3646 • FAX (808) 526-1267
EMAIL : atahnl@atahawaii.com

OFFICES IN:
HONOLULU, HAWAII
WAILUKU, MAUI, HAWAII
HILO, HAWAII

Lisa L. Appelgate

From: Ian_Bordenave@fws.gov
Sent: Friday, May 11, 2012 9:56 AM
To: Lisa L. Appelgate
Subject: Fw: 2012-TA-0266 Piiholo Water Treatment Plant Improvements letter

Ian Bordenave/R1/FWS/DOI

05/09/2012 11:42 AM

To lappelgate@atahawaii.com
cc
Subject 2012-TA-0266 Piiholo Water Treatment Plant Improvements letter

In Reply Refer To:
2012-TA-0266

Mr. Ivan K. Nakatsuka
Vice President
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

Subject: Technical Assistance for Piiholo Water Treatment Plant Organic Carbon Reduction Project, Maui

Dear Mr. Nakatsuka:

The U.S. Fish and Wildlife Service (Service) received your letter on April 9, 2012, requesting comment on the construction of new granular activated carbon vessels and a booster pump station at the existing Piiholo water treatment plant near Makawao, Maui. A portion of the existing fence line will be relocated to allow for the upgrade. However, the upgrade will remain within the existing property. The new filtration vessels will be utilized to remove organic carbon from the water. Removal of organic carbon compounds are required to ensure that the drinking water produced by the Piiholo treatment plant will be in compliance with State Department of Heath and U.S. Environmental Protection Agency guidelines. Based on information you provided and pertinent information in our files, including data compiled by the Hawaii Biodiversity and Mapping Program, four species protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq*.) are known to occur throughout the action area of the proposed project.

The threatened Newell's shearwater (*Puffinus auricularis newelli*) and the endangered Hawaiian petrel (*Pterodroma sandwichensis*); collectively known as seabirds, may traverse the action area when flying between the ocean and nesting sites in the mountains during their breeding season (March through December). Nighttime artificial lighting, such as flood lighting for security and nighttime construction activities, can adversely impact seabirds by causing disorientation which may result in collision with utility lines, buildings, fences, and vehicles. Furthermore, fledging seabirds attracted to nighttime artificial lighting have a tendency to exhaust themselves while circling the light source and become grounded. Too weak to fly, these birds become vulnerable to depredation by feral predators, such as dogs, cats, and mongoose. The Service recommends that measures to minimize the amount of glare from all outdoor lighting installations be incorporated into the proposed action. Outdoor lighting should utilize systems which employ the lowest possible wattage for the application, and be constructed in a manner that fully shields lighting sources and directs light downwards. If night work is becomes necessary for completion of the proposed project please contact the Service for additional minimization measures regarding seabirds and lights.

Due to its range and foraging behavior, the Hawaiian goose (*Branta sandvicensis*) may be present in the vicinity of the proposed action at any time of the year. If a nene appears within 100 feet (30.5 meters) of ongoing work, all activity should be temporarily suspended until the bird moves off to a safe distance of its own volition. Moreover, if any number of Hawaiian geese are observed loafing and/or foraging within the area of the proposed action during the Hawaiian goose

breeding season (December through April) a biologist familiar with the nesting behavior of the Hawaiian goose should survey the area around proposed construction sites prior to the initiation of any work, or after any subsequent delay of work of three or more days (during which the birds may attempt to nest). If a nest is discovered within a radius of 100 feet of proposed construction activity, or a previously undiscovered nest is found within said radius after work begins, all work should cease immediately and the Service contacted for further guidance.

The endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) roosts in both exotic and native woody vegetation and, while foraging, leaves young unattended in "nursery" trees and shrubs. If trees or shrubs suitable for bat roosting are cleared during the breeding season (June 1 through September 15), there is a risk that young bats could inadvertently be harmed or killed. The Service reccomends that no trees greater than 15 feet tall be removed or trimmed during the time frame from June 1 to September 15. Additionally, Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground. When barbed wire is used in fencing, Hawaiian hoary bats can become entangled. Moreover, there is also evidence that barbed wire fences in open areas pose a greater risk to bats than barbed wire fences in forested areas. The Service therefore recommends that barbed wire not be used for any fencing which may be part of the proposed action.

If you have any questions or concerns regarding the comments included in this correspondence, please contact me using the information attached below.

Aloha,

Ian Bordenave
Biologist
U.S. Fish and Wildlife Service
Pacific Islands Field Office
Ecological Services, Consultations & HCP
300 Ala Moana Blvd., Suite 3-122
Honolulu, HI. 96850
Phone: (808) 792-9453
E-Mail: ian_bordenave@fws.gov

AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

KENNETH K. KUROKAWA, P.E.
TERRANCE S. ARASHIRO, P.E.
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STANLEY T. WATANABE
IVAN K. NAKATSUKA, P.E.
ADRIENNE W. L. H. WONG, P.E., LEED AP

Job No. 10-110

May 15, 2012

Mr. Ian Bordenave, Biologist
U.S. Fish and Wildlife Service
Pacific Islands Field Office
Ecological Services, Consultations & HCP
300 Ala Moana Blvd., Suite 3-122
Honolulu, Hawaii 96850

Dear Mr. Bordenave:

Subject: **Pre-Assessment Consultation for Draft Environmental Assessment**
Piiholo Water Treatment Plant Organic Carbon Reduction Project
DWS Job No. 08-02
TMK: (2) 2-4-16:02, Piiholo, Maui, Hawaii
U.S. Fish & Wildlife Service Project Number: 2012-TA-0266

Thank you for your email dated May 9, 2012, commenting on the proposed action. In your email, you noted that there are four species of animals protected by the Endangered Species Act that are known to occur throughout the action area of the proposed project. Your concerns and suggestions are listed below, with our responses.

Comment: *Outdoor lighting should utilize systems which employ the lowest possible wattage for the application, and be constructed in a manner that fully shields lighting sources and directs light downwards. If night work is becomes necessary for completion of the proposed project please contact the Service for additional minimization measures regarding seabirds and lights.*

Response: The outdoor lighting for the proposed improvements will employ the lowest possible wattage for the application, and be constructed in a manner that fully shields lighting sources and directs light downwards. Construction will take place during normal working daylight hours, and there will be no construction activities during the night.

Comment: *Due to its range and foraging behavior, the Hawaiian goose (Branta sandvicensis) may be present in the vicinity of the proposed action at any time of the year. If a nene appears within 100 feet (30.5 meters) of ongoing work, all activity should be temporarily suspended until the bird moves off to a safe distance of its own volition. Moreover, if any number of Hawaiian geese are observed loafing and/or foraging within the area of the proposed action during the Hawaiian goose breeding season (December through April) a biologist familiar with the nesting behavior of the Hawaiian goose should survey the area around proposed construction sites prior to the initiation of any work, or after any subsequent delay of work of three or more days (during which the birds may attempt to nest). If a nest is discovered within a radius of 100 feet of proposed construction activity, or a previously undiscovered nest is found within said radius*

Mr. Ian Bordenave, Biologist
U.S. Fish and Wildlife Service
Pacific Islands Field Office

May 15, 2012

after work begins, all work should cease immediately and the Service contacted for further assistance.

Response: The construction specifications will include a section on environmental protection and will include a section on protection of the Hawaiian goose with the abovementioned directions.

Comment: *The Service recommends that no trees greater than 15 feet tall be removed or trimmed during the time frame from June 1 to September 15.*

Response: It is anticipated that between three and four trees that are taller than 15 feet will need to be removed for the proposed project. Construction of the project is expected to start between January and March, 2013. Therefore, the trees will be able to be removed before June 1.

Comment: *Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground. When barbed wire is used in fencing, Hawaiian hoary bats can become entangled. Moreover, there is also evidence that barbed wire fences in open areas pose a greater risk to bats than barbed wire fences in forested areas. The Service therefore recommends that barbed wire not be used for any fencing which may be part of the proposed action.*

Response: We note your concern regarding barbed wire fences. However, the Piiholo Water Treatment Plant (WTP) provides drinking water to nearby communities and providing a secure project area is critical to prevent tampering and terrorist activities. Therefore, for security reasons, the relocated fence will need to have barbed wire similar to the existing fence around the WTP. The relocated fence will be along a heavily forested area, which may reduce the risk to bats in the area.

Thank you again for your input. Please do not hesitate to call me or Lisa Appelgate at (808) 533-3646 if you have any questions.

Sincerely,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

By

IVAN K. NAKATSUKA, P.E.
Vice President

cc: Jeff Pearson – Maui DWS

IKN:lla

Lisa L. Appelgate

From: Ian_Bordenave@fws.gov
Sent: Wednesday, May 16, 2012 3:04 PM
To: Ivan K. Nakatsuka
Cc: Jeff Pearson; Lisa L. Appelgate
Subject: Re: 2012-TA-0266 Piiholo Water Treatment Plant Improvements letter
Attachments: Response to U.S. Fish & Wildllife (05-15-12).doc.pdf

Aloha,

Thank-you for the quick respose! Everything looks good *except* for the barbed fencing for security. I understand that the security concerns dictate that there be barbed wire installed to keep the water treatment facility secure, but we might have an issue with endangered species (hoary bat) take as a result. Is the type of wire on the existing fence a "concertina" configuration? Or is it a configuration of parallel strands of barbed wire angled out over the outside of the fence? My gut feeling is that concertina wire configurations might be better because it presents a more dense, solid-seeming profile for the bats' echolocation vocalizations to bounce off of. Other configurations might work fine as well, but the idea is that there should be as limited an amount of space possible between the strands of wire without compromising function as a security deterent.

Let me know. If you'd like to call to discuss this please don't hesitate.

Ian Bordenave
Biologist
U.S. Fish and Wildlife Service
Pacific Islands Field Office
Ecological Services, Consultations & HCP
300 Ala Moana Blvd., Suite 3-122
Honolulu, HI. 96850
Phone: (808) 792-9453
E-Mail: ian_bordenave@fws.gov

"Ivan K. Nakatsuka" <inakatsuka@atahawaii.com>

05/15/2012 04:07 PM

To "Ian_Bordenave@fws.gov" <Ian_Bordenave@fws.gov>
cc "Lisa L. Appelgate" <lappelgate@atahawaii.com>, Jeff Pearson <Jeff.Pearson@co.maui.hi.us>
Subject 2012-TA-0266 Piiholo Water Treatment Plant Improvements letter

Dear Mr. Bordenave,

Attached is our letter in response to your May 11, 2012 e-mail below. Thank you for having commented on this project.

Best regards,

Ivan K. Nakatsuka, P.E.
Vice President & Chief Environmental Engineer
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817

Lisa L. Appelgate

From: Ivan K. Nakatsuka
Sent: Friday, May 18, 2012 11:38 AM
To: Ian_Bordenave@fws.gov
Cc: Jeff Pearson; Lisa L. Appelgate
Subject: RE: 2012-TA-0266 Piiholo Water Treatment Plant Improvements letter

Dear Mr. Bordenave,

The existing configuration of barbed wire for the existing fencing of the Piiholo Water Treatment Plant (WTP), which we propose to match, is the standard 3-strands of parallel barbed wire 5" apart mounted on brackets at each fence post that are angled out over the outside of the fence at 45°. We have confirmed with Maui Department of Water Supply that they are not aware of ever having caught any birds (or bats) in this type, or any other type, of barbed wire configuration at any of their facilities – including at the subject Piiholo WTP. Therefore, although we will consider other barbed wire configurations for the new fencing, one of these options is still expected to be with the 3-strand configuration. Thank you for your understanding on this matter.

Ivan K. Nakatsuka, P.E.
Vice President & Chief Environmental Engineer
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817
Phone: 808-533-3646 ext. 634
Fax: 808-526-1267
Email: inakatsuka@atahawaii.com

From: Ian_Bordenave@fws.gov [mailto:Ian_Bordenave@fws.gov]
Sent: Wednesday, May 16, 2012 3:04 PM
To: Ivan K. Nakatsuka
Cc: Jeff Pearson; Lisa L. Appelgate
Subject: Re: 2012-TA-0266 Piiholo Water Treatment Plant Improvements letter

Aloha,

Thank-you for the quick respose! Everything looks good *except* for the barbed fencing for security. I understand that the security concerns dictate that there be barbed wire installed to keep the water treatment facility secure, but we might have an issue with endangered species (hoary bat) take as a result. Is the type of wire on the existing fence a "concertina" configuration? Or is it a configuration of parallel strands of barbed wire angled out over the outside of the fence? My gut feeling is that concertina wire configurations might be better because it presents a more dense, solid-seeming profile for the bats' echolocation vocalizations to bounce off of. Other configurations might work fine as well, but the idea is that there should be as limited an amount of space possible between the strands of wire without compromising function as a security deterent.

Let me know. If you'd like to call to discuss this please don't hesitate.

Ian Bordenave
Biologist
U.S. Fish and Wildlife Service
Pacific Islands Field Office
Ecological Services, Consultations & HCP
300 Ala Moana Blvd., Suite 3-122
Honolulu, HI. 96850
Phone: (808) 792-9453

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

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

In reply, please refer to:
EMD/CWB

06007PKP.12

June 5, 2012

Mr. Ivan K. Nakatsuka, P.E.
Vice President
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

Dear Mr. Nakatsuka:

SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment for the Piiholo Water Treatment Plant Organic Carbon Reduction Project Piiholo, Island of Maui, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated April 5, 2012, 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://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

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

   a. Anti-degradation 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 a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for an NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

a. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. This includes areas used for a construction base yard and the storage of any construction related equipment, material, and waste products. An NPDES permit is required before the start of the construction activities.

b. Hydrotesting waters.

c. Construction dewatering effluent.

You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

3. For other types of wastewater not listed in Item No. 2 above or wastewater discharging into Class 1 or Class AA waters, an NPDES individual permit will need to be obtained. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://hawaii.gov/health/environmental/water/cleanwater/forms/environmental/water/cleanwater/forms/indiv-index.html.

4. If your project involves work in, over, or under waters of the United States, it is highly recommend that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 438-9258) 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 HAR, Chapter 11-54.

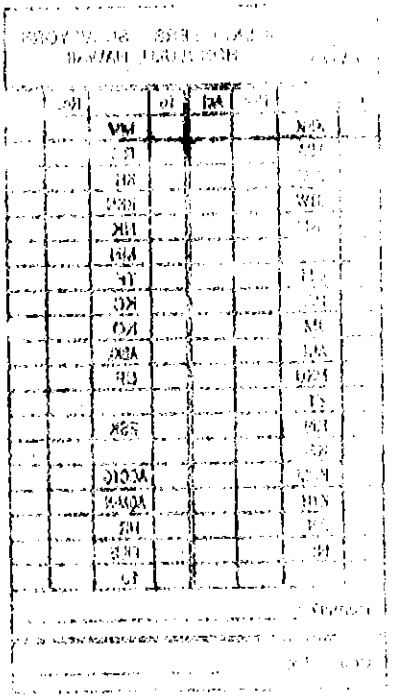
5. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Non-compliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

If you have any questions, please visit our website at: http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at 586-4309.

Sincerely,

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

KP:np



AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

KENNETH K. KUROKAWA, P.E.
TERRANCE S. ARASHIRO, P.E.
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STANLEY T. WATANABE
IVAN K. NAKATSUKA, P.E.
ADRIENNE W. L. H. WONG, P.E., LEED AP

Job No. 10-110

June 14, 2012

Mr. Alec Wong, P.E., Chief
State of Hawaii
Department of Health
Clean Water Branch
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Dear Mr. Wong:

Subject: Pre-Assessment Consultation for Draft Environmental Assessment
Piiholo Water Treatment Plant Organic Carbon Reduction Project
DWS Job No. 08-02
TMK: (2) 2-4-16:02, Piiholo, Maui, Hawaii

Thank you for your letter dated June 5, 2012, commenting on the proposed action. Please be assured that Maui Department of Water Supply will comply with all of the conditions presented in your letter that require follow-up action on their part. Please do not hesitate to call me or Lisa Appelgate at (808) 533-3646 if you have any questions.

Sincerely,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

By
IVAN K. NAKATSUKA, P.E.
Vice President

cc: Jeff Pearson – Maui DWS

REPLY TO:
501 SUMNER STREET, SUITE 521 • HONOLULU, HAWAII 96817-5031
PHONE (808) 533-3646 • FAX (808) 526-1267
EMAIL : atahnl@atahawaii.com

OFFICES IN:
HONOLULU, HAWAII
WAILUKU, MAUI, HAWAII
HILO, HAWAII

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH
919 ALA MOANA BLVD., ROOM 308
HONOLULU, HI 96814-4920

In reply, please refer to:
File: SDWB
PiiholoWTP1.Doc

June 6, 2012

Austin, Tsutsumi and Associates, Inc.
Attention: Ivan Nakatsuka
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

Dear Mr. Nakatsuka:

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR A DRAFT ENVIRONMENTAL ASSESSMENT
PIIHOLO WATER TREATMENT PLANT ORGANIC CARBON REDUCTION PROJECT, DWS JOB NO. 080-02
PIIHOLO, MAUI, HAWAII

The Safe Drinking Water Branch (SDWB) has reviewed the subject document and has the following comments:

1. The Maui DWS in its operation of the Piiholo Water Treatment Plant and the proposed carbon reduction system shall comply with all other relevant provisions of Hawaii Administrative Rules (HAR), Title 11, Chapter 20, "Rules Relating to Public Water Systems".

2. The Piiholo Water Treatment Plant and the proposed carbon reduction system shall deliver drinking water of the quality in compliance with HAR, Chapter 11-20. The water quality shall be subject to verification by the SDWB.

3. As required under HAR Section 11-20-30, "New and modified public water systems", construction plans for modifications to the Piiholo Water Treatment Plant and other pertinent construction documents shall be submitted for review and approval by the DOH SDWB before construction.

4. A basis for design engineering report for the carbon reduction system will be required for SDWB review and approval.

5. Materials used in the construction shall have NSF certification. Proper procedures shall be followed for the cleaning and disinfection of the various water system components involved in the improvement project.

6. The SDWB may impose protocols for monitoring the performance of the new carbon reduction system.

If there are any questions, please call Craig Watanabe of the SDWB Engineering Section at 586-4258.

Sincerely,

JOANNA L. SETO, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

CW:cb

c: EPO Reference No. 12-069

AUSTIN, TSUTSUMI & ASSOCIATES, INC. CIVIL ENGINEERS • SURVEYORS
CONTINUING THE ENGINEERING PRACTICE FOUNDED BY H. A. R. AUSTIN IN 1934

KENNETH K. KUROKAWA, P.E.
TERRANCE S. ARASHIRO, P.E.
DONOHUE M. FUJII, P.E.
STANLEY T. WATANABE
IVAN K. NAKATSUKA, P.E.
ADRIENNE W. L. H. WONG, P.E., LEED AP

Job No. 10-110

June 1 4, 2012

Ms. Joanna L. Seto, P.E., Chief
State of Hawaii
Department of Health
Safe Drinking Water Branch
919 Ala Moana Blvd., Room 308
Honolulu, Hawaii 96814-4920

Dear Ms. Seto:

Subject: Pre-Assessment Consultation for Draft Environmental Assessment
Piiholo Water Treatment Plant Organic Carbon Reduction Project
DWS Job No. 08-02
TMK: (2) 2-4-16:02, Piiholo, Maui, Hawaii

Thank you for your letter dated June 6, 2012, commenting on the proposed action. Please be assured that Maui Department of Water Supply (DWS) will comply with all of the conditions presented in your letter that require follow-up action on their part. In regards to Items 3 and 4 of your letter, we will be submitting for review and approval the pertinent construction documents and basis for design engineering report on DWS's behalf upon completion of the pre-final plans and specifications.

Thank you again for your input. Please do not hesitate to call me or Lisa Appelgate at (808) 533-3646 if you have any questions.

Sincerely,

AUSTIN, TSUTSUMI & ASSOCIATES, INC.

By
IVAN K. NAKATSUKA, P.E.
Vice President

cc: Jeff Pearson – Maui DWS

REPLY TO:
501 SUMNER STREET, SUITE 521 • HONOLULU, HAWAII 96817-5031
PHONE (808) 533-3646 • FAX (808) 526-1267
EMAIL : atahnl@atahawaii.com

OFFICES IN:
HONOLULU, HAWAII
WAILUKU, MAUI, HAWAII
HILO, HAWAII

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF:

April 23, 2012

Regulatory Branch

POH-2012-00107

Austin, Tsutsumi, and Associates, Inc.
Attn: Ivan Nakatsuka, P.E.
501 Sumner Street, Suite 521
Honolulu, HI 96817

Dear Mr. Nakatsuka:

We have received your request for the Department of the Army to review and comment on the Draft Environmental Assessment (DEA) for the proposed Piiholo Water Treatment Plant Organic Carbon Reduction Project in Piiholo, Maui. We have assigned the project the reference number **POH-2012-00107**. Please cite this reference number in any correspondence with us concerning this project. We have completed our review of the submitted document and have the following comments:

Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires that a Department of the Army (DA) permit be obtained from the U.S. Army Corps of Engineers (Corps) prior to undertaking any construction, dredging, and other activities occurring in, over, or under navigable waters of the U.S. Section 404 of the Clean Water Act (Section 404) of 1972 (33 U.S.C. 1344) requires that a DA permit be obtained for the discharge, or placement, of dredge and/or fill material into waters of the U.S., including wetlands.

Based on our review of the information provided in your letter dated April 5, 2012, it appears that the project location consists entirely of uplands and no navigable waters of the U.S. are present. As such, authorization under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act do not appear to be required for the proposed project.

If the project design should change and work is to be proposed in wetlands, streams, drainage ditches, the Pacific Ocean, or other aquatic resource, (whether or not water is present in that resource during project construction) please contact our office to request a jurisdictional determination. We can then determine if any regulatory requirements apply to work that may impact those resources.

Thank you for contacting us regarding this project. We look forward to working with you on this project as well as any future projects. Should you have any questions, please contact Kaitlyn Seberger, at (808) 438-0390 or via email at Kaitlyn.R.Seberger@usace.army.mil.

Sincerely,

George P. Young, P. E.
Chief, Regulatory

ALAN M. ARAKAWA
Mayor

DAVID C. GOODE
Director

ROWENA M. DAGDAG-ANDAYA
Deputy Director

RALPH M. NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
DEVELOPMENT SERVICES ADMINISTRATION
250 SOUTH HIGH STREET
WAILUKU, MAUI, HAWAII 96793

April 16, 2012

Mr. Ivan K. Nakatsuka, P.E.
AUSTIN, TSUTSUMI & ASSOCIATES, INC.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

Subject: PRE-ASSESSMENT CONSULTATION FOR DRAFT ENVIRONMENTAL ASSESSMENT FOR THE PIIHOLO WATER TREATMENT PLANT ORGANIC CARBON REDUCTION PROJECT DWS JOB NO. 08-02
TMK: (2) 2-4-016:002

Dear Mr. Nakatsuka:

We reviewed the subject application and have no comments at this time.

Please call Rowena M. Dagdag-Andaya at 270-7845 if you have any questions regarding this letter.

Sincerely,

David C. Goode
Director of Public Works

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xc: Highways Division
Engineering Division

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

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

In reply, please refer to:
File:

12-069
Piiholo WTP

April 11, 2012

Mr. Ivan K. Nakatsuka, P.E.
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

Dear Mr. Nakatsuka:

SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment Piiholo Water Treatment Plant Organic Carbon Reduction Project DWS Job No. 08-02, TMK: (2) 2-4-16: 02, Piiholo, Maui, Hawaii

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter, dated April 5, 2012. Thank you for allowing us to review and comment on the subject document. The document was routed to the various branches of the Environmental Health Administration. We have no comments at this time, but reserve the right to future comments. We strongly recommend that you review all of the Standard Comments on our website: www.hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to.

The United States Environmental Protection Agency (EPA) provides a wealth of information on their website including strategies to help protect our natural environment and build sustainable communities at: www.epa.gov/sustainability. The DOH encourages State and county planning departments, developers, planners, engineers and other interested parties to apply these strategies and environment principles whenever they plan or review new developments or redevelopments projects. We also ask you to share this information with others to increase community awareness on healthy, sustainable community design. If there are any questions about these comments please contact me.

Sincerely,

Laura Leialoha Phillips McIntyre, AICP
Environmental Planning Office Manager
Environmental Health Administration
Department of Heath
919 Ala Moana Blvd., Ste. 312
Honolulu, Hawaii 96814
Phone: 586-4337
Email: laura.mcintyre@doh.hawaii.gov
Website: www.hawaii.gov/health/environmental

ALAN M. ARAKAWA
Mayor
KYLE K. GINOZA, P.E.
Director
MICHAEL M. MIYAMOTO
Deputy Director

TRACY TAKAMINE, P.E.
Solid Waste Division
ERIC NAKAGAWA, P.E.
Wastewater Reclamation Division

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

April 25, 2012

Mr. Ivan Nakatsuka
Austin, Tsutsumi & Associates, Inc.
501 Summer Street, Suite 521
Honolulu, Hawaii 96817

SUBJECT: PIIHOLO WATER TREATMENT PLANT
ORGANIC CARBON REDUCTION PROJECT
PRE-ASSESSMENT CONSULTATION FOR DRAFT EA
TMK (2) 2-4-016:002, PIIHOLO, MAUI, HAWAII

We reviewed the subject application and have the following comments:

1. Solid Waste Division comments:

   a. None.

2. Wastewater Reclamation Division (WWRD) comments:

   a. None. The County does not have a wastewater system in the area of the subject project.

If you have any questions regarding this memorandum, please contact Michael Miyamoto at 270-8230.

Sincerely,

KYLE K. GINOZA, P.E.
Director of Environmental Management

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

LORETTA J. FUDDY, A.C.S.W., M.P.H.
DIRECTOR OF HEALTH

LORRIN W. PANG, M.D., M.P.H.
DISTRICT HEALTH OFFICER

STATE OF HAWAII
DEPARTMENT OF HEALTH
MAUI DISTRICT HEALTH OFFICE
54 HIGH STREET
WAILUKU, HAWAII 96793

April 24, 2012

Mr. Ivan K. Nakatsuka, P.E.
Vice President
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, HI 96817-5031

Dear Mr. Nakatsuka:

Subject: **Pre-Assessment Consultation for Draft Environmental Assessment for Piiholo Water Treatment Plant Organic Carbon Reduction Project**
DWS Job No. 08-02
TMK: (2) 2-4-16: 02, Piiholo, Maui, Hawaii

Thank you for the opportunity to review this project. We have the following comments to offer:

> National Pollutant Discharge Elimination System (NPDES) permit coverage maybe required for this project. The Clean Water Branch should be contacted at 808 586-4309.

It is strongly recommended that the Standard Comments found at the Department's website: http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html be reviewed, and any comments specifically applicable to this project should be adhered to.

Should you have any questions, please call me at 808 984-8230 or E-mail me at patricia.kitkowski@doh.hawaii.gov.

Sincerely,

Patti Kitkowski

Patti Kitkowski
District Environmental Health Program Chief

c EPO

ALAN M. ARAKAWA
Mayor

JO ANNE JOHNSON-WINER
Director
MARC I. TAKAMORI
Deputy Director
Telephone (808) 270-7511

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI
200 South High Street
Wailuku, Hawaii, USA 96793-2155

April 23, 2012

Mr. Ivan Nakatsuka
Austin, Tsutsumi & Associates
501 Summer Street, Suite 521
Honolulu, Hi. 96817

Subject: DEA Piiholo Water Treatment Plant Organic Carbon Reduction Project

Dear Mr. Nakatsuka,

Thank you for the opportunity to comment on this project. We have no comments to make at this time.

Please feel free to contact me if you have any questions.

Sincerely,

Jo Anne Johnson Winer
Director

Maui Electric Company, Ltd. • 210 West Kamehameha Avenue • PO Box 398 • Kahului, Maui, HI 96733-6898 • (808) 871-8461

April 25, 2012

Mr. Ivan Nakatsuka, P.E.
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

Subject: Pre-Assessment Consultation for Draft Environmental Assessment
Piiholo Water Treatment Plant Organic Carbon Reduction Project
Tax Map Key: (2) 2-4-16:02
Piiholo, Maui, Hawaii

Dear Mr. Nakatsuka,

Thank you for allowing us to comment on the Early Consulation for the subject project.

In reviewing our records and the information received, Maui Electric Company (MECO) would like to highly encourage the customer's electrical consultant to submit electrical drawings to us as soon as practical to address and coordinate any possible relocations of our facilities. Since this project's anticipated electrical demand may have a substantial impact to our system, we encourage the customer's electrical consultant to submit the electrical demand requirements and project time schedule as soon as practical so that service can be provided on a timely basis. MECO may need to complete system upgrades to accommodate the anticipated electrical load.

Should you have any questions or concerns, please call Kelcie Kawamura 872-3246.

Sincerely,

Ray Okazaki
Supervisor, Engineering

ALAN M. ARAKAWA
Mayor

GLENN T. CORREA
Director

PATRICK T. MATSUI
Deputy Director

(808) 270-7230
FAX (808) 270-7934

DEPARTMENT OF PARKS & RECREATION

700 Hali'a Nakoa Street, Unit 2, Wailuku, Hawaii 96793

April 17, 2012

Mr. Ivan K. Nakatsuka, P.E.
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, HI 96817-5031

Dear Mr. Nakatsuka:

SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment Piiholo Water Treatment Plant Organic Carbon Reduction Project, DWS Job No. 08-02. TMK: (2) 2-4-016:002, Piiholo, Maui, Hawaii

We have reviewed the draft environmental assessment for the Piiholo Water Treatment Plant Organic Carbon Reduction Project. The Department of Parks and Recreation has no comment or objection to submit at this time.

Thank you for the opportunity to review and comment on this matter. Please feel free to contact me or Mr. Robert Halvorson, Chief of Planning and Development at (808) 270-7387 should you have any other questions.

Sincerely,

GLENN T. CORREA
Director

c: Robert Halvorson, Chief of Planning and Development

GTC:RH:do

ALAN M. ARAKAWA
Mayor

WILLIAM R. SPENCE
Director

MICHELE CHOUTEAU McLEAN
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

April 17, 2012

Mr. Ivan K. Nakatsuka, PE
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, Hawaii 96817-5031

Dear Mr. Nakatsuka:

SUBJECT: PRE-ASSESSMENT CONSULTATION FOR DRAFT ENVIRONMENTAL ASSESSMENT PIIHOLO WATER TREATMENT PLANT ORGANIC CARBON REDUCTION PROJECT, DWS JOB NO. 08-02, AT PIIHOLO, MAUI, HAWAII; TMK: (2) 2-4-016:002 (RFC 2012/0056)

The Department of Planning has reviewed the proposed action and has no comments to offer at this time.

Thank you for your cooperation. If additional clarification is required, please contact Staff Planner Paul Fasi at paul.fasi@mauicounty.gov or at (808) 270-7814.

Sincerely,

CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

for WILLIAM SPENCE
Planning Director

xc: Paul F. Fasi, Staff Planner (PDF)
Department of Public Works
Project File
General File

WRS:CIY:PFF:sa
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POLICE DEPARTMENT
COUNTY OF MAUI

ALAN M. ARAKAWA
MAYOR

OUR REFERENCE

YOUR REFERENCE

55 MAHALANI STREET
WAILUKU, HAWAII 96793
(808) 244-6400
FAX (808) 244-6411

GARY A. YABUTA
CHIEF OF POLICE

CLAYTON N.Y.W. TOM
DEPUTY CHIEF OF POLICE

April 17, 2012

Mr. Ivan K. Nakatsuka, P.E.
Vice President
Austin, Tsutsumi & Associates, Inc.
501 Sumner Street, Suite 521
Honolulu, HI 96817-5031

Dear Mr. Nakatsuka:

SUBJECT: Pre-Assessment Consultation for DEA Piiholo Water Treatment Plant Organic Carbon Reduction Project - DWS Job No. 08-02
TMK: (2) 2-4-16:02, Piiholo, Maui

Thank you for your letter of April 5, 2012, requesting comments on the above subject.

We have no comments to offer at this time. Thank you for giving us the opportunity to provide initial comments on the proposed project.

Very truly yours,

Assistant Chief Victor Ramos
for: Gary A. Yabuta
Chief of Police

c: William Spence, Maui County Planning Department

COUNTY COUNCIL
COUNTY OF MAUI
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.mauicounty.gov/council

April 23, 2012

Austin, Tsutsumi & Associates, Inc.
Ivan K. Nakatsuka, P.E
501 Sumner Street, Suite 521
Honolulu, HI 96817-5031

SUBJECT: Pre-Assessment Consultation for Draft Environmental Assessment
Piiholo Water Treatment Plant Organic Carbon Reduction Project
DWS Job No. 08-02
TMK No. (2) 2-4-16:02, Piiholo, Maui, HI

Dear Mr. Nakatsuka:

Thank you for the opportunity to provide early review and comments for the Piiholo Water Treatment Plant Organic Carbon Reduction Project at TMK No. (2) 2-4-16:02, Piiholo, Maui, HI.

After review of the information presented, I have no comments at this time.

Sincerely,

JOSEPH PONTANILLA,
COUNCIL MEMBER