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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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June 30, 2020

Mr. Keith Kawaoka, Acting Director
Office of Environmental Quality Control
State of Hawai'i, Department of Health
235 South Beretania Street, Room 702
Honolulu, Hawai'i 96813

Subject: Draft Environmental Assessment and Anticipated Finding of No Significant Impact for Hilo Scrap Metal Yard Closure and Remediation
South Hilo District, Island of Hawai'i, Hawai'i
TMK: (3) 2-1-013:150 (portion)

Dear Mr. Kawaoka:

With this letter, the County of Hawai'i Department of Environmental Management (DEM) hereby transmits the draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI) for the Hilo Scrap Metal Yard Closure and Remediation project situated at TMK parcel (3) 2-1-013:150 in South Hilo on the island of Hawai'i for publication in the next available edition of *The Environmental Notice*.

Simultaneous with this letter, we will be utilizing the OEQC online submission platform to provide your office with the required information and files concerning the Draft EA, along with a zip file that contains the shapefile of the project's location and a PDF-formatted electronic copy of the draft environmental assessment.

Should you have any questions, please contact Mr. Gregory Goodale, Solid Waste Division Chief at (808) 961-8515 (Gregory.Goodale@hawaiicounty.gov), or Ms. Rebecca Candilasa of Wilson Okamoto Corporation at (808) 946-2277.

Sincerely,

William A. Kucharski
Director

cc: Gregory Goodale, Solid Waste Division Chief
Rebecca Candilasa, Wilson Okamoto Corporation

From: webmaster@hawaii.gov
To: HI Office of Environmental Quality Control
Subject: New online submission for The Environmental Notice
Date: Tuesday, June 30, 2020 3:32:48 PM

Action Name

Hilo Scrap Metal Yard Closure and Remediation

Type of Document/Determination

Draft environmental assessment and anticipated finding of no significant impact (DEA-AFNSI)

HRS §343-5(a) Trigger(s)

- (1) Propose the use of state or county lands or the use of state or county funds

Judicial district

South Hilo, Hawaiʻi

Tax Map Key(s) (TMK(s))

(3) 2-1-013:150 (por.)

Action type

Agency

Other required permits and approvals

Numerous

Proposing/determining agency

County of Hawaiʻi, Department of Environmental Management

Agency contact name

Gene Quiamas

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345 Kekūanāoʻa Street, Suite 41
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Map It

Was this submittal prepared by a consultant?

Yes

Consultant

Wilson Okamoto Corporation

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1907 S. Beretania Street, Suite 400
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Map It

Action summary

The County of Hawai'i Department of Environmental Management is planning to permanently close and remediate the site of the former Hilo Scrap Metal Yard located in Hilo on Hawai'i Island. The proposed action consists of excavating and disposing of all waste materials and all lead contaminated soils in the project area. As an alternative, DEM is also analyzing the cost benefits of only disposing of excavated non-recyclable waste materials and consolidating the lead-contaminated soils onsite, grading to optimize future use, and capping with an engineered cover system to prevent direct contact exposure to the lead-contaminated soil. Other activities may include conducting site assessments, post-excavation confirmation sampling, grading, backfilling portions of the site with clean aggregate, and vegetating. Once the site has been remediated, DEM plans to use the site in the future for consolidation of existing solid waste management program components in the area.

Reasons supporting determination

Refer to Chapter 7 of the Draft EA.

Attached documents (signed agency letter & EA/EIS)

- 20200629_Hilo-SMY_Draft-EA.pdf
- HSMY-Closure-and-Remediation-EA-Transmittal.pdf

Action location map

- Shapefiles.zip

Authorized individual

Rebecca Candilasa

Authorization

- The above named authorized individual hereby certifies that he/she has the authority to make this submission.

Draft Environmental Assessment

Hilo Scrap Metal Yard Closure and Remediation

Hilo, Hawai‘i Island, Hawai‘i

Prepared For:

Prepared By:

WILSON OKAMOTO CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

July 2020

DRAFT ENVIRONMENTAL ASSESSMENT

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

District of South Hilo
Island of Hawaiʻi, State of Hawaiʻi
Tax Map Key: 2-1-013:150 (por.)

Prepared For:

County of Hawaiʻi
Department of Environmental Management
Solid Waste Division
345 Kekūanāoʻa Street, Suite 41
Hilo, Hawaiʻi 96720

Prepared By:

Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
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WOC Job No. 10455-01

JULY 2020

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LIST OF ACRONYMS AND ABBREVIATIONS

AFNSI	Anticipated Finding of No Significant Impact
ALISH	Agricultural Lands of Importance to the State of Hawai‘i
BISM	Big Island Scrap Metal, LLC
BMP	Best Management Practices
CDP	Census Designated Place
CFR	Code of Federal Regulations
CO	Carbon monoxide
Corps	U.S. Army Corps of Engineers
CWSRF	Clean Water State Revolving Fund
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
DBEDT	Department of Business, Economic Development and Tourism
DEM	County of Hawai‘i Department of Environmental Management
DHHL	State of Hawai‘i Department of Hawaiian Homelands
DLNR	State of Hawai‘i Department of Land and Natural Resources
DOH	State of Hawai‘i Department of Health
DOT	State of Hawai‘i Department of Transportation
DWS	County of Hawai‘i Department of Water Supply
EA	Environmental Assessment
EAL	Environmental Action Levels
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
GHG	Greenhouse gas
H_2S	Hydrogen sulfide
HAR	Hawai‘i Administrative Rules
HRS	Hawai‘i Revised Statutes
HSMY	Hilo Scrap Metal Yard
IRSWMP	Integrated Resources and Solid Waste Management Plan
KMR	Keaukaha Military Reservation
LSB	Land Study Bureau
LUC	State Land Use Commission
LUPAG	Land Use Pattern Allocation Guide
mgd	Million gallons per day
msl	Mean sea level
NAAQS	National Ambient Air Quality Standards
NHPA	National Historic Preservation Act
NO_2	Nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resources Conservation Service

LIST OF ACRONYMS AND ABBREVIATIONS (Continued)

O_3	Ozone
OEQC	Office of Environmental Quality Control
OHA	Office of Hawaiian Affairs
OP	State of Hawai‘i Office of Planning
Pb	Lead
PM_X	Particulate matter
ROD	Rapid ‘Ōhi‘a Death
rPAE	Papai series
SDWA	Safe Drinking Water Act
SHPD	State Historic Preservation Division
SHWB	State of Hawai‘i, Department of Health, Solid and Hazardous Waste Branch
SMA	Special Management Area
SO_2	Sulfur dioxide
SWMP	Solid Waste Management Permit
TMK	Tax Map Key
TPH	Total petroleum hydrocarbon
UIC	Underground Injection Control
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	Volatile organic compounds
WHSL	West Hawai‘i Sanitary Landfill

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SUMMARY

Project Name:	Hilo Scrap Metal Yard Closure and Remediation
Location:	South Hilo District, Island of Hawaiʻi, State of Hawaiʻi
Tax Map Keys (TMKs):	(3) 2-1-013:150 (por.)
Proposing Agency:	County of Hawaiʻi Department of Environmental Management Solid Waste Division 345 Kekūanāoʻa Street, Suite 41 Hilo, HI 96720
Recorded Fee Owner:	State of Hawaiʻi
Existing Use:	Former scrap metal salvage facility
State Land Use Classification:	Urban
County General Plan Designation:	Industrial
County Zoning Designation:	General Industrial District (MG-1a)
Proposed Action:	The County of Hawaiʻi Department of Environmental Management (DEM) is planning to permanently close and remediate the site of the former Hilo Scrap Metal Yard located in Hilo on Hawaiʻi Island. The proposed action consists of excavating and disposing of all waste materials and all lead-contaminated soils in the project area. Any excavated non-recyclable waste materials and non-hazardous lead-contaminated soils exceeding the commercial/industrial land use environmental action levels (EAL) (>800 mg/kg) would be disposed of at the West Hawaiʻi Sanitary Landfill (WHSL). Recyclable materials would be taken to State of Hawaiʻi Department of Health (DOH) approved recycling facilities. If waste characterization sampling and analysis identifies any hazardous waste, that material would either be treated (e.g. stabilized) to remove hazardous waste characteristics and landfill disposed on-island or transported to a mainland U.S. hazardous waste treatment and disposal facility. As an alternative, DEM is also analyzing the cost benefits of only transporting excavated non-recyclable waste materials to WHSL and consolidating the lead-contaminated soils on-site, grading to optimize future use, and capping with an engineered

cover system to prevent direct contact exposure to the lead-contaminated soil. Final treatment of the soil will be consistent with DOH guidance for managing contaminated soil and will be subject to approval by DOH. Other activities associated with the proposed action may include conducting site assessments, post-excavation confirmation sampling, grading, backfilling portions of the site with clean aggregate, and vegetating. Once the site has been remediated, DEM plans to use the site in the future for consolidation of existing solid waste management programs in the area.

Impacts: The proposed action may result in temporary air quality and soil erosion impacts associated with construction activities. These impacts would be mitigated through implementation of best management practices (BMPs) and adherence to federal, State, and County rules and regulations.

Anticipated Determination: Anticipated Finding of No Significant Impact (AFNSI)

PREFACE

This Draft Environmental Assessment (EA) / Anticipated Finding of No Significant Impact (AFNSI) has been prepared pursuant to Chapter 343, Hawaiʻi Revised Statutes (HRS), and Title 11, Chapter 200.1, Hawaiʻi Administrative Rules (HAR), Department of Health, State of Hawaiʻi. Proposed is an agency action by the County of Hawaiʻi Department of Environmental Management (DEM) to permanently close and remediate the site of the former Hilo Scrap Metal Yard (HSMY) located in the Waiākea Ahupuaʻa, Hilo District, Island of Hawaiʻi, Hawaiʻi.

The proposed action involves the use of State lands and funds and is subject to the environmental review process prescribed under Chapter 343, HRS. Since the proposed action involves termination of an existing component of DEM's solid waste and recycling program, it may eligible for exemption from the preparation of an environmental assessment based on the Comprehensive Exemption List for the County of Hawaiʻi Department of Environmental Management concurred upon by the Environmental Council on January 8, 2019. However, an EA is being prepared nonetheless to ensure that environmental concerns are given appropriate consideration in the decision-making process along with economic and technical considerations. Therefore, this EA has been prepared in accordance with Title 11, Chapter 200.1, Hawaiʻi Administrative Rules of the Department of Health and includes an assessment of the potential environmental, social, cultural and economic impacts associated with the proposed activities. Pursuant to HRS 343-5(b), the County is the proposing agency and will determine the significance of potential environmental impacts. A Finding of No Significant Impact (FONSI) is anticipated for the proposed action.

Funding for the project may come from the Clean Water State Revolving Fund (CWSRF) program administered by the State of Hawaiʻi. Therefore, a discussion on the project's compliance with cross-cutting federal authorities as set forth in the CWSRF regulations (40 CFR §35.3145) is also included in this EA.

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1. INTRODUCTION

1.1 Project Location

The former Hilo Scrap Metal Yard (HSMY) is located near the South Hilo Sanitary Landfill in the South Hilo district of Hawaiʻi Island (see Figure 1-1). It is roughly situated a mile south of the Hilo International Airport and a mile east of Kanoelehua Avenue. The project area encompasses approximately 13 acres of a total 35.4 acres of land identified as Tax Map Key (TMK) [3] 2-1-013:150 (see Figure 1-2). The subject property is owned by the State of Hawaiʻi and is under the control and management of the County of Hawaiʻi by Executive Order 2432.

Access to HSMY is provided by the former Rubbish Dump Road, currently known as Hoʻolaulima Road, which traverses the subject property and intersects with Leilani Street northwest of HSMY. The County of Hawaiʻi Department of Environmental Management (DEM) is currently working with the State of Hawaiʻi Department of Land and Natural Resources (DLNR) Land Division to re-subdivide the existing parcel boundaries to conform to the use of a portion of the property as a road.

Based on historic aerial photos of the area, scrap metal salvaging operations may have extended north into the adjacent property owned by the Department of Hawaiian Home Lands (DHHL) further identified as TMK [3] 2-1-012:029. Therefore, the final clean-up area will be determined through sampling and analysis of the site prior to remediation activities. DEM is currently coordinating with DHHL for access to the adjacent property to conduct further environmental investigations. If affected, all proposed remediation activities and long-term maintenance of the site will be determined in consultation with DHHL.

1.2 Existing and Surrounding Uses

HSMY was used for decades to process and bale vehicles, white goods, scrap metal, lead acid batteries, and tires for recycling before operations ceased in March 2013. Following cessation of operations, the site remained vacant and became heavily vegetated. The dominant vegetation in the area primarily consists of monkey pod trees, albizia trees, and guinea grass. Interspersed within the cleared, open areas of HSMY are a number of vegetated stockpiles ranging from 10 to 20 feet high and 10 to 300 feet in diameter. The stockpiles generally consist of solid waste debris (metal, plastic, tires, wood, foam, and other inert materials) and loose soil and rocks.

Located in the immediate vicinity of the project area are other solid waste management program components, including a HI-5 Redemption Center and Hilo ReUSE Center to the north; the adjacent Hilo Recycling & Transfer Station (Hilo Transfer Station) to the east; and the East Hawaiʻi Organics Facility, a County baseyard, a County sort station (known as the East Hawaiʻi Regional Sort Station), and the soon to be closed South Hilo Sanitary Landfill to the south (see Figure 1-3). Just beyond that, the project area is surrounded by several active quarries and heavily vegetated land that remains mostly undeveloped.

Other surrounding uses in the general vicinity include the Hilo International Airport and the Keaukaha Military Reservation (KMR) of the Hawaiʻi National Guard to the north and east; the County of Hawaiʻi Trap and Skeet Range to the southeast; the Panaʻewa Drag Strip, the County of Hawaiʻi Mass Transit Agency baseyard, and the Department of Hawaiian

Homelands Pana‘ewa Farmlots and residences to the south; and various commercial/industrial properties to the west.

1.3 Historic Land Use

Prior to being used for scrap metal salvaging operations, HSMY was originally forested land owned by the State of Hawai‘i. It was in the vicinity of the old Hilo Airport as well as 2,054 acres of land acquired by the U.S. Army and Navy between 1941 and 1945 for military activities. During World War II, the U.S. Naval Air Station-Hilo, U.S. Army Air Station-Hilo, and Hilo Airport Military Reservation were established and the area was subsequently named General Lyman Field. The facility included three runways and housing, training, and storage facilities situated north of what would eventually become HSMY. In 1952, the U.S. Air Force transferred General Lyman Field to the Territory of Hawai‘i and the executive board of DHHL, the Hawaiian Homes Commission.

Around 1965, the subject property began to be used for gravel quarry operations. Unregulated, unsupervised disposal and open burning of solid waste also occurred at this time. It was not until 1971 that regulated, supervised municipal solid waste disposal operations were instituted by the County of Hawai‘i, and the site was named Hilo Rubbish Dump. Around that same time, ownership of the site was transferred from the State of Hawai‘i to the County of Hawai‘i by Executive Order 2432. Landfill operations continued to extend south until around the late 1970’s to the early 1980’s when capacity of the area was nearing its limits and landfill operations were relocated to the current site of the South Hilo Sanitary Landfill. Once capacity was reached, the Hilo Rubbish Dump site was covered and became overgrown with vegetation. A portion of the property, however, remained active and was used to collect wrecked cars and large household appliances even prior to the formal use of the site for metal salvaging operations.

1.4 Operational History

In August 2003, the State of Hawai‘i Department of Health (DOH) Solid and Hazardous Waste Branch (SHWB) issued the County of Hawai‘i Solid Waste Management Permit (SWMP) No. SV-0009-03 permitting Big Island Scrap Metal, LLC (BISM), a third-party vendor contracted by DEM, to operate a scrap metal salvage facility on the property. The permit authorized BISM to receive, store, process, and bale vehicles, white goods, scrap metal, lead acid batteries, and tires. The maximum storage capacity of the facility permitted by the SWMP was:

- 150 unprocessed vehicle units;
- 150 unprocessed white goods units;
- 500 processed vehicle units;
- 300 processed white goods units;
- 400 cubic yards of scrap metal;
- 220 gallons of used oil;
- One 40-foot container of lead-acid batteries;
- 100 used tires under a covered area;

- One 40-foot container of tires; and
- 110 gallons of coolant/antifreeze, gasoline, and diesel.

While in operation, the public would access the site from Leilani Street and proceed along Hoʻolaulima Road to reach the metal salvage operations area and drop off metal waste. The working surface of the scrap metal salvage facility was generally flat and located behind the active Hilo Transfer Station. In this area, BISM sorted the scrap metal material and loaded it into a compactor, producing bales of compacted metal. The bales were then placed into transport containers via forklift by way of a loading ramp located near the compactor. Temporary accumulation and storage of discarded white goods and automobiles also occurred on site, but the exact locations of these activities are unknown. BISM used track excavators with shears and grapplers to sort and process metal debris, before transferring it to the staging pile adjacent to the compactor unit. The facility accepted both new scrap metal and also scavenged and extracted remnant scrap materials that were left partially buried by activities associated with the former Hilo Rubbish Dump.

Prior to baling and logging, all scrap vehicles were stripped of batteries, tires, and other debris, and then drained of all fluids. White goods were rendered Freon-free prior to baling. Heavy-gauge, loose iron was processed by torch-cutting or shearing to mill specifications. All processed scrap was shipped to the West Coast of the United States in 20-ton ocean-going containers for reclamation. BISM processed approximately 500 tons of scrap metal every month.

The SWMP expired in August 2008, at which time operations were allowed to continue under an administrative permit extension. Operations finally ended in March 2013 when BISM demobilized from the site and removed commodities, equipment, and structures associated with its salvage operations. All vertical structures were demolished, leaving only concrete foundations in place of former structures. Remaining solid waste or debris that remains is likely material that was dug up from the former Hilo Rubbish Dump or byproduct from processing of the scrap metal material. Today, DEM continues to manage the facility under an administrative extension of the permit until final closure and remediation activities are completed.

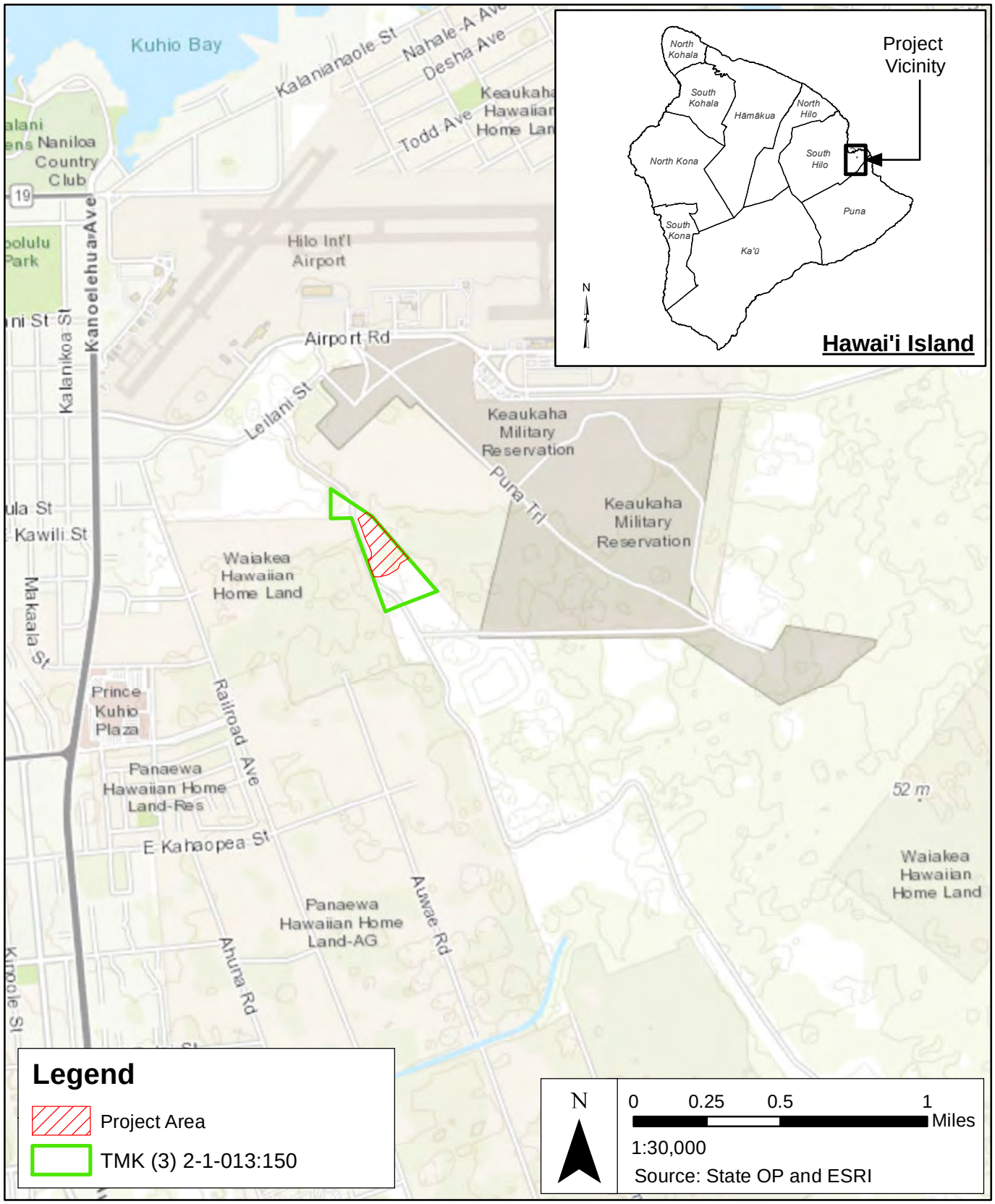

FIGURE 1-1

LOCATION MAP

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

WILSON OKAMOTO CORPORATION

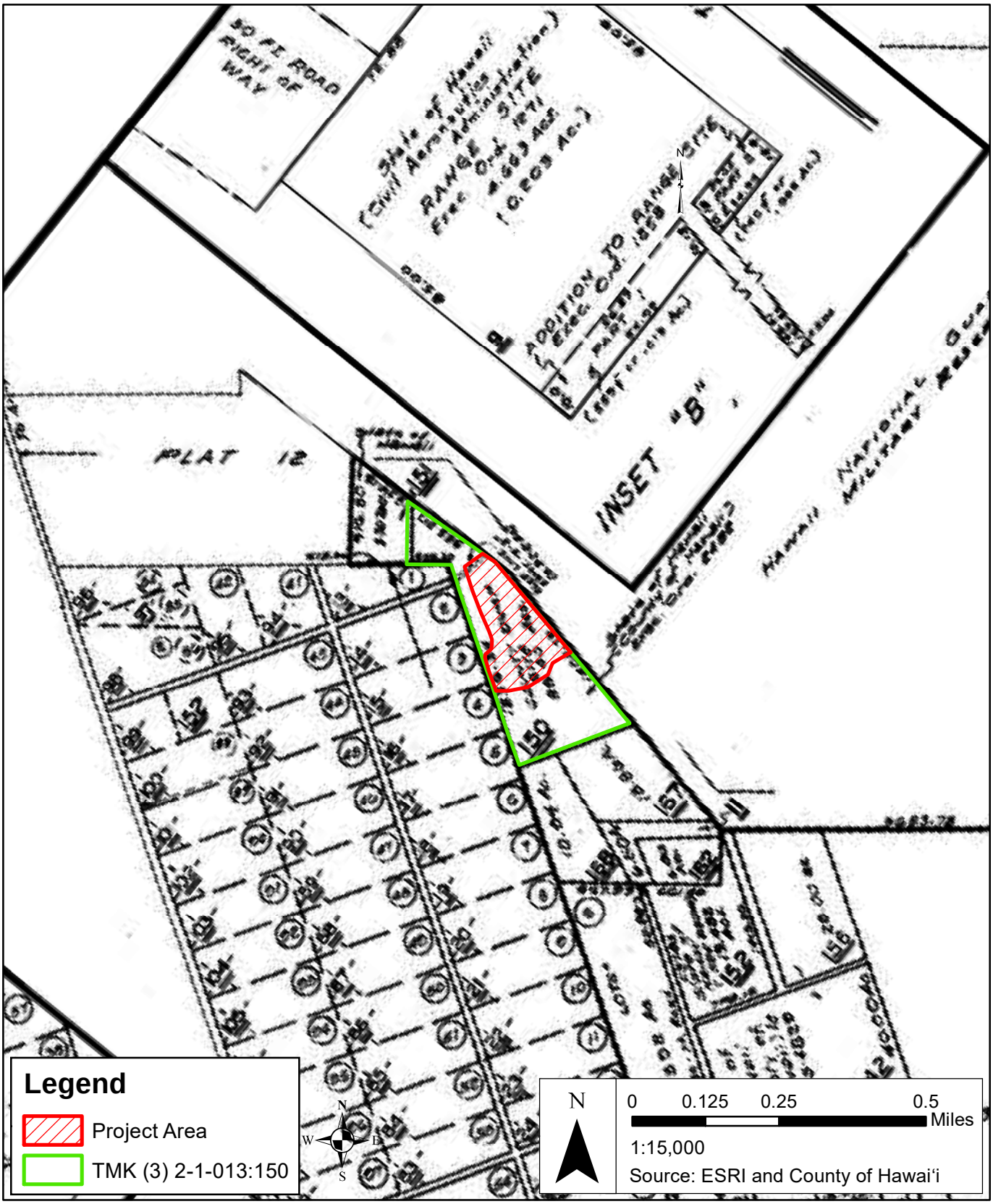

FIGURE 1-2

TMK MAP [(3) 2-1-013:150]

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

WILSON OKAMOTO CORPORATION

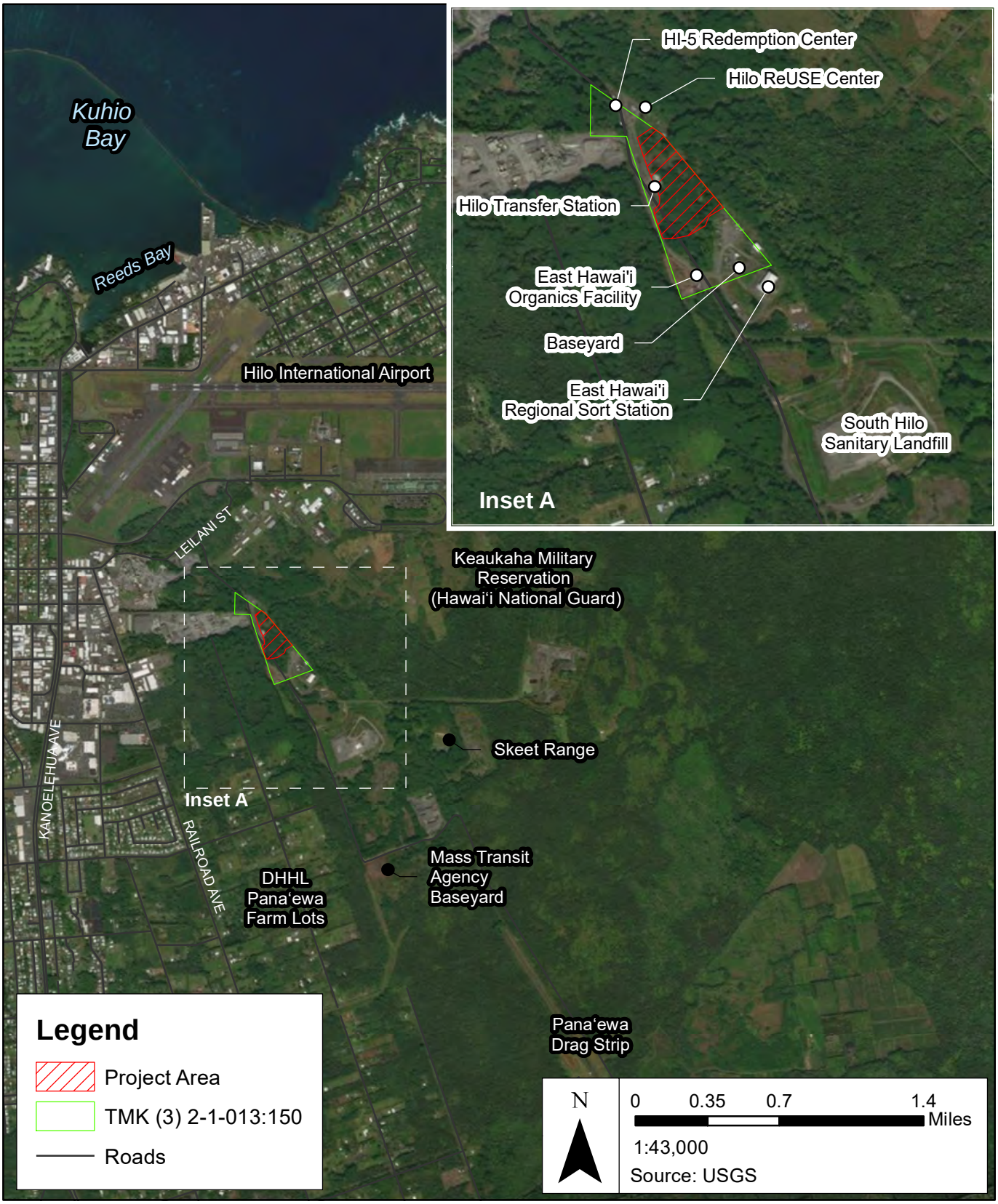

FIGURE 1-3

SURROUNDING LAND USE MAP

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

WILSON OKAMOTO CORPORATION

2. PROJECT DESCRIPTION

2.1 Purpose and Need

Past scrap metal salvaging operations have caused site soil to become contaminated above Hawai‘i environmental action levels (EALs). According to a Preliminary Site Assessment performed in 2008, identified chemicals of concern above screening levels in the areas of significant scrap metal accumulation and salvage operations include total petroleum hydrocarbon (TPH)-Oil, lead, and benzo(a)pyrene. Lead-contaminated soil are present within working surfaces throughout the subject property. Pollutants identified as chemicals of potential concern at the property include: asbestos, PCBs, arsenic and other metals, pesticides, hydrogen sulfide, methane, combustible gases, and carbon monoxide. Small concentrations of Freon and other halogenated and non-halogenated VOCs were also found in soil vapors. It has also been previously suggested by DEM personnel that there may be a potential for buried ordinance (munitions) to be present in the vicinity of the property boundary between the subject property and the DHHL property given historic use of the site for military training activities.

The contaminated soil that remains on the subject property presents a potential hazard to public health by direct contact. Ordinances that could be buried in the area also present a potential hazard. Remediation is needed to adequately manage these potential hazards and allow for productive future beneficial use of the land. Therefore, the purpose of the proposed action is to restore and reclaim the land within the project area to meet DOH standards and close the SWMP in support of the future land use plans of DEM.

2.2 Proposed Action

A draft final closure plan was prepared in December 2013 to support DEM in performing necessary closure and remediation work in compliance with the conditions of the SWMP. DEM is in the process of updating the final closure plan, which will need to be approved by DOH. The final closure plan includes an assessment of the site’s present and future threat to public health and the environment, a plan of action to minimize or mitigate threats to public health and the environment, and a schedule to implement the plan of action. Closure procedures presented in the final closure plan are designed to minimize and mitigate hazards to human health and the environment from the existing site conditions as they are currently known, which consist of residual solid waste materials from BISM operations and historical buried waste of the former Hilo Rubbish Dump. In general, closure procedures would consist of the following:

- Clearing of the site, and geophysical delineation of former HSMY and landfilling operations through sampling and analysis to determine the final clean-up area;
- Processing of remnant debris and soil piles and recycling/disposal as appropriate;
- Removal of all existing equipment and structures;
- Environmental investigation;
- Landfill disposal of non-recyclable solid waste material and lead contaminated soil OR design and installation of an engineered encapsulation system; and
- Post-closure documentation.

Once a final clean-up area has been delineated, all non-recyclable waste materials and all contaminated soil and solid waste debris in the project area would be excavated. Any excavated non-recyclable waste material and contaminated soil exceeding the commercial/industrial land use environmental action levels (EAL) (>800 mg/kg) would be disposed of at the West Hawai‘i Sanitary Landfill (WHSL). WHSL is the only solid waste landfill on the island of Hawai‘i that is permitted to accept non-hazardous lead-contaminated soil. Additional waste characterization sampling and analysis would be performed to ensure the material is not a hazardous waste and is suitable for on-island landfill disposal. If waste characterization identifies any hazardous waste, that material would be either treated (e.g., stabilized) to remove hazardous waste characteristics and landfill disposed on-island or transported to a mainland U.S. hazardous waste treatment and disposal facility.

As an alternative, DEM is also analyzing the cost benefits of only transporting excavated non-recyclable waste materials to WHSL and leaving in place or consolidating the contaminated soil and solid waste debris onsite, grading to optimize future use, and capping with an engineered cover system to prevent direct contact exposure to the contaminated soil. The design of the on-site encapsulation system would be determined through further environmental investigation. Final treatment of the soil will need to meet DOH guidance for managing contaminated soil and will be subject to approval by DOH.

Other activities associated with the proposed action may include conducting post-excavation confirmation sampling, grading, backfilling portions of the site with clean aggregate, and vegetating.

Once the former HSMY site has been closed and properly remediated, DEM is proposing to reclaim the land for future commercial/industrial use consistent with its former use. It is anticipated that the site would be reconfigured for ease-of-use and to consolidate the adjacent Hilo Transfer Station with other existing waste management program components in the area including the Hilo ReUSE Center and the HI-5 Redemption Center. See Figure 2-1.

2.3 Project Costs and Schedule

Final closure and remediation of HSMY is anticipated to cost approximately $15 million which includes the costs associated with closure and remediation of the site. Once regulatory approvals have been granted and the construction contract awarded, it is estimated that remediation activities would take 1 year followed by another 6 months to complete post-closure documentation based on current assumptions.

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FIGURE 2-1

CONCEPTUAL FUTURE LAND USE PLAN

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

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3. DESCRIPTION OF EXISTING ENVIRONMENT, IMPACTS, AND MITIGATION MEASURES

3.1 Climate

Hawai‘i’s climate is relatively uniform year round with mild temperatures, moderate humidity, and relatively consistent northeasterly trade winds. The dominant geological features of Hawai‘i Island, namely Mauna Loa (13,679 foot summit elevation) and Mauna Kea (13,796 foot summit elevation), significantly influence the island’s climate and weather conditions making Hawai‘i Island home to 4 out of the 5 major climate zones and 8 out of the 13 sub-zones.

Hilo is located within the continuously wet sub-zone of the humid tropical climate zone. Annual rainfall in Hilo averages about 130 inches per year, with the winter months from October to April receiving the majority of the rainfall (Giambelluca et al., 2013). Temperatures are relatively uniform throughout the year with averages at the Hilo International Airport ranging from a low of 64 degrees Fahrenheit in the winter months to a high of 84 degrees Fahrenheit in the summer months (DBEDT, 2018). Wind patterns in Hilo are largely a function of the interaction between the northeasterly trade winds and the Mauna Loa volcano. In general, the trades are more persistent in the summer than in the winter and stronger in the afternoon than at night. In the absence of trade winds, winds become light and variable. Diurnal heating and cooling of the island also gives rise to onshore breezes during the day, and offshore breezes during the night.

Changes in the Earth’s climate over the last century due to human input of GHGs into the atmosphere are unprecedented. The concentration of carbon dioxide in the atmosphere is well outside the range of natural variability and is higher than it has ever been before. The rapid build-up of GHGs, including carbon dioxide, methane, nitrous oxide, and fluorinated gases, from human activities, is causing global warming and climate disruption (Hawai‘i Climate Change Mitigation and Adaptation Commission, 2017).

Slight increases in the average temperature of the Earth’s surface have translated to widespread changes in weather patterns. Scientific studies indicate that extreme weather events such as heat waves and large storms are likely to become more frequent or more intense as the Earth’s climate changes. Many islands are especially vulnerable to the risks of climate change because of their small size, low elevation, remote geographical location, and concentration of infrastructure along the coastlines (EPA, 2016).

Act 234, Session Laws of Hawai‘i 2007, established the state’s policy framework and requirements to address Hawai‘i’s GHG emissions. The purpose of the Act is to “reduce, by January 1, 2020 GHG emissions in the State to levels at or below the best estimations and updates of the inventory of greenhouse gas emissions estimates for 1990.”

Impacts and Mitigation Measures

No direct or indirect impacts on climate are anticipated with implementation of the proposed action. The proposed action would be appropriately designed in the context of the surrounding environment and would not affect temperatures, wind, or rainfall levels in the region.

Short-term construction and disposal activities associated with the project are expected to temporarily increase GHG emissions in the project area. Cumulatively, these emissions are anticipated to have insignificant effects on regional or global climate due to the small scale of the project and the temporary nature of the activities. In the long-term, GHG emissions in the project area are not expected to increase as future land use plans proposed by DEM are expected to involve consolidation of waste management program components that already exist in the area.

3.2 Physiography

3.2.1 Geology and Topography

Hawai‘i Island is the youngest and largest island in the Hawaiian chain. The island was formed by the coalescence of five volcanoes—Kohala, Hualālai, Mauna Kea, Mauna Loa, and Kīlauea. Only Mauna Loa and Kīlauea are presently considered active while the other three are considered dormant.

The town of Hilo, created by Mauna Loa lava flows, is characterized by ‘a‘a (clinker) and pāhoehoe (ropy) lava from various eruptions dating back to between 750 to 1,500 years ago (Wolfe and Morris, 1996). Flows are typically 5 to 20 feet thick. Due to its relatively young age, the Kau Basalt in the project area site is generally unweathered and has developed only a thin soil layer. These basalt layers are typically highly fractured resulting in high permeability.

The natural grade in the vicinity of the project area slopes gently from the southeast towards the northwest and Kūhiō Bay. Grade elevations range from about 75 feet to 85 feet above mean sea level. Interspersed within the cleared portions of the project area are vegetated piles of debris that range from approximately 10 to 20 feet high and 10 to 300 feet in diameter. These soil piles are characterized by a mixture of soil, rocks, and assorted small and large debris (metal, plastic, wood, tires).

Impacts and Mitigation Measures

No direct, indirect or cumulative impacts on geology are anticipated with implementation of the proposed action.

Construction of the proposed action would involve land disturbing activities that would alter the existing topography within the project area. Such activities may include clearing, excavation, grading, and backfilling intended to remove lead contaminated soil and stabilize the site for future use. It is anticipated that the existing stockpiles containing solid waste debris would be cleared and leveled off to the final design grade similar to pre-existing conditions even prior to use of the site for quarry or landfill activities. Therefore, no significant impacts to topography are anticipated and no mitigation measures are proposed or anticipated to be required.

A drainage study would be performed to assess any potential changes in drainage patterns as a result of the project. Should final treatment of the site involve a soil encapsulation system, that system would be designed to accommodate any potential increases in runoff. All development generated runoff that may be associated with future improvement of the site for the consolidation of solid waste management

program components would be retained on-site as determined through a separate drainage study. The final drainage system design would be coordinated with the County of Hawai‘i Department of Public Works (DPW) prior to construction.

3.2.2 Soils

According to the U.S. Department of Agriculture National Resources Conservation Service's (NRCS) *Soil Survey of the Island of Hawai‘i, State of Hawai‘i*, dated December 1973, soils within the project area are classified in the Papai series (rPAE). This series is described as extremely stony muck, with three to 25 percent slopes and consists of well-drained, thin, extremely stony organic soils over fragmented ‘a‘a lava. They are found at elevations ranging from sea level to 1,000 feet and receive between 90 to 150 inches of annual rainfall. Areas with Papai soils are mostly covered in woodland, with some small areas used for pasture, orchards, and truck crops. These soils are slightly acidic and are generally about eight inches deep. Permeability for these soils is rapid, runoff is slow, and the erosion hazard is slight. Papai series soils are given capability subclass VII, meaning they have severe limitations that makes them largely unsuitable for cultivation, limiting their usefulness to pastureland or woodland. Additionally, Papai series soils are of limited use for road fill, as locations for highways, and foundations, due to the fragmental nature of the underlying ‘a‘a lava. See Figure 3-1.

The State of Hawai‘i Department of Agriculture's *Agricultural Lands of Importance to the State of Hawai‘i (ALISH)* system of defining agricultural suitability classifies lands into four categories: Prime Lands, Unique Lands, Other Lands and Unclassified. According to ALISH, the project area is classified as Other Lands, which is defined as an area that can be farmed satisfactorily by applying greater inputs of fertilizer, improving drainage, practicing erosion control, and protecting the land from flooding. See Figure 3-2.

The *Detailed Land Classification, Island of Hawai‘i*, published by the University of Hawai‘i, Land Study Bureau (LSB), evaluates the quality or productive capacity of certain lands on the island using a five-class productivity rating system, with "A" representing the class of the highest productivity and "E" the lowest. Under this system, the project area has not been rated for agriculture. See Figure 3-2.

Impacts and Mitigation Measures

The project involves remediation of the project area to remove or stabilize contaminated soil to acceptable levels, thereby reducing the toxicity, mobility, and volume of contamination in the project area. No indirect or cumulative impacts on soils are anticipated with implementation of the proposed action.

Construction of the proposed action would involve land disturbing activities, which could result in short-term soil erosion impacts. These activities would be mitigated by incorporating best management practices (BMP) and erosion control measures into the project plans and specifications. Specific measures may include, but are not limited to: phasing the project to minimize the total area of exposed soil at any given time, revegetating or stabilizing disturbed areas of soil as soon as possible after working, minimizing disturbance of soil during periods of heavy rain, applying protective covers to soil and material stockpiles, and installing appropriate erosion

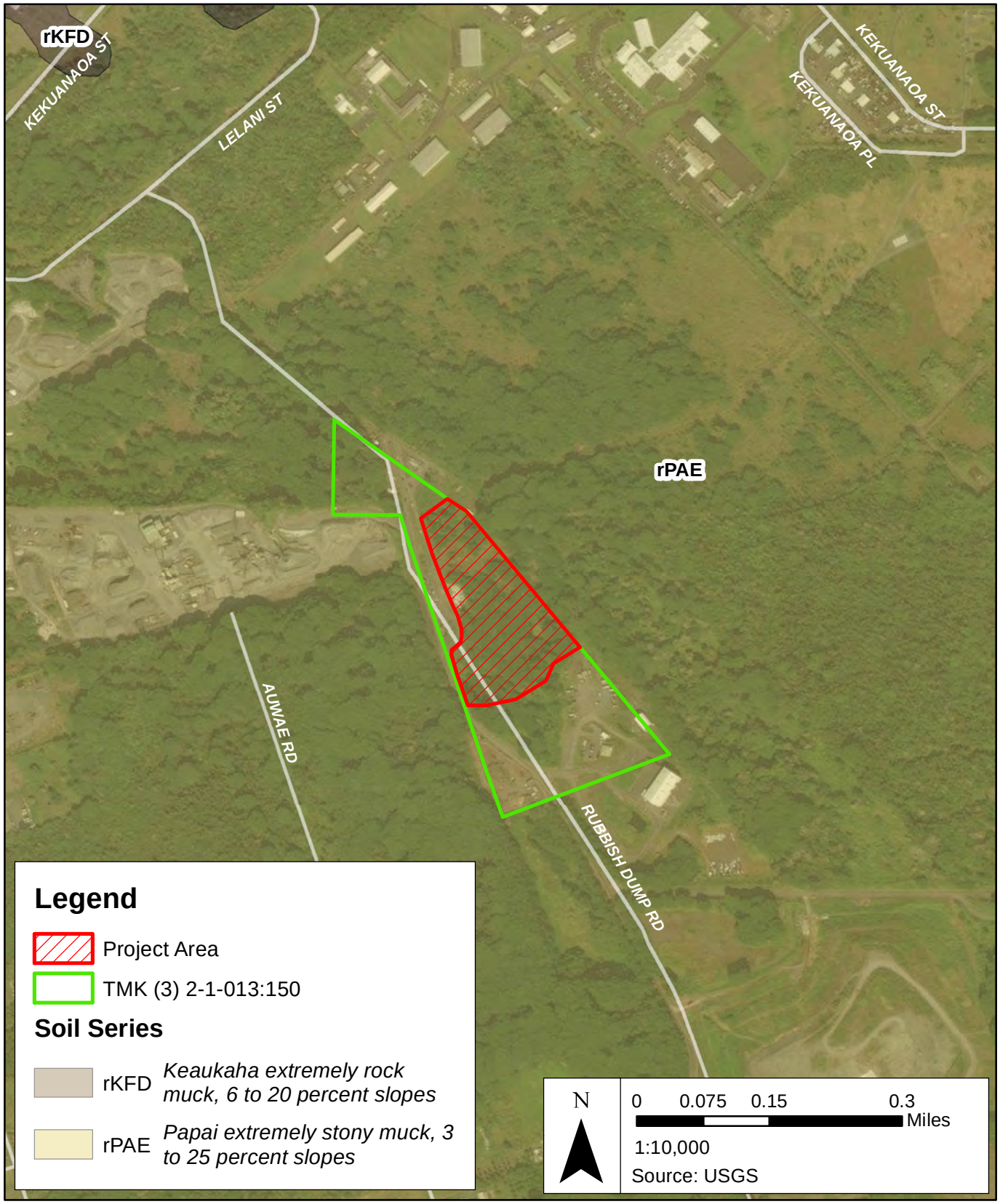

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FIGURE 3-1

SOILS MAP

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

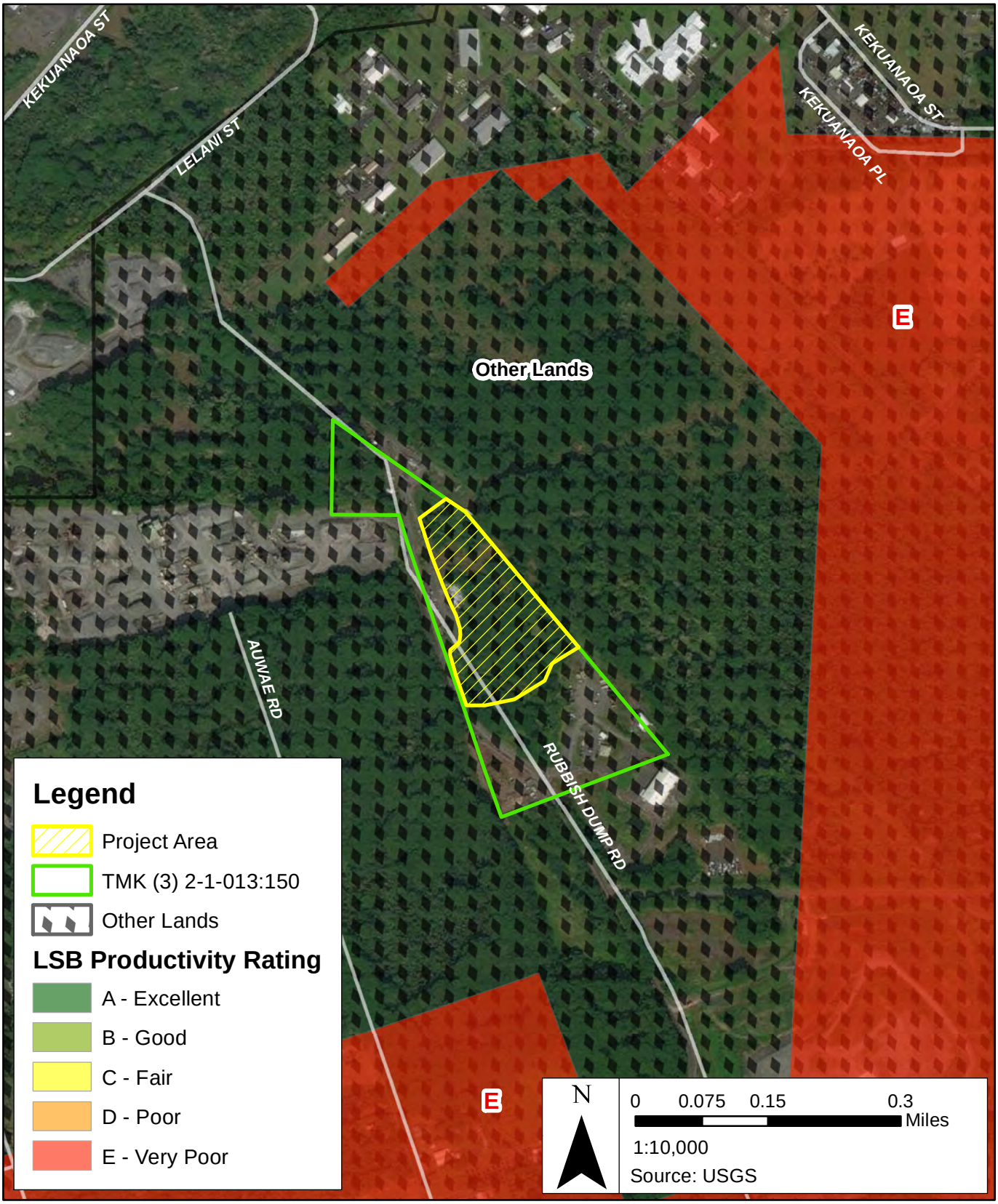

FIGURE 3-2

AGRICULTURAL LANDS OF IMPORTANCE TO THE STATE OF HAWAII

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

WILSON OKAMOTO CORPORATION

and sedimentation control devices during construction. Strong engineering and management controls would also need to be implemented, such as the use of personal protective equipment for works and air monitoring. In addition, the proposed action will comply with the requirements of Hawai‘i County Code, Chapter 10, related to Erosion and Sedimentation Control. Following construction, exposed soils in the project area would be stabilized or re-vegetated to control erosion.

Soil erosion impacts would also be mitigated through coordination with the appropriate agencies during permitting and construction. A National Pollutant Discharge Elimination System (NPDES) permit for storm water runoff from construction activities is anticipated to be required as individual and/or cumulative soil disturbances in the project area would exceed one acre of land area. Any discharges related to project construction or operation activities will comply with applicable State Water Quality Standards as specified in Hawai‘i Administrative Rules (HAR), Chapter 11-54 Water Quality Standards and Chapter 11-55 Water Pollution Control, Department of Health.

Given the low productivity potential of the soil in the area and need for high inputs, the project area is not considered suitable for agricultural activity. Therefore, implementation of the proposed action would not reduce the inventory of productive lands available for agricultural uses.

3.3 Hydrology

3.3.1 Groundwater

Due to the relatively young and porous geology of Hawai‘i Island, most of the rainfall infiltrates to groundwater. In the vicinity, the uppermost groundwater aquifer beneath the project area is typically encountered from six to seven feet above mean sea level (msl), or about 70 to 90 feet below the ground surface. The State of Hawai‘i has classified groundwater under an aquifer coding system to identify and describe groundwater aquifers. The project area overlies the North East Mauna Loa Aquifer Sector of the Hilo Aquifer System. Groundwater within this aquifer exists primarily as basal groundwater followed by high level dike and perched water. Cap rock, although thick and extensive, does not play an important role in the coastal regions of the aquifer. The sustainable yield of an aquifer is the amount of groundwater that can be pumped without depleting the source; the Hilo Aquifer System has a sustainable yield of 347 million gallons per day (mgd) (DWS, 2010).

HAR Section 11-23.4 provides criteria for classifying aquifers into those that are designated as underground sources of drinking water and those that are not. The boundary between non-drinking water aquifers and underground sources of drinking water is generally referred to as the underground injection control (UIC) line. The project area is about a mile outside and downgrade of the UIC line, which means that the underlying aquifer is not considered a drinking water source.

<u>Impacts and Mitigation Measures</u>

No adverse impacts on groundwater are anticipated with implementation of the proposed action. The underlying aquifer at the site is not considered a drinking water source. The proposed action involves remediation of the project area to remove or

stabilize contaminated soil to acceptable levels, thereby reducing the toxicity, mobility, and volume of contamination in the project area. The design of the final encapsulation system would be determined upon further environmental investigation and would be subject to the approval of DOH.

3.3.2 Surface Water

Due to the permeability of the ʻaʻa and pāhoehoe lava beneath the soil at HSMY, there are no well-defined drainage courses and very little surface water in the area. The nearest surface water bodies include quarry ponds located about a mile northwest of HSMY and a rarely flowing drainage ditch about a half-mile south of the project area that collects water from streams and ditches in the southeastern part of Hilo and discharges into vacant, low-lying land. Reed's Bay is the nearest coastline at 1.5 miles away from the project area. HSMY is nearly one mile west of Wailoa Pond and slightly over two miles southwest of the Wailuku River. There are no delineated or proposed wetlands in the project area and there are no direct hydrologic connections between the project area and nearby surface waters.

Impacts and Mitigation Measures

No direct, indirect or cumulative impacts on surface waters within or in the vicinity of the project area are anticipated with implementation of the proposed action as there are no surface water features such as rivers, streams, lakes, ponds, or wetlands on or within proximity of the project area.

During construction, soil erosion impacts would be mitigated by incorporating BMPs and erosion control measures into the project plans and specifications. Specific measures may include, but are not limited to: phasing the project to minimize the total area of exposed soil at any given time, revegetating or stabilizing disturbed areas of soil as soon as possible after working, minimizing disturbance of soil during periods of heavy rain, applying protective covers to soil and material stockpiles, and installing appropriate erosion and sedimentation control devices during construction. Strong engineering and management controls would also need to be implemented, such as the use of personal protective equipment for works and air monitoring. In addition, the project will comply with the requirements of Hawaiʻi County Code, Chapter 10, related to Erosion and Sedimentation Control. Following construction, exposed soils in the project area would be stabilized or re-vegetated to control erosion.

Soil erosion impacts would also be mitigated through coordination with the appropriate agencies during permitting and construction. A NPDES permit for storm water runoff from construction activities is anticipated to be required as individual and/or cumulative soil disturbances in the project area would exceed one acre of land area. Any discharges related to project construction or operation activities will comply with applicable State Water Quality Standards as specified in Hawaiʻi Administrative Rules (HAR), Chapter 11-54 Water Quality Standards and Chapter 11-55 Water Pollution Control, Department of Health.

3.4 Natural Hazards

3.4.1 Flood and Tsunami Hazard

According to the Flood Insurance Rate Map (FIRM) Panel Number 1551660885C, prepared by the Federal Emergency Management Agency (FEMA), the project area along with much of the surrounding area is designated as Zone X—an area determined to be outside of the 500-year flood plain. See Figure 3-3. HSMY is also located outside of the tsunami evacuation zone according to the Tsunami Evacuation Zone maps for Hawai‘i Island.

Impacts and Mitigation Measures

No direct, indirect or cumulative impacts on flood and tsunami hazards are anticipated as the proposed action is not anticipated to increase flood risks or cause any adverse flood-related impacts within the project area or lower elevation properties. The project involves remediation of the project area to remove or stabilize contaminated soil to acceptable levels, thereby reducing the toxicity, mobility, and volume of contamination in the project area.

A drainage study would be performed to assess any potential changes in drainage patterns as a result of the project. Should final treatment of the site involve a soil encapsulation system, that system would be designed to accommodate any potential increases in runoff. All development generated runoff that may be associated with future improvement of the site for the consolidation of solid waste management program components would be retained on-site as determined through a separate drainage study. The final drainage system design would be coordinated with the County of Hawai‘i Department of Public Works (DPW) prior to construction.

3.4.2 Hurricane

The Hawaiian Islands are seasonally affected by Pacific hurricanes from the late summer to early winter months. During hurricanes and storm conditions, high winds cause strong uplift forces on structures, particularly on roofs. Wind-driven materials and debris can attain high velocity and cause devastating property damage and harm to life and limb. It is difficult to predict these natural occurrences, but it is reasonable to assume that future events will occur. While the Island of Hawai‘i has not been in the direct path of a hurricane since recordation began in 1950, the models indicate that the island has a long-term hurricane hazard risk higher than any of the other islands for a direct hit.

Impacts and Mitigation Measures

No direct, indirect, or cumulative impacts related to hurricane hazard are anticipated with implementation of the proposed action. Physical components of the proposed action would be designed in consideration of the potential hazards posed by hurricanes to the extent practical. Irrespective of any mitigation measures taken, the unpredictable and sometimes destructive nature of hurricanes ultimately limits the extent of practical measures that can be taken to avoid hurricane impacts. As such, no additional mitigation measures are proposed or anticipated to be required.

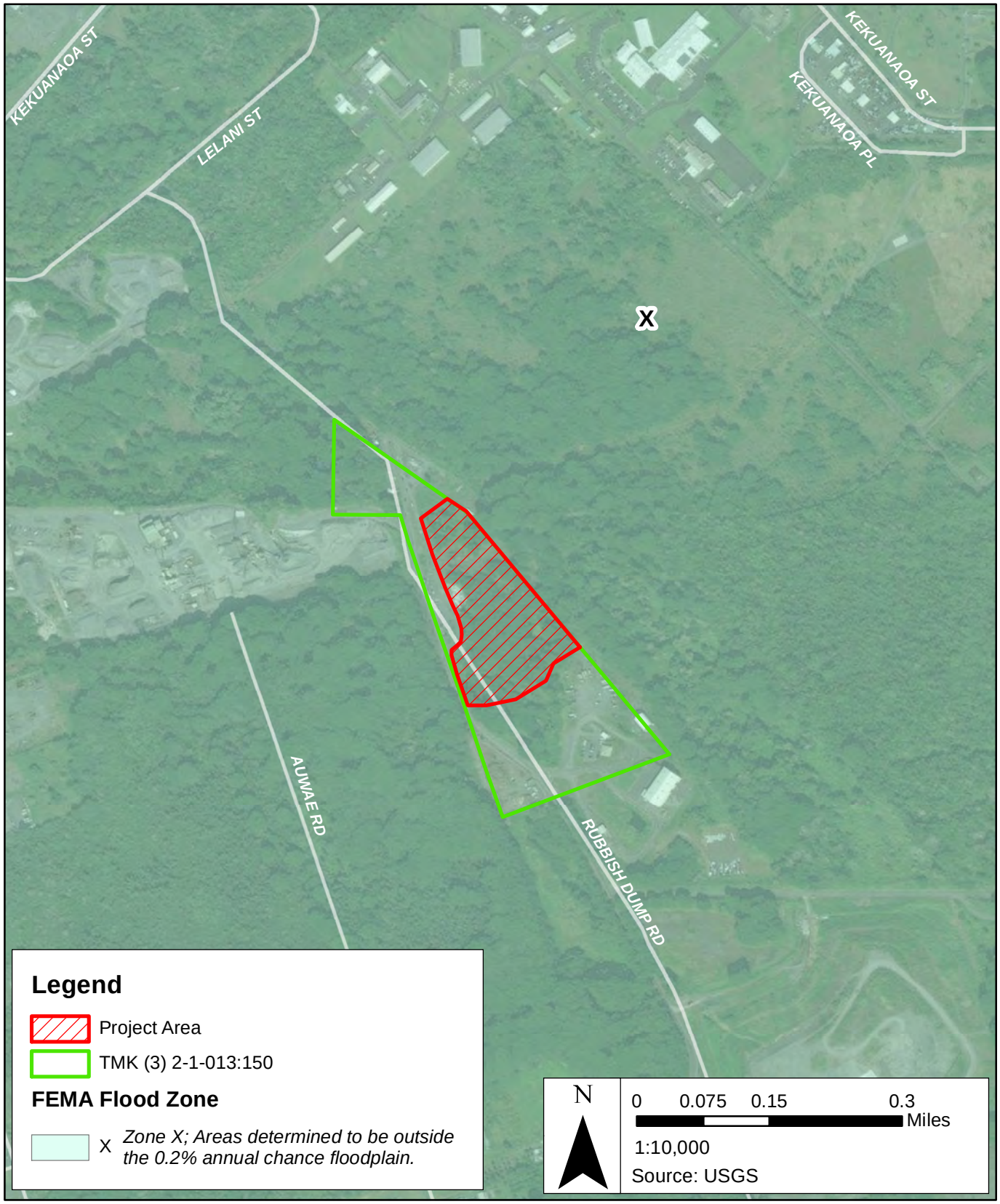

FIGURE 3-3

FLOOD INSURANCE RATE MAP

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

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3.4.3 Volcanic Hazard

The island of Hawai‘i is divided into 9 lava flow hazard zones, with lava flows most likely to occur in Zone 1 and least likely to occur in Zone 9. The zones are primarily based on the location of active vents, location and frequency of both historic and prehistoric eruptions, and larger topographic features that would affect the paths of future flows. The hazard boundaries are approximate, and the change in the degree of hazard is generally gradual rather than abrupt.

HSMY is situated approximately 22 miles from Kīlauea Volcano, the nearest active vent. According to the USGS hazard classification, the entire project area is contained in lava-flow hazard Zone 3—areas less hazardous than Zone 2 because of greater distance from recently active vents and (or) because of topography. See Figure 3-4. One to five percent of Zone 3 has been covered since 1800 CE, and 15 to 75 percent has been covered in the last 750 years.

Impacts and Mitigation Measures

HSMY is subject to the hazard of lava flows due to the topography of the surrounding area and proximity to an active vent. The proposed action would not alter the topography or decrease proximity in a way that would make the project area more susceptible to volcanic hazards. Given the destructive nature of lava flows, there are no practical measures to avoid impacts from lava flows. Hawaiian lava flows generally advance slowly and can be easily avoided by people. No mitigation measures are proposed or anticipated to be required.

3.4.4 Seismic Hazard

The entire island of Hawai‘i is rated Zone 4 Seismic Probability Rating (Uniform Building Code, Appendix Chapter 25, Section 2518). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built. None of the several earthquakes of Richter magnitude 6.0 or greater that have occurred on the island since 1950 have caused substantial damage to well-engineered roads, bridges or other roadway structures. This is due in part to the lack of unconsolidated sediments in the local substrate.

The project area also lies within the occurrence zone of Intensity VIII earthquakes, corresponding to the Mercalli Intensity Scale. Intensity VIII is the third highest on the scale and is characterized by slight damage in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse; great damage in poorly built structures; fall of chimneys, factory stacks, columns, monuments, walls; and heavy furniture can become overturned.

Impacts and Mitigation Measures

No direct, indirect, or cumulative impacts on seismic hazards are anticipated with implementation of the proposed action as no structural elements are being proposed with the remediation of the site. Any future improvements of the site for the consolidation of solid waste management program components would be designed to comply with the Building Code for the County of Hawai‘i which has accounted for potential seismic hazards on structures.

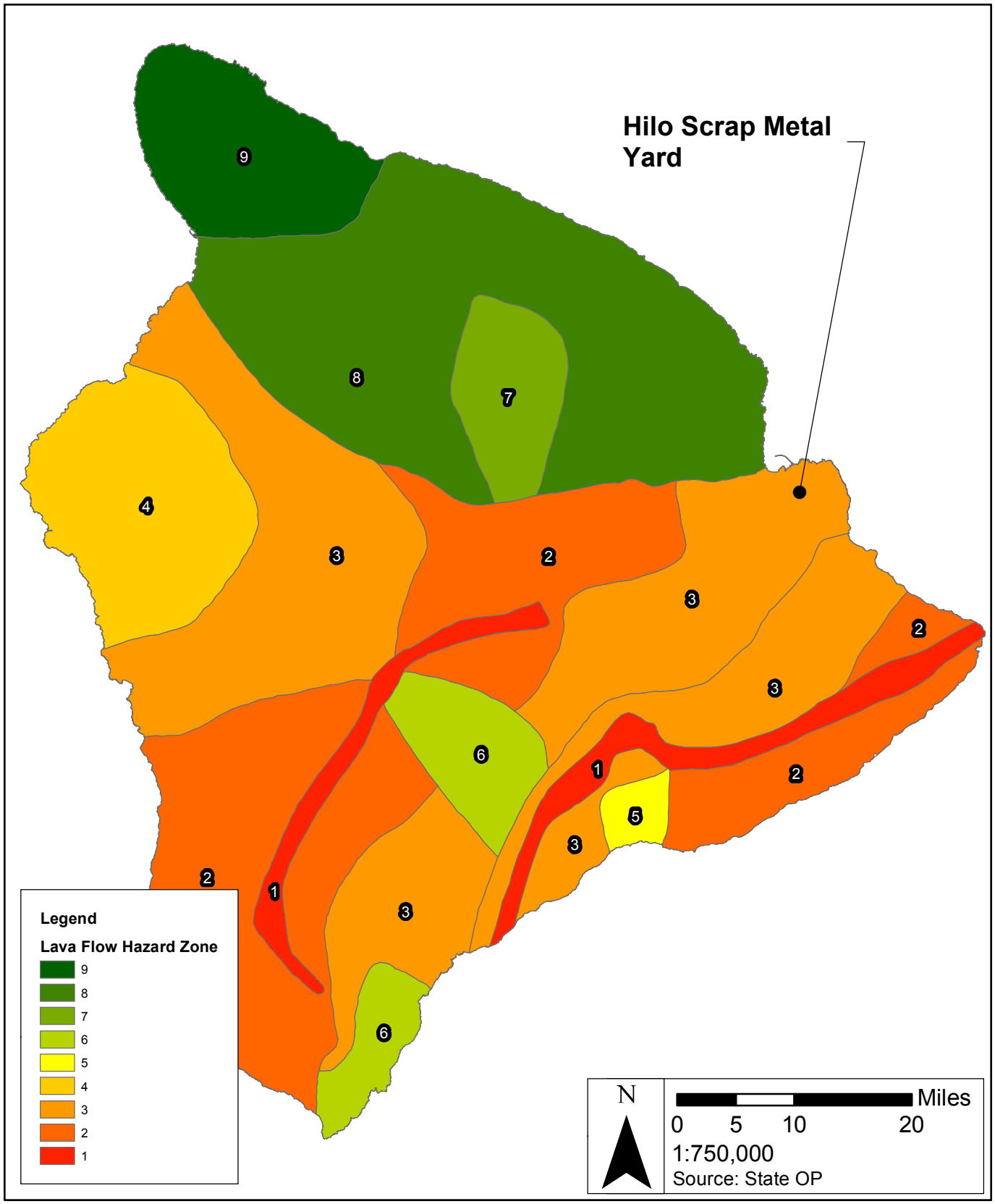

FIGURE 3-4

LAVA FLOW HAZARD ZONES - HAWAI'I ISLAND

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

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3.5 Natural Environment

3.5.1 Flora

The original vegetation of the general area likely consisted of pioneer and early successional plant species such as ʻōhiʻa (*Metrosideros polymorpha*), lama (*Diospyros sandwicensis*) and hala (*Pandanus tectorius*), and kupukupu fern (*Nephrolepis exaltata)* (Gagne and Cuddihy 1990). The introduction of exotic and invasive plant and animal species, along with several seeding attempts (using non-native seeds) following a large fire in the Panaʻewa Forest

Reserve in 1926 drastically altered this native lowland wet forest into the dense, mostly non-native forest that exists currently.

Vegetation found at HSMY itself consists mainly of mokeypod trees, albizia trees, and guinea grass. Along the access roads, vegetation consists of various early successional weed communities. Here alien herbs, vines and grasses dominate. An extremely wide variety of weeds is present in various locations including Napier grass (*Pennisetum purpureum*), *Crotalaria spp.* (rattlepod), *Desmodium spp.* (Spanish clover), sensitive plant (*Mimosa pudica*) and various sedges and grasses. These communities are labeled "early" because they are periodically disturbed through mowing, stockpiling, herbicide spraying, etc. This plant community has little if any conservation value.

The vegetation surrounding the project area consists of late successional forest, which is dominated by alien trees, including albizia tree (*Falcataria moluccana*), gunpowder tree (*Trema orientalis*), trumpet tree (*Cecropia obtusifolia*), strawberry guava (*Psidium cattleianum*), *Melastoma candidum*, and bingabing tree (*Macaranga mappa*). Several native trees including hala, ʻōhiʻa, and lama has been previously observed in the area. This forest community has little conservation value for either the plant species it contains or as animal habitat, although Hawaiian hawks may be able to forage there for rats. Also surrounding the landfill are remnants of native ʻōhiʻa-lama-hala forest, heavily invaded by aliens (especially *Melastoma candidum* and strawberry guava). Some relatively intact and higher quality pockets of this forest type are found on the 500 acres of the Hawaiʻi Army National Guard's Keaukaha Military Reserve (KMR), located to the east of the project area.

Impacts and Mitigation Measures

The proposed action would involve clearing activities. However, no adverse impacts on vegetation resulting from construction of the proposed action is anticipated as no listed or proposed endangered plant species are known to occur in the project area. Vegetation in this area has little if any conservation value. Following construction, exposed soils in the project area would be stabilized or re-vegetated to control erosion. Due to HSMY's proximity to the Hilo International Airport, stabilization measures and any future improvements of the site for the consolidation of solid waste management program components would be designed and operated or otherwise conditioned or mitigated to meet the requirements of FAA Advisory Circular 150/5200-33B "Hazardous Wildlife Attractants On Or Near Airports" and HRS Chapter 262 "Airport Zoning Act".

Project plans and specifications would require the contractor to follow current biosecurity protocols to prevent the introduction and spread of harmful invasive

species on the island of Hawai‘i. These protocols are based on National Park Service, State of Hawai‘i, U.S. Fish and Wildlife, U.S. Geological Survey, and the DOI Office of Native Hawaiian Relations guidance to prevent the introduction of harmful invasive species including frogs, ants, weeds, and fungi into local natural areas and areas with native habitat, other islands in Hawaiian archipelago, or the U.S. mainland. The protocol also includes suggestions for keeping field staff safe from certain invasive species.

3.5.2 Fauna

The South Hilo area supports a variety of common alien mammals, birds, reptiles and amphibians. More importantly, several species of native birds forage or fly over the site, including the Hawaiian hawk or ‘io (*Buteo solitaries*), an endangered species. Foraging habitat for Hawaii’s only land mammal, the endangered ‘ope‘ape‘a, or Hawaiian hoary bat (*Lasiurus cinereus semotus*), may also be present in the forested areas surrounding the HSMY. However, due to noise and disturbance in the vicinity of the project area along with a lack of tall native trees, it is unlikely that ‘io and ‘ope‘ape‘a nest within the project area.

According to the U.S Fish & Wildlife Service (USFWS), other federally listed species that may occur in the immediate vicinity of the project area include the endangered Hawaiian hoary bat *(Lasiurus cinereus semotus)*, Hawaiian hawk *(Buteo solitarius)*, Hawaiian petrel *(Pterodroma sandwichensis)*, band-rumped storm petrel *(Oceanodroma castro)*, and the threatened Newell’s shearwater *(Puffinus auricularis newelli)*. Although the Hawaiian hawk was recently removed from the federal list of threatened and endangered species it continues to be State-listed as endangered under HRS §195-D.

Other mammals previously observed or expected to occur on the property include non-native mongoose (*Herpestes javanicus*), mice (*Mus musculus*), rats (*Rattus spp.*), and feral cats (*Felis catus*). None of these species are federally listed, and all are expected to occur in high abundance near the project area.

No streams, wetlands, or aquatic habitat is present in or near the project area.

Impacts and Mitigation Measures

The proposed action would not have a significant adverse impact on threatened or endangered species or native fauna in the project area. The listed species of fauna tend not to frequent the HSMY due to historical quarrying and landfilling activities. Furthermore, observations have shown that bird species responsible for aircraft/bird collision are not present in the area. Following construction, exposed soils in the project area would be stabilized or re-vegetated to control erosion. Due to HSMY’s proximity to the Hilo International Airport, stabilization measures and any future improvements of the site for the consolidation of solid waste management program components would be designed and operated or otherwise conditioned or mitigated to meet the requirements of FAA Advisory Circular 150/5200-33B “Hazardous Wildlife Attractants On Or Near Airports” and HRS Chapter 262 “Airport Zoning Act”.

The contractor would be responsible for adhering to project plans and specifications which would incorporate the following avoidance and impact minimization measures, as applicable:

- To avoid impacts to Hawaiian hawks, construction activities associated with the proposed action as well as brush and tree clearing activities should be avoided during their breeding season (March through September). If the project area must be cleared during the ʻio breeding season, it is recommended that a nest search of the area be conducted by a qualified biologist immediately prior to the start of the proposed activities. Pre-disturbance surveys (valid for 14 days) should ensure that the proposed activities would not occur within 1,600 feet of any active Hawaiian hawk nest during the breeding season until the young have fledged. No trimming or cutting trees containing a hawk nest would be allowed, as nests may be re-used during consecutive breeding seasons.

- It is recommended that woody plants greater than 15 feet tall should not be removed or trimmed during the Hawaiian hoary bat breeding season (June 1 to September 15). It is further recommended that barbed wire not be used for fencing to protect low-flying, foraging bats.

- The proposed action would avoid or minimize use of artificial lighting and avoid night work if possible. If artificial illumination must be used, it would be shielded so the bulb is not visible at or above bulb-height. If night work must be conducted, it would take place outside the sea bird fledging season (September 15 through December 15) and would utilize shielded lighting.

Project plans and specifications would also require the contractor to follow current biosecurity protocols to prevent the introduction and spread of harmful invasive species on the island of Hawaiʻi. These protocols are based on National Park Service, State of Hawaiʻi, U.S. Fish and Wildlife, U.S. Geological Survey, and the DOI Office of Native Hawaiian Relations guidance to prevent the introduction of harmful invasive species including frogs, ants, weeds, and fungi into local natural areas and areas with native habitat, other islands in Hawaiian archipelago, or the U.S. mainland. The protocol also includes suggestions for keeping field staff safe from certain invasive species.

3.6 Archaeological and Historical Resources

The project area is in the ahupuaʻa of Waiākea, in the moku o loko (district) of Hilo. Waiākea is made up of roughly 95,000 acres. Once considered a region of abundant natural resources and numerous fishponds, Waiākea was also an early important political center (Escott, 2013). Prior to its use as a scrap metal salvaging facility, the project area was associated primarily with modern commercial quarrying and landfilling activities.

Based on previous studies of the surrounding area, it is unlikely that the project area is within areas of traditional pre-contact Hawaiian settlement and habitation. An Archaeological Assessment (2016) prepared by Scientific Consultant Services, Inc., notes that early settlements in the Hilo District were located along the coast. Furthermore, the Panaʻewa region where the project area is located contains marginally thin soils and is not well suited to

mechanical agricultural techniques. Due to the extent of ground disturbance in the area, the inland location of the site from historic coastal communities, and the regional soil characteristics, the project area is unlikely to contain historic properties, archaeological resources, or any resources of a potential traditional cultural nature.

Impacts and Mitigation Measures

No cultural, historic or archaeological sites are believed to be present in the project area. It is anticipated that the proposed action would not adversely affect any historic properties, or culturally valued resources or cultural practices given the project area has been used for quarrying, landfilling, and scrap metal salvaging operations since at least the 1960's.

Nonetheless, DEM and its contractors would be required to comply with all State and County rules and regulations regarding the preservation of archaeological and historic sites. The construction documents would include a provision that should historic sites such as walls, platforms, pavements and mounds, or remains such as artifacts, burials, concentrations of shell or charcoal or artifacts be inadvertently encountered during construction activities, work would cease immediately and the State Historic Preservation Division (SHPD) would be contacted, which would assess the significance of the find and recommend appropriate mitigation measures if necessary. DEM would also consult with SHPD in compliance with State historic preservation review requirements to determine appropriate mitigation measures for the project.

3.7 Air Quality

Kīlauea Volcano continuously emits volcanic gases which result in emissions of over 1,000 tons of sulfur dioxide per day. This approximate level of output has persisted since 1986, and intermittently since 1983. Hawaii's strong sunlight and moist air promote oxidation and hydration of sulfur dioxide to a sulfuric acid aerosol which is partially neutralized to ammonium sulfate. The combination of these aerosols, the remaining sulfur dioxide and other volcanic vapors are locally referred to as "vog," or volcanic fog. The rate of air emissions by Kīlauea may produce vog exposures along the plume trajectory which present chronic or acute public health hazards. Kīlauea's Pu'u 'Ō'ō vent is located approximately 25 miles southwest of the Hilo International Airport.

The State of Hawai'i Department of Health (DOH), Clean Air Branch, monitors the ambient air quality in the State for various gaseous and particulate air pollutants. The EPA has set national ambient air quality standards (NAAQS) for six criteria pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), ozone (O_3), and particulate matter (PM_{10} and $PM_{2.5}$). Hawai'i has also established a state ambient air standard for hydrogen sulfide (H_2S) related to volcanic activity on Hawai'i Island. The primary purpose of the statewide monitoring network is to measure ambient air concentrations of these pollutants and ensure that these air quality standards are met.

Air pollution in Hawai'i is caused by many different man-made and natural sources. There are industrial sources of pollution, such as power plants and petroleum refineries; mobile sources, such as cars, trucks and buses; agricultural sources, such as previous sugar cane burning; and natural sources, such as windblown dust and volcanic activity. The DOH Clean Air Branch is responsible for regulating and monitoring pollution sources to ensure that the

levels of criteria pollutants remain well below the State and federal ambient air quality standards.

Air quality on Hawai‘i Island is affected by emissions from industrial sources, vehicles, and natural sources. The major industrial source for the island is oil-fired power plants, which emit SO_2, nitrogen oxides, and particulate matter. Motor vehicles emit CO, nitrogen oxides and hydrocarbons (an ozone precursor), as well as smaller amounts of other pollutants including particulates. Also emitting SO_2 is the geothermal power plant Puna Geothermal Venture, which supplies about 10-20% of the island's electricity. Volcanic emissions of sulfur dioxide convert into particulate sulfate, which causes a volcanic haze (vog) to blanket the area during occasional episodes of southerly kona winds. Vog concentrations are primarily dependent on the amount of volcanic emissions, the distance from the source vents, and the wind direction and speed on a given day. When trade winds are absent, which occurs most often during the winter months, East Hawai‘i, the entire island or the entire state can be impacted by vog.

The State maintains six air monitoring stations on the island of Hawai‘i, one of which is located in Hilo. According to DOH ambient air quality data, the quality of air in the Hilo area is considered to be good. The prevailing northeasterly trade winds tend to disperse pollutants toward the mountains, decreasing the concentration of pollution above Hilo. However, the amount of particulates and other air pollutants can significantly increase during periods when the winds shift to a southwesterly direction. Air flow from this direction carrying vog can lead to an increase in pollution and a decrease in visibility.

Impacts and Mitigation Measures

Construction activities that occur near to existing residences, business, and public areas and major thoroughfares exacerbate potential dust concerns. Construction activities must comply with the provisions of Hawai‘i Administrative Rules, §11-60.1-33 on Fugitive Dust. Therefore, a dust control management plan will be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. Measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction will be incorporated into the project plans and specifications. These measures may include, but are not limited to, the following:

- Planning the different phases of construction, focusing on minimizing the amount of airborne, visible fugitive dust-generating materials and activities, centralizing on-site vehicular routes, and locating potential dust-generating equipment in areas of the least impact;
- Providing an adequate water source at the site prior to start-up of construction activities;
- Landscaping and providing rapid covering of bare areas, including slopes, starting from the initial grading phase;
- Minimizing airborne, visible fugitive dust from shoulders and access roads;
- Providing reasonable dust control measures during weekends, after hours, and prior to daily start-up of construction activities; and
- Controlling airborne, visible fugitive dust from debris being hauled away from the project site.

Respective contractors would be responsible for adhering to air quality standards and minimizing air quality impacts during the various phases of construction. An air pollution control permit may be required to operate certain construction equipment, such as crushers or generator sets, which may be used during construction. If required, the contractor will be responsible for obtaining an air pollution control permit from the Clean Air Branch and complying with all applicable conditions and requirements. Air monitoring would also be required during construction. With the appropriate controls in place, no significant impacts on air quality are anticipated as a result of the proposed action.

Exhaust emissions from construction vehicles are anticipated to have negligible impacts on air quality in the project area as the emissions would be temporary in nature, relatively small, and readily dissipated. Any potential impacts would be mitigated by complying with the State DOH Administrative Rules, Title 11, Chapter 60 "Air Pollution Control". In the long-term, GHG emissions in the project area are not expected to increase as future land use plans proposed by DEM are expected to involve consolidation of waste management program components that already exist in the area.

3.8 Noise

Ambient noise in the project area is predominantly attributed to the combined noise levels of disposal activities at the adjacent transfer station, vehicular traffic servicing or passing by the project area, aircraft overflights to and from the Hilo International Airport, industrial activities in the surrounding area, and the occasional use of the Pana‘ewa Drag Strip. Residences roughly 1,000 feet or more away near the intersection of ‘Auwae Road and Kahaope‘a Street are the nearest sensitive uses. At this distance, noise originating from the vicinity of the project area is perceptible but not a nuisance, and is blended in with airport, industrial, agricultural, and naturally occurring sounds. Therefore, existing noise impacts from the HSMY on sensitive receptors are modest.

Impacts and Mitigation Measures

Construction of the proposed action may result in short-term noise impacts to the surrounding environment. However, noise generated by temporary construction activities would be similar in character and intensity to the existing noise conditions and is not anticipated to have an adverse effect on overall noise levels. Any potential impacts would be mitigated by complying with the State DOH Administrative Rules, Title 11, Chapter 46 "Community Noise Control" regulations.

Potential large volumes of contaminated soil and solid waste debris would have to be transported by truck over local roadways to the WHSL, resulting in an increase in truck traffic and potential neighborhood disturbances. The final closure plan being prepared by DEM would include the appropriate measures needed to avoid or minimize adverse impacts from this alternative, such as limiting hauling activity to occur during non-peak hours of travel and designating routes for travel that would minimize neighborhood disturbances.

In the long-term, noise in the project vicinity is anticipated to remain similar to existing conditions. Noise generated by future use of the site would be similar in character

and intensity to the noise levels currently generated in the project vicinity. Therefore, the project is not anticipated to result in significant impacts in the long-term.

3.9 Visual Resources

From areas surrounding the HSMY, line-of-sight views are generally obstructed because of the relatively flat terrain and the dense, tall forest that acts as a visual barrier. View planes of the HSMY from residences in the agricultural lands in proximity to the HSMY are generally obstructed by tall foliage. Other than the agricultural lots, land uses surrounding the HSMY are generally industrial, including the Hilo International Airport, and are thus less sensitive in terms of visual impacts. Regardless, the views towards HSMY from these areas are also obstructed by trees.

Impacts and Mitigation Measures

No direct, indirect, or cumulative impacts on visual resources are anticipated with implementation of the proposed action. View planes of the HSMY from the surrounding area is generally obstructed by dense, tall vegetation that provides a visual barrier for the area. Construction of the proposed action would not significantly alter the topography in such a way that would diminish the aesthetic value of the area. No mitigation measures are proposed or anticipated to be required.

3.10 Traffic

Access to HSMY is provided by Hoʻolaulima Road, which traverses the subject property west of HSMY and southeast of its intersection with Leilani Street. Hoʻolaulima Road also provides access for other solid waste management facilities in the vicinity including the Hilo Transfer Station, the East Hawaiʻi Organics Facility, the East Hawaiʻi Regional Sort Station, and the soon-to-be closed South Hilo Sanitary Landfill. Access to quarry and borrow pits, the Mass Transit Agency Baseyard, the County of Hawaiʻi Skeet Range, and the Panaʻewa Drag Strip is also provided by Hoʻolaulima Road.

Since scrap metal salvaging operations at HSMY ceased in 2013, the only traffic in the project area consists of DEM servicing vehicles used for maintenance and management of the HSMY site. Nearby, traffic consists of private vehicles and County trucks accessing the Hilo Transfer Station.

Impacts and Mitigation Measures

Temporary increases in traffic from remediation activities are anticipated in the short-term. Potential large volumes of contaminated soil and solid waste debris would have to be transported by truck over local roadways to the WHSL, resulting in an increase in truck traffic and potential neighborhood disturbances. The final closure plan being prepared by DEM would include the appropriate measures needed to avoid or minimize adverse impacts from this alternative, such as limiting hauling activity to occur during non-peak hours of travel and designating routes for travel that would minimize neighborhood disturbances. It is also anticipated that hauling associated with remediation activities may detract from normal ongoing solid waste transfer station operations. A designated ingress and egress would be provided for construction vehicles accessing the project area to minimize disruptions in traffic flow to the Hilo Transfer Station and other surrounding facilities. Upon completion of the proposed action, traffic conditions are expected to remain unchanged from existing

conditions. DEM will coordinate with the DOT Highways Division, Hawai‘i District Engineer regarding any permits that may be necessary.

In the long-term, the site would be reconfigured for ease-of-use and to consolidate the adjacent Hilo Transfer Station with other existing solid waste management program components in the area. It is anticipated that future improvements in the project area related to DEM's long-term land use plans would improve overall traffic flow as internal circulation patterns would enhance access to services and facilities around the site.

3.11 Socioeconomic

The largest towns on the island are Hilo (pop. 43,263), Kailua-Kona (pop. 11,975) and Waimea (pop. 9,212). The project area is located within the Hilo Census Designated Place (CDP). Demographic and other information was reviewed from the U.S. Census 2010 for the Hilo CDP and the County of Hawai‘i and is shown in Table 3-2.

Based upon the data shown on the table, Hilo CDP has a slightly older population than the County of Hawai‘i. The median age of the population for Hilo CDP was 40.4 versus 40.9 for the County.

By racial mix, the Hilo CDP has a higher percentage of Asians (34.3%) and a slightly higher percentage of Native Hawaiians and other Pacific Islander and individuals with two or more races (14.2% and 32.5%) than the County (22.2%, 12.1%, and 29.5%, respectively). These groups (Asians, Native Hawaiians and other Pacific Islanders, and individuals with two or more races) make up the majority of the population in Hilo. In contrast, Hilo CDP has a population of Whites (17.6%) that is half that of the County (33.7%).

According to the 2010 Census, Hilo CDP has a higher housing occupancy rate, 91.6%, than the County, 81.5%. Housing units in this region are occupied by more owners (62.2%) than renters (37.8%) consistent with County trends (66.0% and 34.0%, respectively).

The island of Hawai‘i is still a dominantly rural area, with great tracts of open space partly used for farms or ranches. Over most of the island, population is clustered within towns or villages, not widely dispersed, although some areas (particularly Puna) contain large, sprawling “agricultural” subdivisions with low population density. Many businesses and government functions are headquartered in Hilo, including the University of Hawai‘i at Hilo. It is a major commercial center on the island of Hawai‘i and supports several industrial and commercial districts. Hilo International Airport and the deep draft harbor anchor the major shipping center on the island.

The closing of Ka‘u Sugar in 1996 marked the end of the sugar plantation era on the Big Island. Today, County and State government, the University of Hawai‘i at Hilo, several astronomy bases, and diversified agriculture anchor the economy. Ranching continues to be a major industry, with over $20 million in annual sales. East Hawai‘i is noted for its lush tropical agriculture: anthurium, papaya, orchid, foliage, banana, and ginger, among others, as well as a growing potential for wood products.

Table 3-1
Demographic Characteristics

Subject	Hilo CDP		County of Hawai'i	
	Number	Percent	Number	Percent
TOTAL POPULATION	43,263	100	185,079	100
AGE				
Under 5 years	2,597	6.0	11,845	6.4
5-19 years	8,169	18.8	35,088	18.9
20-64 years	24,690	57.2	111,312	60.1
65 years and over	7,807	18.0	26,834	14.6
Median age (years)	40.4	---	40.9	---
RACE				
White	7,617	17.6	62,348	33.7
Black or African American	227	0.5	1,020	0.6
American Indian and Alaskan Native	132	0.3	869	0.5
Asian	14,833	34.3	41,050	22.2
Native Hawaiian and other Pacific Islander	6,132	14.2	22,389	12.1
Two or more races	14,064	32.5	54,535	29.5
Other	258	0.6	2,868	1.5
HOUSEHOLD (BY TYPE)				
TOTAL HOUSEHOLDS	15,483	100	67,096	100
Family households (families)	10,287	66.4	44,407	66.2
Married-couple family	7,034	45.4	31,834	47.4
With own children under 18 years	2,307	14.9	11,141	16.6
Female householder, no husband present	2,278	14.7	8,258	12.3
With own children under 18 years	1,027	6.6	4,054	6.0
Nonfamily household	5,196	33.6	22,689	33.8
Average household size	2.69	---	2.70	---
HOUSING OCCUPANCY AND TENURE				
TOTAL HOUSING UNITS	16,905	100	82,324	100
Occupied Units	15,483	91.6	67,096	81.5
By owner	9,623	62.2	44,271	66.0
By renter	5,860	37.8	22,825	34.0
Vacant Units	1,422	8.4	15,228	18.5

Impacts and Mitigation Measures

No relocation of residences, businesses, community organizations or farms would occur because of the project. The proposed action would only properly restore and remediate the site to manage potential hazards and allow for productive future beneficial use of the land. In the long-term, it is anticipated that DEM's future land use plans would only enhance the solid waste management services provided and improve the quality of life for residents who would benefit from improved solid waste management facilities.

3.12 Public Services and Facilities

3.12.1 Police, Fire and Medical Services

Police protection in the project area is provided by the Hawaiʻi Police Department. SMY is part of the South Hilo, Patrol District 1 that covers the area between Halakau in the north, to the mid-point of Kanoelehua Avenue between Hilo and Keaʻau in the south, to Saddle Road in the west. The area is served by the main police station located on Kapiʻolani Street near downtown Hilo, approximately 3 miles from the project area.

Fire prevention and protection is provided by the Hawaiʻi Fire Department. Fire Department personnel include paramedics who respond to medical as well as fire emergencies. The Hawaiʻi County Fire Department Kawailani Fire Station provides fire protection and suppression services in Waiākea. Backup support is provided by the Central Fire Station located 3.5 miles away in Hilo, the Kaumana Fire Station located 4.5 miles away, and the Waiākea Fire Station located 2.5 miles away in Keaukaha. A new fire station, Haihai, is less than three miles from HSMY.

Hilo Medical Center located approximately 5 miles northwest of the Project site on Waiānuenue Avenue is the primary health care facility serving the South Hilo District.

Several medical and healthcare facilities are located along Waiānuenue Avenue in proximity to HSMY including Kaiser Permanente, Saint Francis Dialysis Center, Hale Anuenue Restorative Care Center, Hawaiʻi Pacific Oncology Center (owned by Hilo Medical Center), and The Arc of Hilo and Hospice of Hilo.

Impacts and Mitigation Measures

No direct, indirect, or cumulative impacts on police, fire, and medical services are anticipated with implementation of the proposed action. The project is not anticipated to affect traffic and/or public safety concerns. No mitigation measures are proposed or anticipated to be required.

3.12.2 Educational Facilities

The project area is located in the State Department of Education's Hilo-Laupahoehoe-Waiākea Complex Area within the Hawaiʻi District. The closest State Department of Education (DOE) public schools are: Keaukaha Elementary School, Waiākeawaena Elementary School, Waiākea Elementary School, Waiākea Intermediate School, and Waiākea High School.

Impacts and Mitigation Measures

No direct, indirect, or cumulative impacts on educational facilities are anticipated with implementation of the proposed action. The proposed action would not generate new residents or introduce new school-aged children to the area. Therefore, no additional demands would be placed on DOE facilities. The closest public school is Waiākeawaena Elementary School located nearly two miles away. While construction activities may generate some noise and fugitive dust, these impacts are anticipated to be easily dissipated by the distance between the construction site and the school as well as predominant trade wind conditions in the area. No additional mitigation measures are proposed or anticipated to be required.

3.12.3 Recreational Facilities

A Trap & Skeet Range located just under a mile southeast of HSMY is the closest recreational facility to the project area. The facility includes four (4) trap ranges, one (1) skeet range, two (2) covered rest areas, and a public restroom. Farther south is the Panaʻewa Drag Strip, also known as the Hilo Drag Strip, which includes a sanctioned quarter mile drag strip, an oval dirt track, motocross track, go-cart track, and a mud bog. Both facilities are maintained and operated by the County of Hawaiʻi Department of Parks & Recreation.

Other nearby parks and open spaces include Panaʻewa Park, Lokahi Park, and the Hoʻolulu Park Complex, which contains the Afook-Chinen Civic Auditorium, Francis Wong Stadium, and Walter Victor CK Baseball Complex.

Impacts and Mitigation Measures

No direct, indirect, or cumulative impacts on recreational facilities are anticipated with implementation of the proposed action. Access to nearby recreational facilities would be maintained during construction and after completion of the project. Additionally, the proposed action is not a direct generator of new residents requiring recreational facilities. No mitigation measures are proposed or anticipated to be required.

3.13 Infrastructure and Utilities

3.13.1 Water and Wastewater Systems

Existing potable water resources for the Hilo area come from ground water (approximately 65.5 percent) and surface water (approximately 34.5 percent). The water system in the Hilo area is served by one main system, and four smaller systems, which consumes a daily average of 5.49 million gallons of water from five surface systems and five deep well sources. The surface sources are the Waiakea-Uka Tunnel, the Olaa Flume Spring, Lyman Spring, Wailuku River-Hookelekele Stream, and Kaohama Stream. Three of the smaller systems use deep well sources, while the one remaining source draws its supply from surface water. Industrial and Commercial sources draw water from smaller wells.

The County of Hawaiʻi Department of Water Supply (DWS) provides potable water service to the East Hawaiʻi Regional Sort Station through a 12-inch water main that runs along Hoʻolaulima Road within the subject property. The County does not provide sewer service to HSMY.

Impacts and Mitigation Measures

No direct, indirect, or cumulative impacts on water and wastewater systems are anticipated with implementation of the proposed action. The proposed action does not involve uses that would place additional demand on the existing water and wastewater systems.

In the long-term, improvements to the existing County water and wastewater systems may be required to support the future land use plans of DEM. It is expected that these improvements would be done in compliance with federal, State and County regulations and would be coordinated with the appropriate agencies for any required approvals. Estimated maximum daily water usage calculations for any future water requirements would be submitted to DWS for approval. If increases in demand are proposed, a reduced principle type backflow prevention assembly would also need to be installed and DWS must inspect and approve the installation prior to commencement of water service.

3.13.2 Drainage System

There is no defined drainage system in the project area. Runoff from rainfall currently sheet flows and percolates within the upper layers of the site. Some ponding may occur at natural low points in the topography during and immediately after heavy rainstorm events. However, this water quickly infiltrates into the ground once heavy rains have subsided.

Impacts and Mitigation Measures

Construction of the proposed action would involve land disturbing activities that would alter the existing topography within the project area. A drainage study would be performed to assess any potential changes in drainage patterns as a result of the project. Should final treatment of the site involve a soil encapsulation system, that system would be designed to accommodate any potential increases in runoff. All development generated runoff that may be associated with future improvement of the site for the consolidation of solid waste management program components would be retained on-site as determined through a separate drainage study. The final drainage system design would be coordinated with DPW prior to construction.

3.13.3 Electrical and Communication Systems

There are currently no existing electrical or wired communication systems in the project area.

Impacts and Mitigation Measures

No mitigation measures are proposed or anticipated to be required.

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4. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS

This section discusses the State and County of Hawaiʻi land use plans, policies, and controls relating to the proposed action.

4.1 State of Hawaiʻi Land Use Plans and Policies

4.1.1 Hawaiʻi State Plan

The Hawaiʻi State Plan, Chapter 226, Hawaiʻi Revised Statutes (HRS), as amended, provides goals, objectives, policies, and priorities for the State. The purpose of the Hawaiʻi State Plan is to set forth a plan that shall serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State; provide a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water, and other resources; improve coordination of federal, state, and county plans, policies, programs, projects, and regulatory activities; and to establish a system for plan formulation and program coordination to provide for an integration of all major state, and county activities. Consistency of the proposed action with applicable goals, objectives and policies of the State Plan is discussed below.

> *§226-4 State goals. In order to ensure, for present and future generations, those elements of choice and mobility that ensure that individuals and groups may approach their desired levels of self-reliance and self-determination, it shall be the goal of the State to achieve:*
>
> *(2) A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical well-being of the people.*

Discussion:

The project area was previously used as a scrap metal salvage facility. Remnant debris is scattered throughout the project area and contaminated soil that remains on-site presents a potential hazard to public health by direct contact. Remediation of the site would restore the land and allow for productive beneficial use of a previously disturbed area. Once reclaimed, the land would be used to consolidate existing operations of various solid waste management components for the benefit of the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in even closer proximity to each another. Solid waste transfer stations play an important role in a community's overall waste management system and implementing the proposed action would aid in maintaining the desired physical environment for the region.

> *§226-6 Objectives and policies for the economy--in general.*
>
> *(a) Planning for the State's economy in general shall be directed toward achievement of the following objectives:*
>
> *(1) Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaiʻi's people.*

(2) A steady growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.

Discussion:
The proposed action would contribute to the local economy on Hawai‘i Island both directly and indirectly through construction related expenditures, a portion of which would be used towards the purchase of material from local suppliers, employment of local labor, and patronage at local retail businesses as income earned through project construction is spent. Additionally, implementing the proposed action would provide needed work experience that would help to build the local skilled labor workforce.

§226-9 Objective and policies for the economy--federal expenditures.

(a) Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawai‘i's economy.

To achieve the federal expenditures objective, it shall be the policy of this State to:

(3) Promote the development of federally supported activities in Hawai‘i that respect statewide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawai‘i's environment.

Discussion:
Funding for the proposed action may involve federal expenditures through the Clean Water State Revolving Fund. No significant adverse impacts to the environment are anticipated as a result of the proposed action and would be minimized through implementation of appropriate mitigation measures and compliance with applicable local, state, and federal rules and regulations. Construction of the proposed action would contribute to the local economy through construction related expenditures. Once the project area has been remediated and the land reclaimed, the area would be used to consolidate existing operations of various solid waste management components for the benefit of the public.

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

(a) The land-based, shoreline, and marine resources objectives are:

(1) Prudent use of Hawai‘i's land-based, shoreline, and marine resources.

(2) Effective protection of Hawai‘i's unique and fragile environmental resources.

To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to:

(6) Encourage the protection of rare or endangered plant and animal species and habitats native to Hawai‘i.

Discussion:
The project area has been previously disturbed due to past rock quarry, landfilling, and scrap metal salvaging activities. Vegetation at HSMY consists mainly of mokeypod trees, albizia trees, and guinea grass, and is believed to have little conservation value for either the plant species it contains or as animal habitat. Although threatened or endangered species may occur in the project area, these species tend not to frequent HSMY due to historical quarrying and landfilling activities and current solid waste management activities in the vicinity. Nonetheless, avoidance and impact minimization measures will be incorporated into the project plans and specifications. No significant adverse impacts on threatened or endangered species or their habitat are anticipated as a result of the proposed action.

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

(a) Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:

(1) Maintenance and pursuit of improved quality in Hawai'i's land, air, and water resources.

(2) Greater public awareness and appreciation of Hawai'i's environmental resources.

To achieve the land, air, and water quality objectives, it shall be the policy of this State to:

(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawai'i's people.

(7) Encourage urban developments in close proximity to existing services and facilities.

Discussion:
Construction of the proposed action would involve land disturbing activities, which may result in short-term soil erosion impacts and generate temporary increases in fugitive dust.

Construction activities that occur near to existing residences, business, and public areas and major thoroughfares exacerbate potential dust concerns. Construction activities must comply with the provisions of Hawai'i Administrative Rules, §11-60.1-33 on Fugitive Dust. Therefore, a dust control management plan will be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. Measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction will be incorporated into the project plans and specifications. Respective contractors would be responsible for adhering to air quality standards and minimizing air quality impacts during the various phases of construction. An air pollution control permit may be required to operate certain construction equipment, such as crushers or generator sets, which may be used during construction. If required, the contractor will be responsible for obtaining an air pollution control permit from the Clean Air Branch and complying with all applicable conditions and requirements. Air monitoring would also be required during construction. With the appropriate controls in place, no significant impacts on air quality are anticipated as a result of the proposed action.

Any potential impacts on air quality would be mitigated by complying with the State DOH Administrative Rules, Title 11, Chapter 60 "Air Pollution Control". In the long-term, GHG emissions in the project area are not expected to increase as future land use plans proposed

by DEM are expected to involve consolidation of existing solid waste management program components from the surrounding area.

Soil erosion impacts would be mitigated by incorporating best management practices (BMP) and erosion control measures into the project plans and specifications. Specific measures may include, but are not limited to: phasing the project to minimize the total area of exposed soil at any given time, revegetating or stabilizing disturbed areas of soil as soon as possible after working, minimizing disturbance of soil during periods of heavy rain, applying protective covers to soil and material stockpiles, and installing appropriate erosion and sedimentation control devices during construction. Strong engineering and management controls would also need to be implemented, such as the use of personal protective equipment for works and air monitoring. In addition, the proposed action will comply with the requirements of Hawai‘i County Code, Chapter 10, related to Erosion and Sedimentation Control. Following construction, exposed soils in the project area would be stabilized or re-vegetated to control erosion.

Soil erosion impacts would also be mitigated through coordination with the appropriate agencies during permitting and construction. A NPDES permit for storm water runoff from construction activities is anticipated to be required as individual and/or cumulative soil disturbances in the project area would exceed one acre of land area. Any discharges related to project construction or operation activities will comply with applicable State Water Quality Standards as specified in HAR Chapter 11-54 Water Quality Standards and HAR Chapter 11-55 Water Pollution Control, Department of Health.

In the long-term, the proposed action involves consolidating the existing operations of various solid waste management activities to an area that has been previously disturbed. The proposed use is consistent with the former use of the site, which is in close proximity to existing services and facilities.

§226-14 Objective and policies for facility systems--in general.

(a) Planning for the State’s facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

To achieve the general facility systems objective, it shall be the policy of this State to:

(1) Accommodate the needs of Hawai‘i's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.

(2) Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.

(3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.

(4) Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.

Discussion:
The project area was previously used as a scrap metal salvage facility. Remnant debris is scattered throughout the project area and contaminated soil that remains on-site presents a potential hazard to public health by direct contact. Remediation of the site would restore the land and allow for productive beneficial use of a previously disturbed area. Once reclaimed, the land would be used to consolidate existing operations of various solid waste management components for the benefit of the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in close proximity to each another. Solid waste transfer stations play an important role in a community's overall waste management system.

Final treatment of the soil at the site will need to be consistent with DOH guidance for managing contaminated soil and will be subject to approval by DOH. To the extent possible and in consideration of regulatory constraints, different design alternatives would be considered to ensure the project can be supported within resource capacities and at a reasonable cost to the users. Alternative funding sources, such as the Clean Water State Revolving Fund, would also be considered.

§226-15 Objectives and policies for facility systems--solid and liquid wastes.

(b) Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives:

(1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.

(2) Provision of adequate sewerage facilities of physical and economic activities that alleviate problems in housing, employment, mobility, and other areas.

To achieve solid and liquid waste objectives, it shall be the policy of this State to:

(2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.

Discussion:
Once the project area has been remediated and the land reclaimed, the project area would be used to consolidate existing operations of various solid waste management components. Reconfiguring the layout of the solid waste management components that are currently spread out across the property would benefit the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in close proximity to each another. The ease-of-use and convenience may encourage more reuse and recycling activities to take place.

§226-20 Objectives and policies for socio-cultural advancement--health.

(a) Planning for the State's socio-cultural advancement with regard to health shall be directed towards achievement of the following objectives:

(1) Fulfillment of basic individual health needs of the general public.

(2) Maintenance of sanitary and environmentally healthful conditions in Hawai'i's communities.

(3) Elimination of health disparities by identifying and addressing social determinants of health.

To achieve the health objectives, it shall be the policy of this State to:

(5) Provide programs, services, and activities that ensure environmentally healthful and sanitary conditions.

Discussion:

The project area was previously used as a scrap metal salvage facility. Remnant debris is scattered throughout the project area and contaminated soil that remains on-site presents a potential hazard to public health by direct contact. Remediation of the site would restore the land and allow for productive beneficial use of a previously disturbed area. Once reclaimed, the land would be used to consolidate existing operations of various solid waste management components for the benefit of the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in even closer proximity to each another. Solid waste transfer stations play an important role in a community's overall waste management system and implementing the proposed action would aid in maintaining sanitary conditions of the physical environment.

§226-27 Objectives and policies for socio-cultural advancement--government.

(a) Planning the State's socio-cultural advancement with regard to government shall be directed towards the achievement of the following objectives:

(1) Efficient, effective, and responsive government services at all levels in the State.

(2) Fiscal integrity, responsibility and efficiency in the state government and county governments.

To achieve the government objectives, it shall be the policy of this State to:

(5) Assure that government attitudes, actions, and services are sensitive to community needs and concerns.

Discussion:

The proposed action involves remediation of a former scrap metal salvaging site consistent with the associated permits and approvals. Remediation activities would ensure that potential public health hazards are adequately managed and land could be reclaimed for future beneficial use. Although the proposed action involves termination of an existing component of DEM's solid waste and recycling program, which may eligible for exemption from the preparation of an environmental assessment, an EA is being prepared nonetheless to ensure that environmental concerns are given appropriate consideration in the decision-making process along with economic and technical considerations. The filing and publication of this Draft EA with the Office of Environmental Quality Control (OEQC) would be followed by a 30-day public comment period.

4.1.2 State Land Use Law, Chapter 205, Hawai‘i Revised Statutes

The State Land Use Law, Chapter 205, HRS, is intended to preserve, protect and encourage the development of lands in the State for uses which are best suited to the public health and welfare of Hawai‘i's people. All lands in the State are classified into four land use districts by the State Land Use Commission (LUC): Urban, Agricultural, Conservation, and Rural. The

State Land Use Commission (LUC) is responsible for preserving and protecting Hawai‘i’s lands and encouraging those uses to which lands are best suited.

Discussion:
The Land Use District Boundary map for the island of Hawai‘i designates the subject property as part of the State Land Use Urban District. See Figure 4-1. The existing and planned use is a permitted use for areas within the State Land Use Urban District.

4.1.3 Hawai‘i Coastal Zone Management Program, Chapter 205A, Hawai‘i Revised Statutes

Hawai‘i’s Coastal Zone Management (CZM) Program, established pursuant to Chapter 205A, Hawai‘i Revised Statutes (HRS), as amended, is administered by the State Office of Planning (OP) and provides for the beneficial use, protection and development of the State’s coastal zone. The objectives and policies of the Hawai‘i CZM Program encompass broad concerns such as impact on recreational resources, historic and archaeological resources, coastal scenic resources and open space, coastal ecosystems, coastal hazards, and the management of development. The Hawai‘i CZM area includes all lands within the State and the areas seaward to the extent of the State’s management jurisdiction. Hence, the project area is located in the CZM area. A discussion of the project’s consistency with the objectives and policies of the CZM program is provided below.

Recreational Resources

Objective: Provide coastal recreational opportunities accessible to the public.

Policies:

1) *Improve coordination and funding of coastal recreational planning and management; and*
2) *Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:*
   a) *Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas.*
   b) *Requiring placement 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 placement is not feasible or desirable.*
   c) *Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value.*
   d) *Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation.*
   e) *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.*
   f) *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.*

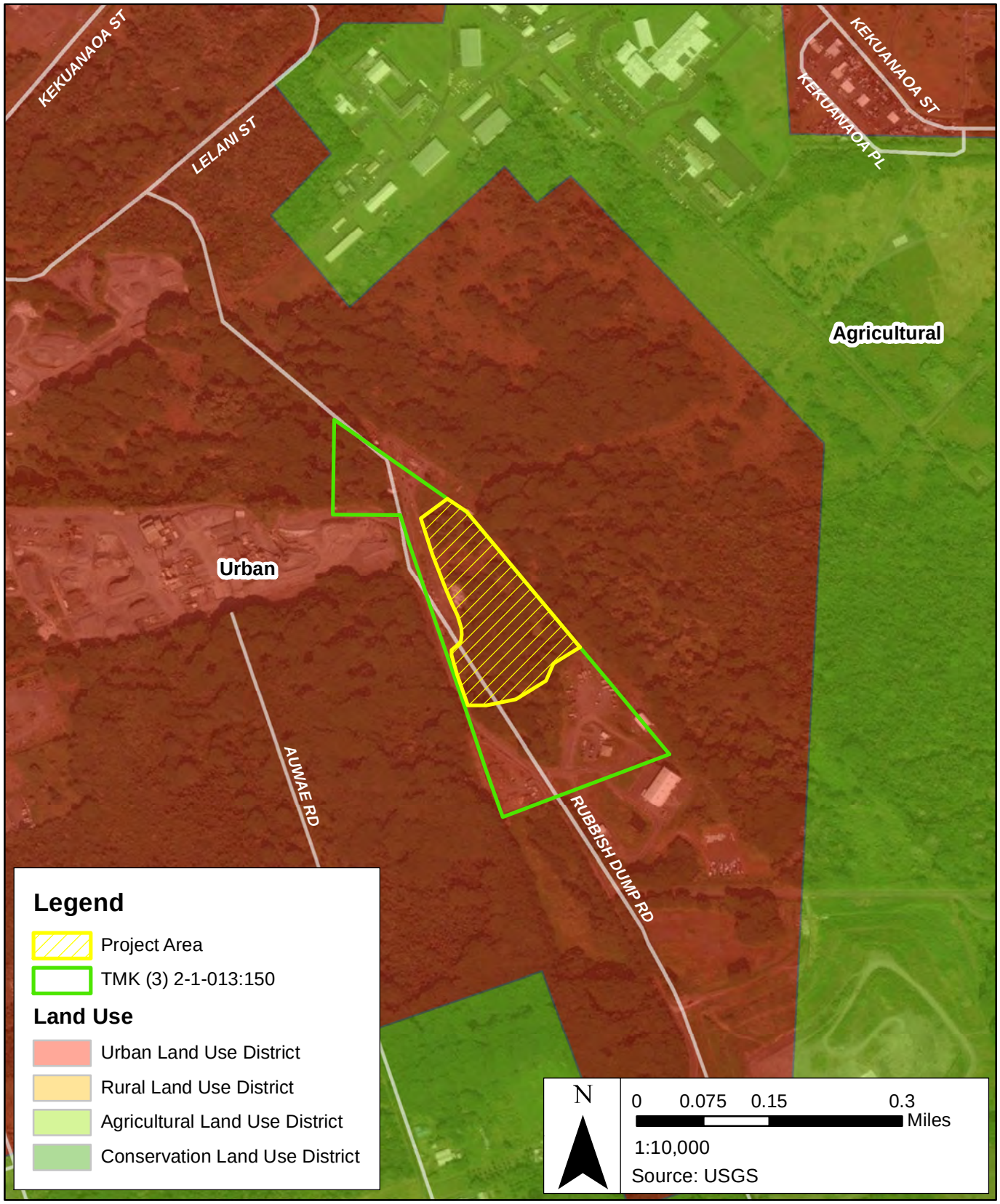

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FIGURE 4-1

STATE LAND USE DISTRICTS

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

g) *Developing new shoreline and recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing.*
h) *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 Hawai'i Revised Statutes, section 46-6.*

Discussion:
The project area is not located within close proximity to the shoreline or any surface or coastal water body such as a stream, river, pond, lake, or ocean. Access to and provision of coastal recreational resources will not be affected by the proposal action.

Historic Resources

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:
1) *Identify and analyze significant archaeological resources.*
2) *Maximize information retention through preservation of remains and artifacts or salvage operations; and*
3) *Support state goals for protection, restoration, interpretation, and display of historic resources.*

Discussion:
The site has been used for scrap metal salvaging activities, and as a landfill prior to that, for several decades. Before its use as a landfill, the project area was associated primarily with modern commercial quarrying activities. Due to the extent of ground disturbance in the area, the inland location of the site from historic coastal communities, and the regional soil characteristics, the project area is unlikely to contain historic properties, archaeological resources, or any resources of a potential traditional cultural nature.

Scenic and Open Space Resources

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

Policies:
1) *Identify valued scenic resources in the coastal zone management area.*
2) *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.*
3) *Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources.*

4) *Encourage those developments that are not coastal dependent to locate in inland areas.*

Discussion:
The project area is located inland and away from the coast. Thus, the proposed action would not adversely affect existing public views to and along the shoreline. View planes of the HSMY from the surrounding area is generally obstructed by dense, tall vegetation that provides a visual barrier for the area. Construction of the proposed action would not significantly alter the topography in such a way that would diminish the aesthetic value of the area.

Coastal Ecosystems

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

Policies:
1) *Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources.*
2) *Improve the technical basis for natural resource management.*
3) *Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance.*
4) *Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land water uses, recognizing competing water needs.*
5) *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.*

Discussion:
The project area is located approximately 2 miles away from the nearest coastal area. No surface or coastal water bodies such as a stream, river, pond, lake, or ocean occur in the vicinity. Therefore, the proposed action is not anticipated to have any adverse impacts on coastal ecosystems.

Economic Uses

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

Policies:
1) *Concentrate coastal development in appropriate areas.*
2) *Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area.*

3) *Direct the location and expansion of coastal dependent developments to areas presently designated and used for such development and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:*
   a) *Use of presently designated locations is not feasible;*
   b) *Adverse environmental effects are minimized; and*
   c) *The development is important to the State's economy.*

Discussion:
The proposed action is not coastal dependent activity and is located approximately 2 miles away from the nearest coastal area.

Coastal Hazards

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

Policies:
1) *Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards.*
2) *Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards.*
3) *Ensure that developments comply with requirements of the Federal Flood Insurance Program.*
4) *Prevent coastal flooding from inland projects.*

Discussion:
The project area is located inland and away from the coast. It is outside of the 500-year flood plain and outside of the tsunami evacuation zone. A drainage study would be performed to assess any potential changes in drainage patterns that may occur as a result of the proposed action. Should final treatment of the site involve a soil encapsulation system, that system would be designed to accommodate any potential increases in runoff. All development generated runoff that may be associated with future improvement of the site for the consolidation of solid waste management program components would be retained on-site as determined through a separate drainage study. The final drainage system design would be coordinated with the County of Hawai'i Department of Public Works (DPW) prior to construction.

Managing Development

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

Policies:
1) *Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development.*
2) *Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements.*

3) *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.*

Discussion:
This EA is being prepared under the procedural provisions of Chapter 343, HRS and Title 11, Chapter 200.1, HAR which includes opportunities for agency consultation and coordination as well as for public notification and participation. Accordingly, the preparation of this EA, and disclosure of anticipated impacts of the proposed action complies with the policy on managing development.

This EA will inform interested parties of the proposed action and seek relevant public comment on subjects of concern for EA documentation. The filing and publication of this Draft EA with the OEQC will be followed by a 30-day public comment period. All relevant public comments received during the 30-day public comment period will receive a written response for inclusion and use in the preparation in the forthcoming Final EA.

Public Participation

Objective: *Stimulate public awareness, education, and participation in coastal management.*

Policies:
1) *Promote public involvement in coastal zone management processes.*
2) *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.*
3) *Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.*

Discussion:
Public involvement would consist of public notice of the proposed project during the State environmental review process through publication in the OEQC's Environmental Notice, and through direct coordination with agencies, organizations, and individuals. See Section 8.1 for a list of the agencies, organizations and individuals that have been consulted for the proposed project.

The publication of this Draft EA will be followed by a 30-day public comment period and those comments and responses thereto will be included in the Final EA. If deemed necessary by DEM, a public informational meeting could be held during the 30-day public comment period to address community concerns and provide more information about the project.

Beach Protection

Objective: *Protect beaches for public use and recreation.*

Policies:

1) *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.*
2) *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.*
3) *Minimize the construction of public erosion-protection structures seaward of the shoreline.*
4) *Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor.*
5) *Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.*

Discussion:

The project area is not located within close proximity to the shoreline or any surface or coastal water body such as a stream, river, pond, lake, or ocean. No structures are proposed within the shoreline area and public beaches will not be affected by the proposed action.

Marine Resources

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

Policies:

1) *Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial.*
2) *Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency.*
3) *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.*
4) *Promote research, study, and understanding of ocean processes, marine life, and other ocean resources to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources.*
5) *Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.*

Discussion:
No impacts on marine and coastal resources are anticipated as a result of the proposed action. The project area is not located within close proximity to the shoreline or any surface or coastal water body such as a stream, river, pond, lake, or ocean. No structures are proposed in the shoreline area and public beaches will not be affected by the proposed action.

4.2 County of Hawai‘i Land Use Plans and Policies

4.2.1 County of Hawai‘i General Plan

The County of Hawai‘i General Plan, adopted by the Hawai‘i County Council in February 2005 (amended in December 2006), is the overall planning document outlining the long-range comprehensive development of Hawai‘i Island. It brings into focus the relationship between residents and their pursuits and institutions, offering policy statements that embody the expressed goals for present and future generations.

The Plan contains goals, policies and standards to guide the development of the County in 13 areas: economic, energy, environmental quality, flood control and drainage, historic sites, natural beauty, natural resources and shoreline, housing, public facilities, public utilities, recreation, transportation, and land use. Currently, the County of Hawai‘i is updating its General Plan, which is under review by the public, various agencies, and organizations. A discussion of consistency with the goals, policies, and standards of the currently adopted General Plan is provided below.

Economic Goals
(c) Strive for diversity and stability in the economic system.
(d) Provide an economic environment that allows new, expanded, or improved economic opportunities that are compatible with the County's cultural, natural and social environment.

Economic Policies
(g) Capital improvements programs shall improve the quality of existing commercial and industrial areas.

Discussion:
The proposed action involves remediation of a former scrap metal salvaging site consistent with the associated permits and approvals. Remediation activities would ensure that potential public health hazards are adequately managed and land could be reclaimed for future beneficial use. Future land use plans proposed by DEM are expected to involve the consolidation of existing solid waste management program components from the surrounding area, which would enhance the quality of the available solid waste management facilities.

The proposed action would contribute to the local economy on Hawai‘i Island both directly and indirectly through construction related expenditures, a portion of which would be used towards the purchase of material from local suppliers, employment of local labor, and patronage at local retail businesses as income earned through project construction is spent. Additionally, implementing the proposed action would provide needed work experience that would help to build the local skilled labor workforce.

Environmental Quality Goals

(a) Define the most desirable use of land within the County that achieves an ecological balance providing residents and visitors the quality of life and an environment in which the natural resources of the island are viable and sustainable.
(b) Maintain and, if feasible, improve the existing environmental quality of the island.
(c) Control pollution.

Environmental Quality Policies

(a) Take positive action to further maintain the quality of the environment.
(c) Advise the public of environmental conditions and research undertaken on the island's environment.
(d) Encourage the concept of recycling agricultural, industrial, and municipal waste material.

Discussion:

The proposed action serves to maintain environmental quality through the proper closure and remediation of a former scrap metal salvaging facility in accordance with State and federal regulations. No significant adverse impacts to the environment are anticipated as a result of the proposed action and would be minimized through implementation of appropriate mitigation measures and compliance with applicable local, state, and federal rules and regulations.

Once the project area has been remediated and the land reclaimed, the project area would be used to consolidate existing operations of various solid waste management components. Reconfiguring the layout of the solid waste management components that are currently spread out across the property would benefit the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in close proximity to each another. The ease-of-use and convenience may encourage more reuse and recycling activities to take place.

Flooding and Other Natural Hazards Goals

(a) Protect human life.
(b) Prevent damage to man-made improvements.
(c) Control pollution.
(d) Prevent damage from inundation.
(e) Reduce surface water and sediment runoff.
(f) Maximize soil and water conservation.

Flooding and Other Natural Hazards Policies

(g) Development-generated runoff shall be disposed of in a manner acceptable to the Department of Public Works and in compliance with all State and federal laws.
(q) Consider natural hazards in all land use planning and permitting.

Discussion:

Physical components of the proposed action would be designed in consideration of the potential hazards posed by hurricanes and other natural hazards to the extent practical. The project area is outside of the 500-year flood plain and outside of the tsunami evacuation zone. A drainage study would be performed to assess any potential changes in drainage patterns that may occur as a result of the proposed action. Should final treatment of the site

involve a soil encapsulation system, that system would be designed to accommodate any potential increases in runoff. All development generated runoff that may be associated with future improvement of the site for the consolidation of solid waste management program components would be retained on-site as determined through a separate drainage study. The final drainage system design would be coordinated with the County of Hawai‘i Department of Public Works (DPW) prior to construction.

Historic Sites Policies

(c) Require both public and private developers of land to provide historical and archaeological surveys and cultural assessments, where appropriate, prior to the clearing or development of land where there are indications that the land under consideration has historical significance.

Discussion:

The site has been used for scrap metal salvaging activities, and as a landfill prior to that, for several decades. Before its use as a landfill, the project area was associated primarily with modern commercial quarrying activities. Due to the extent of ground disturbance in the area, the inland location of the site from historic coastal communities, and the regional soil characteristics, the project area is unlikely to contain historic properties, archaeological resources, or any resources of a potential traditional cultural nature.

Natural Beauty Goals

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

Discussion:

The project area is not located near any South Hilo natural beauty sites. View planes of HSMY from the surrounding area is generally obstructed by dense, tall vegetation that provides a visual barrier for the area. Construction of the proposed action would not significantly alter the topography in such a way that would diminish the aesthetic value of the area.

Natural Resources and Shoreline Goals

(d) Protect rare or endangered species and habitants native to Hawai‘i.

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

Natural Resources and Shoreline Policies

(a) Requires users of natural resources to conduct their activities in a manner that avoids or minimizes adverse effects on the environment.

(u) Ensure that activities authorized or funded by the County do not damage important natural resources.

Discussion:

The project area has been previously disturbed due to past rock quarry, landfilling, and scrap metal salvaging activities. Vegetation at HSMY consists mainly of mokeypod trees, albizia trees, and guinea grass, and is believed to have little conservation value for either the plant

species it contains or as animal habitat. Although threatened or endangered species may occur in the project area, these species tend not to frequent HSMY due to historical quarrying and landfilling activities and current solid waste management activities in the vicinity. Nonetheless, avoidance and impact minimization measures will be incorporated into the project plans and specifications. No significant adverse impacts on threatened or endangered species or their habitat are anticipated as a result of the proposed action.

Physical components of the proposed action would be designed in consideration of the potential hazards posed by floods, hurricanes, earthquakes, and other natural hazards to the extent practical. While the proposed action may result in temporary air quality and soil erosion impacts associated with construction activities, these impacts would be mitigated through implementation of best management practices (BMPs) and adherence to federal, state, and county rules and regulations. No significant impacts on natural resources is anticipated as a result of the proposed action.

Public Facilities Goals

(a) Encourage the provision of public facilities that effectively service community and visitor needs and seek ways of improving public service through better and more functional facilities in keeping with the environmental and aesthetic concerns of the community.

Public Facilities Policies

(a) Continue to seek ways of improving public service through the coordination of service and maximizing the use of personnel and facilities.

Public Facilities – Health and Sanitation Policies

(c) Appropriately designed and cost-effective solid waste transfer station sites shall be located in areas of convenience and easy access to the public.

(f) Continue to encourage programs such as recycling to reduce the flow of refuse deposited in landfills.

Discussion:

The project area was previously used as a scrap metal salvage facility. Remnant debris is scattered throughout the project area and contaminated soil that remains on-site presents a potential hazard to public health by direct contact. Remediation of the site would restore the land and allow for productive beneficial use of a previously disturbed area. Once reclaimed, the land would be used to consolidate existing operations of various solid waste management components for the benefit of the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in even closer proximity to each another. Solid waste transfer stations play an important role in a community's overall waste management system and implementing the proposed action would improve the existing solid waste facilities in the South Hilo region. Additionally, the ease-of-use and convenience may encourage more reuse and recycling activities to take place.

4.2.2 General Plan Land Use Pattern Allocation Guide and Zoning

The General Plan Land Use Pattern Allocation Guide Map (LUPAG) delineates broad-brush boundaries that are graphic expressions of the General Plan policies, particularly those relating to land uses. The land use pattern in a broad, flexible design intended to guide the

direction and quality of future developments in a coordinated and rational manner. These maps delineate a number of land use categories for each area.

The General Plan Land Use Pattern Allocation Guide (LUPAG) designation for the project area is Important Agricultural Land. See Figure 4-2. Important agricultural lands are those with better potential for sustained high agricultural yields because of soil type, climate, topography, or other factors. Given the low productivity potential of the soil in the area and need for high inputs, the project area is not considered suitable for agricultural activity. Therefore, implementation of the proposed action would not reduce the inventory of productive lands available for agricultural uses. The subject property is zoned MG-1a, General Industrial District by the County. See Figure 4-3. The existing and proposed future use of the project area is a permitted use for areas within the County industrial district.

4.2.3 County of Hawai‘i Integrated Resources and Solid Waste Management Plan Update

In compliance with Chapter 342G, HRS, counties in Hawai‘i are required to update and revise their solid waste management plans every five years. The last update to the Plan was completed during 2009. The Integrated Resources and Solid Waste Management Plan (IRSWMP) update provides an evaluation of waste management practices in the County, including waste reduction practices and programs, opportunities for implementation of zero waste policies and practices, the status of both active and closed landfills, and potential options for expanding and extending the capacity of the HSMY.

The IRSWMP update outlines a series of recommendations for action during the County’s next 5-year implementation period generally consisting of the following:

- Implementing a series of programs to reduce the volume of waste entering the landfills;
- Making improvements to existing infrastructure to accommodate new waste reduction programs; and
- Conducting more in-depth evaluations of 1) re-configuring the Reload Facility (also known as the East Hawai‘i Regional Sort Station) at the HSMY and trucking waste to WHSL, or 2) developing a new lined landfill adjacent to the current HSMY, to address the need for long-term capacity for residuals needing disposal.

The County is currently in the process of updating the 2009 IRSWMP. A draft Integrated Solid Waste management Plan 2019 Update was published for 60-day public comment period on December 6, 2019.

Discussion:

The proposed action involves remediation of a former scrap metal salvaging site consistent with the associated permits and approvals. Remediation activities would ensure that potential public health hazards are adequately managed and land could be reclaimed for future beneficial use. Future land use plans proposed by DEM are expected to involve the consolidation of existing solid waste management program components from the surrounding area, which would enhance the quality of the available solid waste management facilities.

Reconfiguring the layout of the solid waste management components that are currently spread out across the property would benefit the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in close proximity to each another. The ease-of-use and convenience may encourage more reuse and recycling activities to take place.

4.3 Permits and Approvals

The following is a list of permits, approvals, and reviews that may be required prior to construction and operation of the proposed project.

State of Hawai‘i

Department of Health

- Final closure plan approval
- Final closure design approval
- National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from Construction Activities
- Air Pollution Control Permit

Department of Transportation

- Oversized and Overweight Vehicle Permit

County of Hawai‘i

Department of Public Works

- Final drainage system design approval
- Grading Permit
- Grubbing Permit
- Stockpiling Permit

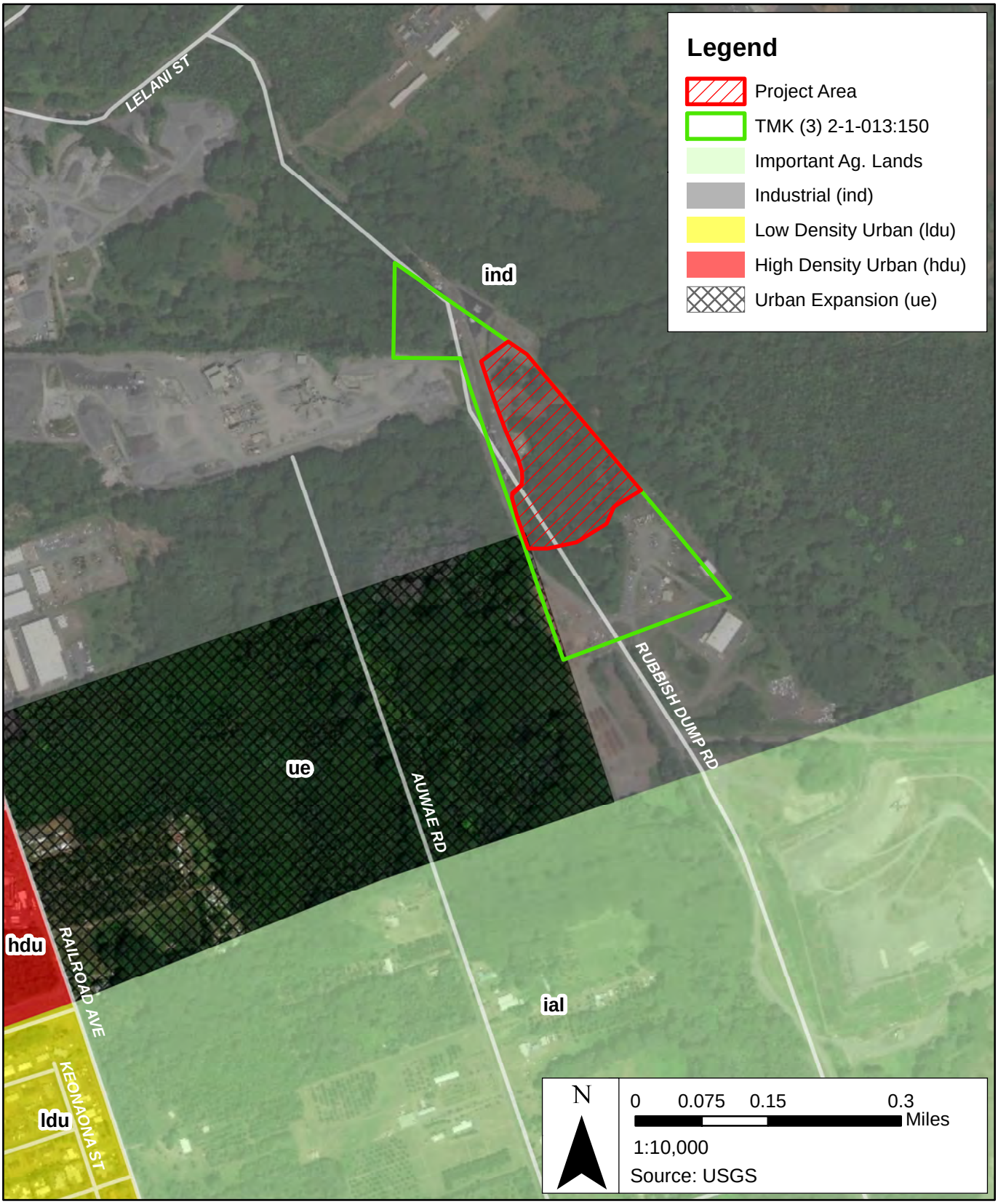

FIGURE 4-2

LAND USE PATTERN ALLOCATION GUIDE MAP

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

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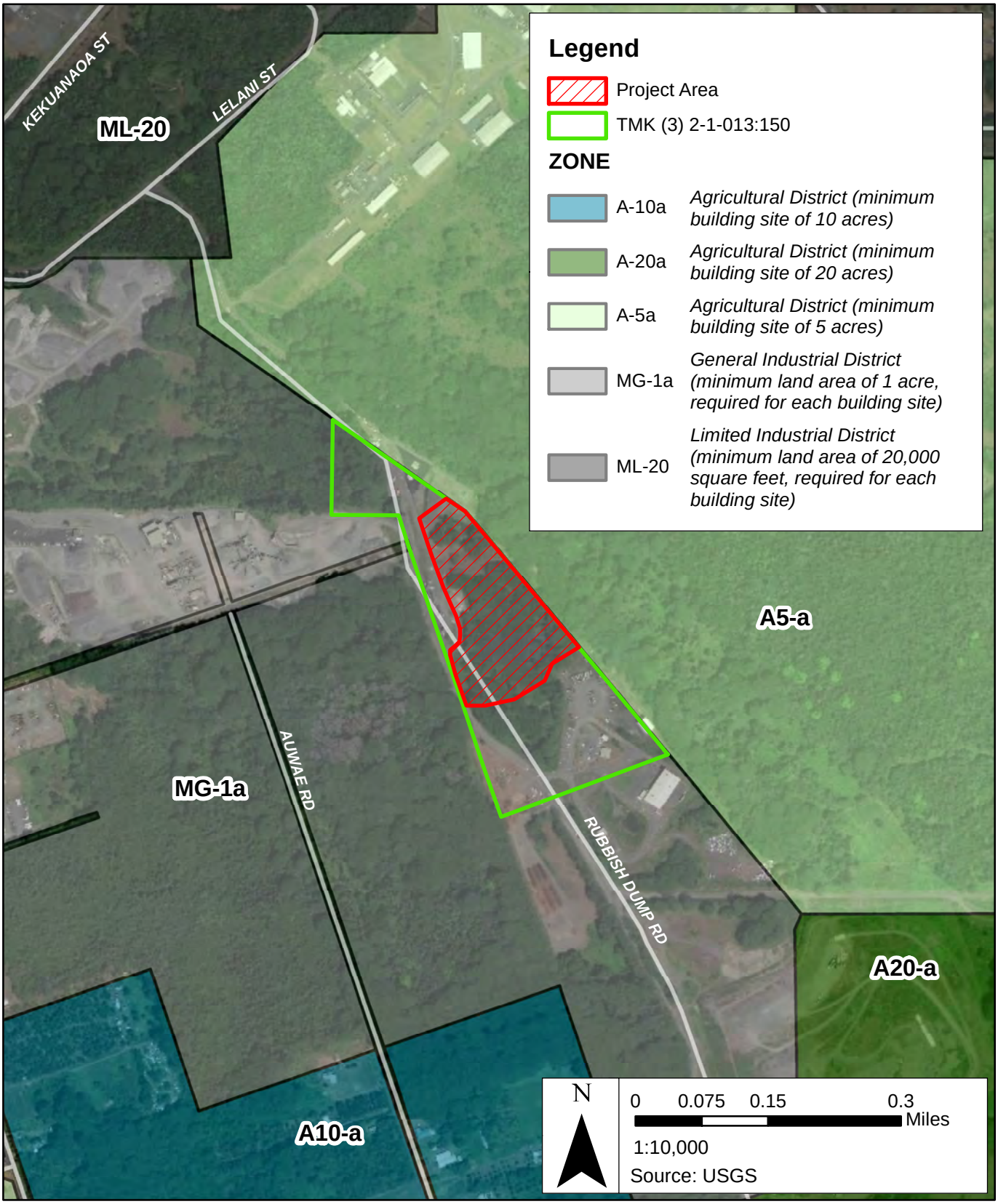

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FIGURE 4-3

COUNTY ZONING MAP

HILO SCRAP METAL YARD CLOSURE AND REMEDIATION

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5. ALTERNATIVES ANALYSIS

5.1 No Action Alternative

Under the no action alternative, the former HSMY site would not be remediated and would remain vacant. Various components of the existing solid waste management program would continue to be spread out across the subject property and would not be consolidated to a more centralized location, as discussed in Section 2.2. Consequently, short-term construction related impacts would be avoided, construction costs spared, and the need for permits and approvals precluded. In the long-term, the site would continue to remain vacant and could not be utilized for any future land uses or activities without the possibility of endangering public health unless proper environmental investigation and remediation activities occur.

This alternative was not selected because of the potential threat to human and environmental health from exposure to contaminated soil. The No Action Alternative would not achieve the project purpose and need to adequately manage potential hazards and allow for productive future beneficial use of the land. It also would not meet DOH guidance for managing contaminated soil and solid waste debris and would be in violation of the conditions of the SWMP, which requires development and implementation of a plan of action to minimize or mitigate any threats to public health and the environment due to contaminants possibly left on-site by the facility's operation. For the foregoing reasons, the No Action Alternative is not considered a feasible option.

5.2 Site Remediation Alternatives

A variety of closure and remediation scenarios are possible and could be implemented depending on the results of additional environmental investigation. The final closure plan and design would also be subject to approval by DOH. Therefore, specific details of the final clean-up area, remediation methods, and final design are not available at this point in time.

Generally speaking, in addition to the no action alternative, there are three additional possible remediation methods that could be deployed to meet the project purpose and need: (1) removal of all contaminated soil and solid waste debris located on-site (clean closure); (2) removal of partial contaminated soil and solid waste debris, and installation of a soil encapsulation system (capping system) to cover the remaining material located on-site (partial clean closure and capping in-place); or, (3) installation of a capping system that covers all contaminated soil and solid waste debris located on-site (capping in-place). The following criteria would be considered when selecting a final remediation method to be implemented:

1. Depth (magnitude) of contaminated soil and solid waste debris.
2. Extent of contaminated soil and solid waste debris.
3. Actions necessary to meet DOH requirements for treatment and management of contaminated soil to support future commercial/industrial land use.
4. Economic feasibility.
5. Post-implementation repair and maintenance requirements.
6. Flexibility/Limitation of land use.

Since any of the three remediation methods or a combination of the methods could be implemented as part of the proposed action, the potential impacts associated with each alternative are considered in the scope of this EA and are discussed in more detail below.

5.2.1 Alternative 1: Clean Closure

Under a clean closure alternative, all solid waste debris and all contaminated soil that exceed the commercial/industrial land use EAL (>800mg/kg) would be removed from the site and disposed of at WHSL. Depending on levels of contamination, soil removed from the site could potentially be used as daily cover at the landfill, which would help to contain odors and deter pests. Additional waste characterization sampling and analysis would be performed to ensure the material is not a hazardous waste and is suitable for on-island landfill disposal. If waste characterization identifies any hazardous waste, that material could either be treated to remove hazardous waste characteristics and landfill disposed on-island or transported to a mainland U.S. hazardous waste treatment and disposal facility. Any recyclable waste material would be taken to the County's convenience center.

The excavation and offsite disposal of contaminated soil and solid waste debris can be implemented using traditional construction techniques (i.e. "dig and haul"). Dust control and soil erosion control measures must be implemented during excavation and loading activities to ensure community and worker health and safety. These measures would include the use of personal protective equipment and air monitoring. Potential large volumes of contaminated soil and solid waste debris would have to be transported by truck over local roadways, resulting in an increase in truck traffic and potential neighborhood disturbances. It is also anticipated that hauling associated with remediation activities may detract from normal ongoing solid waste transfer station operations. The final closure plan being prepared by DEM would include the appropriate measures needed to avoid or minimize adverse impacts from this alternative, such as limiting hauling activity to occur during non-peak hours of travel and designating routes for travel that would minimize neighborhood disturbances.

Removing all contaminated soil and solid waste debris is expected to be the most costly alternative due to the expected volumes to be removed, as well as haul distance and disposal costs at the WHSL. However, post-implementation and maintenance requirements for this alternative are anticipated to be minimal as all the contaminated soil and solid waste debris would be removed and disposed of offsite. This option provides the most flexibility for future land use.

5.2.2 Alternative 2: Partial Clean Closure and Capping In-place (Preferred Alternative)

This alternative consists of removing and disposing of partial volumes of contaminated soil and solid waste debris offsite at the WHSL, or relocated onsite, and capping remaining contaminated soils and solid waste debris onsite. Contaminated soil and solid waste debris that pose a more serious threat to public health and the environment would be removed and disposed of at the WHSL, or relocated onsite, to allow for a more manageable design of a capping system to lessen the threat. Remaining onsite clean and contaminated soils, and imported clean soils would be used to regrade the site to optimize future use and capped with an engineered cover system to prevent direct contact exposure to the remaining contaminated soil and solid waste debris. The capping system would typically consist of an

engineered barrier layer (clay bentonite or geosynthetic membrane) placed over the regraded soils, followed by additional clean soil fill, and asphalt pavement, low impact vegetation, or rock aggregate. The final design of the on-site capping system for treating and managing contaminated soil and solid waste debris would be determined through further environmental investigation and in consultation with DOH.

Similar to a clean closure alternative, the excavation and offsite disposal of contaminated soil and solid waste debris can be implemented using traditional construction techniques (i.e. “dig and haul”). Dust control and soil erosion control measures must be implemented during excavation and loading activities to ensure community and worker health and safety. These measures would include the use of personal protective equipment and air monitoring. If not relocated onsite, potential large volumes of contaminated soil and solid waste debris would have to be transported by truck over local roadways, resulting in increases in truck traffic and potential neighborhood disturbances. However, these increases are expected to be less than the clean closure alternative. It is also anticipated that hauling associated with remediation activities may detract from normal ongoing solid waste transfer station operations. The final closure plan being prepared by DEM would include the appropriate measures needed to avoid or minimize adverse impacts from this alternative, such as limiting hauling activity to occur during non-peak hours of travel and designating routes for travel that would minimize neighborhood disturbances.

The potential cost of this remediation alternative would depend on the extent and magnitude of solid waste debris and contaminated soil as well as the difficulty in accessing the areas of contamination. However, once the extent and magnitude of the remaining contamination and the specific environmental hazards posed by the contamination have been documented, an Environmental Hazard Management Plan would be prepared. The plan would outline requirements for long-term maintenance of the capping system. Long-term monitoring, institutional controls, and deed restrictions for the property would be required under this alternative.

With the removal of partial contaminated soil and solid waste debris, and capping of the remaining material on-site, this alternative would achieve the project purpose and need and would be expected to meet DOH guidance for managing contaminated soil and solid waste debris. This alternative is the preferred alternative as it would minimize hauling to WHSL as much as possible, while also reducing the amount of contaminated soil and solid waste debris remaining onsite. However, the property may require clean closure if the property should ever be sold and redeveloped for some other use than set-forth by institutional controls and deed restrictions.

5.2.3 Alternative 3: Capping In-Place

Unlike the other alternatives, this alternative would not involve removing and disposing of any contaminated soil and solid waste debris at the WHSL. All the contaminated soil and solid waste debris would be consolidated or left in place, and the site would be graded to optimize future use and capped with an engineered cover system to prevent direct contact exposure to the contaminated soil and solid waste debris. Similar to a partial clean closure and capping in-place alternative, the capping system would typically consist of an engineered barrier layer (clay bentonite or geosynthetic membrane) placed over the regraded soils, followed by additional clean soil fill and asphalt pavement or low impact vegetation. This alternative to

treat and manage contaminated soil and solid waste debris would also be determined through further environmental investigation and in consultation with DOH.

This alternative would have reduced costs for excavation, hauling and disposal of contaminated soil and solid waste debris, but may have increased costs for the capping system if the area required to be covered is significantly larger than the area for the partial clean closure and capping in-place alternative.

With capping of the remaining material on-site, this alternative would achieve the project purpose and need and would be expected to meet DOH guidance for managing contaminated soil and solid waste debris. However as previously noted, the property may require clean closure if the property should ever be sold and redeveloped for some other use than set-forth by institutional controls and deed restrictions. In other words, future land use and the type of structures that can be constructed will be limited and/or expensive.

6. FEDERAL CROSS-CUTTER AUTHORITIES

The proposed project may utilize funds through the Clean Water State Revolving Fund (CWSRF) program administered by the State of Hawaiʻi, which would constitute a federal action, and will require the project to comply with federal cross cutting authorities and Hawaiʻi CWSRF program requirements.

6.1 Archaeological & Historic Preservation Act, National Historic Preservation Act

The Archaeological & Historic Preservation Act, 16 U.S.C. §469a-1, deals with the threat of loss or destruction of significant data by Federal construction projects; notification requests for preservation of data; and survey of sites, preservation of data and compensation. The National Historic Preservation Act (NHPA) of 1966 requires the consideration of the effect of any project on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. In addition, Section 106 of the NHPA requires consideration of the effects of a project with federal involvement on historic properties. Section 106 is applicable to the project if a federal agency is carrying out the project, approving it, or funding it.

As described in the Archaeological and Historical Resources section, previous studies of the project area have concluded that it is unlikely the subject property is within an area of traditional pre-contact Hawaiian settlement and habitation. An Archaeological Assessment (2016) prepared by Scientific Consultant Services, Inc. notes that early settlements in the Hilo District were located along the coast. Furthermore, the Panaʻewa region where the project area is located contains marginally thin soils and is not well suited to modern agricultural techniques. Due to the extent of ground disturbance in the area from quarry and landfill operations, the inland location of the site from historic coastal communities, and the regional soil characteristics, the project area is unlikely to contain historic properties, archaeological resources, or any resources of a potential traditional cultural nature.

It is anticipated that the proposed action would not adversely affect any historic properties, or culturally valued resources or cultural practices given the project area has been used for quarrying, landfilling, and scrap metal salvaging operations since at least the 1960's. Should the discovery of potential archaeological or historical resources occur during construction, all work in the area of the find shall stop and SHPD shall be notified. The Historic Preservation Officer will determine what will be necessary for construction to proceed.

6.2 Bald and Golden Eagle Protection Act

Under the Bald and Golden Eagle Protection Act, 16 U.S.C §§ 668-668(c), the two species of eagle are federally protected by the U.S Fish and Wildlife Service. This law provides for the protection of the bald eagle and the golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit(16 U.S.C. 668(a); 50 CFR 22). "Take" includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb (16 U.S.C. 668c; 50 CFR 22.3). Bald or golden eagles have never been recorded in any fauna catalogue for the State of Hawai'i. Therefore, The Bald and Golden Eagle Protection Act is not applicable to the proposed action.

6.3 Clean Air Act

Under the Clean Air Act, 42 U.S.C. §7506(c), the U.S. Environmental Protection Agency (EPA) regulates emissions of air pollution from mobile and stationary sources. The EPA has set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants: particulate matter (PM_{10} and $PM_{2.5}$), ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. In addition to these pollutants, Hawai‘i has also established a state ambient air quality standard for hydrogen sulfide.

Pursuant to the Clean Air Act, states are required to adopt enforceable plans to achieve and maintain air quality that meets established air quality standards. The State of Hawai‘i Department of Health (DOH), Clean Air Branch, administers the state’s air quality program and is responsible for regulating and monitoring pollution sources to ensure that the levels of criteria pollutants remain well below the State and Federal ambient air quality standards (HRS, Chapter 342B).

As discussed in the Air Quality section, the quality of air in the general Hilo area is considered “Good.” Air quality on Hawai‘i Island is affected by emissions from industrial sources, vehicles, and natural sources. The major industrial source for the island is oil-fired power plants, which emit SO_2, nitrogen oxides, and particulate matter. Motor vehicles emit CO, nitrogen oxides and hydrocarbons (an ozone precursor), as well as smaller amounts of other pollutants including particulates. Also emitting SO_2 is the geothermal power plant Puna Geothermal Venture, which supplies about 10-20% of the island’s electricity. Volcanic emissions of sulfur dioxide convert into particulate sulfate, which causes a volcanic haze (vog) to blanket the area during occasional episodes of southerly kona winds.

No significant impacts on air quality are anticipated as a result of the proposed action. During construction fugitive dust would be controlled, as required, by developing a dust control management plan will be developed which identifies and mitigates all activities that may generate airborne, visible fugitive dust. Measures to control airborne, visible fugitive dust from the road areas and during the various phases of construction will be incorporated into the project plans and specifications. Additionally, construction activities must comply with the provisions of Hawai‘i Administrative Rules, §11-60.1-33 on Fugitive Dust. Air monitoring would also be required during construction to ensure compliance with air quality standards. Respective contractors would be responsible for adhering to air quality standards and minimizing air quality impacts during the various phases of construction.

Exhaust emissions from construction vehicles are anticipated to have negligible impacts on air quality in the project area as the emissions would be temporary in nature, relatively small, and readily dissipated. Any potential impacts would be mitigated by complying with the State DOH Administrative Rules, Title 11, Chapter 60 “Air Pollution Control”. The contractor would be responsible for obtaining any air pollution control permits that may be required. In the long-term, GHG emissions in the project area are not expected to increase as future land use plans proposed by DEM are expected to involve consolidation of waste management program components that already exist in the area.

6.4 Coastal Barrier Resources Act

The Coastal Barrier Resources Act, 16 U.S.C. §3501, designates coastal barriers along the Atlantic and Gulf coasts and along the shore areas of the Great Lakes for conservation, and is not applicable to the State of Hawai‘i.

6.5 Coastal Zone Management Act

The Coastal Zone Management Act (CZMA), 16 U.S.C. 1456(c)(1), provides for the management of the nation's coastal resources. The goal is to "preserve, protect, develop and where possible, to restore or enhance the resources of the nation's coastal zone." HRS, Chapter 205A sets forth Hawai‘i's CZM Program which is in compliance with the CZMA and approved by Federal and State agencies. The county authorities administer Special Management Area (SMA) permits and shoreline setback provisions as part of the CZM Program. The objectives and policies of the CZM Program are defined in HRS, Chapter 205A-2.

As discussed in the CZM Program section of Chapter 4, the project area is located inland and away from the coast. It is not within close proximity to the shoreline or any surface or coastal water body such as a stream, river, pond, lake, or ocean and would therefore have no effect on coastal resources. The proposed action is consistent with CZM objectives and policies. In addition, the project area is located outside of the areas regulated by the SMA permitting and shoreline setback provisions.

6.6 Endangered Species Act, Fish & Wildlife Coordination Act, Magnuson-Stevens Fishery Conservation and Management Act

The Endangered Species Act, 16 U.S.C. §1536(a)(2) and (4), is administered by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA), National Marine Fisheries Service (NMFS). The USFWS has primary responsibility for terrestrial and freshwater organisms, while NOAA is mainly responsible for marine wildlife. NOAA-NMFS is also the agency consulted pursuant to the Essential Fish Habitat consultation process of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. §1801. The Fish and Wildlife Coordination Act (FWCA), 16 U.S.C. §662(a), provides the basic authority for USFWS involvement in evaluating impacts of proposed water resource development projects on fish and wildlife, and requires Federal agencies to take actions to prevent or mitigate loss or damage to wildlife resources.

According to the U.S Fish & Wildlife Service (USFWS), other federally listed species that may occur in the immediate vicinity of the project area include the endangered Hawaiian hoary bat *(Lasiurus cinereus semotus)*, Hawaiian hawk *(Buteo solitarius)*, Hawaiian petrel *(Pterodroma sandwichensis)*, band-rumped storm petrel *(Oceanodroma castro)*, and the threatened Newell's shearwater *(Puffinus auricularis newelli)*. Although the Hawaiian hawk was recently removed from the federal list of threatened and endangered species it continues to be State-listed as endangered under HRS §195-D.

The project area has been previously disturbed due to past rock quarry, landfilling, and scrap metal salvaging activities. Vegetation at HSMY consists mainly of mokeypod trees, albizia trees, and guinea grass, and is believed to have little conservation value for either the plant species it contains or as animal habitat. Although threatened or endangered species may

occur in the project area, these species tend not to frequent HSMY due to historical quarrying and landfilling activities and current solid waste management activities in the vicinity. Nonetheless, avoidance and impact minimization measures will be incorporated into the project plans and specifications. The proposed action may affect but is not likely to adversely affect threatened or endangered species or their habitat.

6.7 Environmental Justice Executive Order

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority and Low Income Populations" signed February 11, 1994 by President William Clinton requires Federal agencies to identify and avoid, minimize, or mitigate "disproportionately high and adverse" effects of Federal projects on the health and environment of minority and low income populations.

Native Hawaiian and other Pacific Islanders (14.2 percent) and Whites (17.6 percent) make up the minority population in the Hilo Census Designated Place (CDP). The 2010 median household income of $53,939 was generally higher than the national average of $49,445, although about 19% of the Hilo population lives in poverty. The proposed action involves minimizing and mitigating any threats to public health and the ecological environment through remediation of the former HSMY site. Once the project area has been remediated and the land reclaimed, the area would be used to consolidate existing operations of various solid waste management components for the benefit of the public. The proposed action is not anticipated to have any disproportionately high and adverse effects on the health and environment of minority and low income populations.

6.8 Farmland Protection Policy Act

The Agriculture and Food Act (Public Law 97-98) was passed in 1981 and contained the Farmland Protection Policy Act (FPPA), Subtitle I of Title XV, Section 1539-1549. The purpose of the FPPA is to minimize the effect of Federal programs on the unnecessary and irreversible conversion of prime farmland, unique farmland, and other land of statewide or local importance to nonagricultural uses. It assures that to the extent possible federal programs are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. It is administered by the US Department of Agriculture (USDA), National Resources Conservation Service. The three categories of farmland described in FPPA are translated to the Hawai‘i Department of Agriculture's (DOA), ALISH classifications of "Prime," "Unique," and "Other" agricultural lands.

The project area is classified as Other Lands, which is defined as an area that can be farmed satisfactorily by applying greater inputs of fertilizer, improving drainage, practicing erosion control, and protecting the land from flooding. Given the low productivity potential of the soil in the area and need for high inputs, the project area is not considered suitable for agricultural activity. Therefore, implementation of the proposed action would not reduce the inventory of productive lands available for agricultural uses.

6.9 Floodplain Management Executive Order

Executive Order 11988 is to avoid to the extent possible the adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. To accomplish this

objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities."

As discussed in the Flood and Tsunami Hazard section of Chapter 3, the project area is located in Zone X, an area determined to be outside of the 500-year floodplain. No direct, indirect or cumulative impacts on flood hazards are anticipated as the proposed action is not anticipated to increase flood risks or cause any adverse flood-related impacts within the project area or lower elevation properties.

6.10 Marine Mammal Protection Act

The Marine Mammal Protection Act (16 U.S.C §§703 et seq.) was enacted to protect all marine mammals in U.S waters and by U.S citizens on the high seas and the importation of marine mammals and marine mammal products in the U.S. MMPA is jointly enforced by the U.S fish and Wildlife service and the National Marine Fisheries Service. The site for the proposed action and located about two miles from the nearest coastline or body of water that could support habitat for marine mammals. The proposed action would have no impact on marine mammals.

6.11 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 U.S.C §§ 703 et seq.) was created with the purpose to make it illegal possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts*, nests, or eggs of such a bird except under the terms of a valid Federal permit. Migratory bird species protected by the Act. The state of Hawaii is home to 55 bird species protected by the MBTA. Alter consolation with USFWS it can be determined that the Island of Hawai'i is no exception and is known to host several birds that are protected by the MBTA. The birds protected by MBTA that could possibly traverse or nest in the vicinity of the site location include the Hawaiian hawk *(Buteo solitarius)*, Hawaiian petrel *(Pterodroma sandwichensis)*, band-rumped storm petrel *(Oceanodroma castro)*, and the threatened Newell's shearwater *(Puffinus auricularis newelli).* Conservation measures will be incorporated into the project plans and specifications to avoid or minimize impacts on these listed species.

6.12 Protection of Wetlands Executive Order

The purpose of Executive Order 11990 is to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." Federal agencies, to meet these objectives, in planning their actions are required to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland is unavoidable. The procedures require the determination of whether or not the proposed project will be in or will affect wetlands. There are no wetlands in the vicinity of the project area. Executive Order 11990 is not applicable to this project.

6.13 Rivers and Harbors Act

Under the Rivers and Harbors Act, (33 U.S.C. § 403) all navigable waterways in the U.S a protected under federal law. This act prohibits but is not limited to construction of any bridge,

dam, dike or causeway over or in navigable water within the U.S without congressional approval and or permitting from the Authority of the Corps of Engineers.

There are no navigable waterways in the vicinity of the project area. The Rivers and Harbors Act is not applicable to the proposed action.

6.14 Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), 42 U.S.C. §300f was established to protect the quality of all waters actually or potentially designed for drinking use from both underground and aboveground sources. The SDWA authorizes EPA to establish minimum standards to protect potable water with which all owners or operators of public water systems must comply; to oversee the agencies that can be approved to implement these rules on EPA's behalf, such as state governments; and to encourage attainment of secondary standards (nuisance-related). The SDWA also establishes the Sole Source Aquifer Program, under which EPA also may evaluate Federal-funded projects to determine whether they have the potential to contaminate a sole source aquifer.

The project area is about a mile outside and downgrade of the UIC line, which means that the underlying aquifer is not considered a drinking water source. The proposed action involves remediation of the project area to remove or stabilize contaminated soil to acceptable levels, thereby reducing the toxicity, mobility, and volume of contamination in the project area. No adverse impacts on groundwater are anticipated with implementation of the proposed action.

6.15 Wild & Scenic Rivers Act

The Wild and Scenic Rivers Act, 16 U.S.C. 1271-1287, declares that certain selected rivers, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in their free-flowing condition for the enjoyment of present and future generations.

The State of Hawai‘i has approximately 3,905 miles of river, but no designated wild and scenic rivers. The Wild & Scenic Rivers Act is not applicable to the proposed action.

7. ANTICIPATED DETERMINATION OF FONSI

Based on the significance criteria set forth in Chapter 200.1, Title 11, State of Hawai‘i Department of Health Administrative Rules, it is determined that the proposed project will not have a significant effect on the environment, and it is anticipated that a Finding of No Significant Impact (FONSI) will be issued and filed with the State Office of Environmental Quality Control following the public consultation period. The reasons supporting this determination are described below according to the following significance criteria:

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

Implementation of the proposed action will require an irrevocable commitment of energy, labor, capital, and materials for construction. Past landfilling and scrap metal salvaging operations at the site left behind solid waste debris and has caused the site soil to become contaminated above EAL for the State of Hawai‘i. Remediation is needed to adequately manage potential hazards and allow for productive future beneficial use of the land. Therefore, the proposed action is necessary to ensure protection of human health and the environment. In the long-term, the proposed action involves consolidating the existing operations of various solid waste management activities to an area that has been previously disturbed. The proposed use is consistent with the former use of the site, which is in close proximity to existing services and facilities.

Construction of the proposed action will involve land disturbing activities that may result in temporary air quality and soil erosion impacts. These impacts would be mitigated by implementing BMPs and adhering to federal, State and County rules and regulations. The final closure plan being prepared by DEM would also include the appropriate measures needed to avoid or minimize adverse impacts, and would be subject to approval by DOH.

The project area has been used as a scrap metal salvaging facility and as a landfill and for commercial quarrying activities prior to that for several decades. No effects to any historic sites are anticipated as a result of implementing the proposed action. There is no reported ongoing traditional gathering or hunting practices occurring within the project area itself. It is anticipated that the proposed action will have no adverse impact on traditional cultural properties or practices, gathering rights, or access.

The project area is located inland and away from the coast. There is no surface or coastal water body such as a stream, river, pond, lake, or ocean located nearby. No impacts to these resources are anticipated. Vegetation at HSMY consists mainly of mokeypod trees, albizia trees, and guinea grass, and is believed to have little conservation value for either the plant species it contains or as animal habitat. It is possible that federally listed threatened or endangered species may occur in the project area, although these species are not known to frequent the project area due to historical quarrying and landfilling activities and current solid waste management activities in the vicinity. Conservation measures will be incorporated into the project plans and specifications to avoid or minimize impacts on these listed species.

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

The proposed action involves remediation of a former scrap metal salvaging site consistent with the associated permits and approvals. Remediation activities would ensure that

potential public health hazards are adequately managed and land could be reclaimed for future beneficial use. Future land use plans proposed by DEM are expected to involve the consolidation of existing solid waste management program components from the surrounding area, which is consistent with the former use of the site and uses in the surrounding area.

The project area could not be utilized for any future land uses or activities without the possibility of endangering public health unless proper environmental investigation and remediation activities occur. Therefore, the proposed action is necessary to ensure protection of human health and the environment.

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

The proposed action does not conflict with long-term environmental policies or goals and guidelines of the State of Hawai‘i. Once the project area has been remediated and the land reclaimed, the project area would be used to consolidate existing operations of various solid waste management components. This proposed use is consistent with State and County land use policies for the area. Reconfiguring the layout of the solid waste management components that are currently spread out across the property would benefit the public by having the added convenience of locating all reuse, recycling, and waste disposal activities in close proximity to each another. The ease-of-use and convenience may encourage more reuse and recycling activities to take place further diverting solid waste from the landfill.

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

The proposed action would remediate and reclaim land that is currently unusable, allowing for productive future beneficial use of that land. Implementation and long-term operation of the proposed action is not anticipated to substantially affect the economic or social welfare of the community or state.

(5) Substantially affects public health;

The proposed action involves remediation of the project area to remove or stabilize contaminated soil to acceptable levels, thereby reducing the toxicity, mobility, and volume of contamination in the project area. If required, an Environmental Hazard Management Plan would be prepared to outline maintenance of any soil treatment systems in place and would mitigate long-term hazards to public health.

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

The proposed action involves remediation of a former scrap metal salvaging site consistent with the associated permits and approvals. Once the project area has been remediated and the land reclaimed, the project area would be used to consolidate existing operations of various solid waste management components. The proposed use is consistent with the former use of the site, which is in close proximity to existing services and facilities. The proposed action is not anticipated to induce population growth, and therefore, no secondary impacts associated with population changes or effects on public facilities are anticipated with implementation of the proposed action.

(7) Involves a substantial degradation of environmental quality;

The proposed action involves remediation of the project area to remove or stabilize contaminated soil to acceptable levels, thereby reducing the toxicity, mobility, and volume of contamination in the project area. Vegetation at HSMY consists mainly of mokeypod trees, albizia trees, and guinea grass, and is believed to have little conservation value for either the plant species it contains or as animal habitat. It is possible that federally listed threatened or endangered species may occur in the project area, although these species are not known to frequent the project area due to historical quarrying and landfilling activities and current solid waste management activities in the vicinity. Conservation measures will be incorporated into the project plans and specifications to avoid or minimize impacts on these listed species. Overall, it is anticipated that environmental quality would be enhanced by implementation of the proposed action.

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

Remediating the soil in the project area to allow for future land use would involve a commitment for larger actions with the potential development of that site. However, the future use of the site by DEM has been considered in the scope of this EA and is not anticipated to have a significant adverse effect on the environment. Future land use plans proposed by DEM are expected to involve the consolidation of existing solid waste management program components from the surrounding area, which is consistent with the former use of the site and uses in the surrounding area.

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

Vegetation at HSMY consists mainly of mokeypod trees, albizia trees, and guinea grass, and is believed to have little conservation value for either the plant species it contains or as animal habitat. It is possible that federally listed threatened or endangered species may occur in the project area, although these species are not known to frequent the project area due to historical quarrying and landfilling activities and current solid waste management activities in the vicinity. Conservation measures will be incorporated into the project plans and specifications to avoid or minimize impacts on these listed species. No substantial adverse effects on rare, threatened, or endangered species, or its habitat is anticipated with the proposed action.

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

The project area is located inland and away from the coast. There is no surface or coastal water body such as a stream, river, pond, lake, or ocean located nearby. No impacts to these resources are anticipated.

Construction of the proposed action will involve land disturbing activities that may result in temporary air quality and soil erosion impacts. These impacts would be mitigated by implementing BMPs and adhering to federal, State and County rules and regulations. Strong engineering and management controls would also need to be implemented, such as the use of personal protective equipment for works and air monitoring. The final closure plan being prepared by DEM would also include the appropriate measures needed to avoid or minimize adverse impacts, and would be subject to approval by DOH.

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

The project area is located inland and away from the coast. There is no surface or coastal water body such as a stream, river, pond, lake, or ocean located nearby. No impacts to these resources are anticipated.

Physical components of the proposed action would be designed in consideration of the potential hazards posed by hurricanes and other natural hazards to the extent practical. The project area is outside of the 500-year flood plain and outside of the tsunami evacuation zone. A drainage study would be performed to assess any potential changes in drainage patterns that may occur as a result of the proposed action. Should final treatment of the site involve a soil encapsulation system, that system would be designed to accommodate any potential increases in runoff. All development generated runoff that may be associated with future improvement of the site for the consolidation of solid waste management program components would be retained on-site as determined through a separate drainage study. The final drainage system design would be coordinated with the County of Hawai‘i Department of Public Works (DPW) prior to construction.

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

The project area is not located near any South Hilo natural beauty sites. View planes of HSMY from the surrounding area is generally obstructed by dense, tall vegetation that provides a visual barrier for the area. Construction of the proposed action would not significantly alter the topography in such a way that would diminish the aesthetic value of the area.

(13) Requires substantial energy consumption.

The proposed action would require an irrevocable commitment of energy needed for construction of the proposed project. It is anticipated that energy consumption requirements would mostly be associated with the operation of construction equipment and hauling of excavated material to WHSL, if required. These activities would be temporary and management controls would be included in the final closure plan to ensure these activities are carried out as efficiently as possible. In the long-term, energy requirements would be consistent with that of the existing solid waste management program operations.

8. CONSULTATION

8.1 Pre-Assessment Consultation

The following agencies and organizations were consulted during the EA pre-assessment consultation process. Consultation was conducted to solicit comments regarding potential concerns and requirements pursuant to refining the scope of EA documentation. Parties that formally replied during the pre-assessment period are indicated by a "✓" below. All written comments are reproduced and included herein as Appendix A.

Federal Agencies

- ✓ U.S. Army Corps of Engineers
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Environmental Protection Agency
- ✓ U.S. Fish and Wildlife Service
- U.S. Geological Survey, Pacific Islands Water Science Center
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service

State Agencies

- Department of Accounting & General Services
- Department of Business, Economic Development and Tourism (DBEDT)
- DBEDT, Office of Planning
- Department of Defense
- Department of Hawaiian Home Lands
- Department of Health (DOH), Clean Air Branch
- DOH, Clean Water Branch
- DOH, Safe Drinking Water Branch
- ✓ DOH, Solid and Hazardous Waste Branch
- DOH, Wastewater Branch
- DOH, Hazard Evaluation and Emergency Response Office
- DOH, Office of Environmental Quality Control
- ✓ Department of Land and Natural Resources (DLNR)
- ✓ DLNR, Division of Forestry and Wildlife
- DLNR, State Historic Preservation Division
- DLNR, Land Division
- ✓ Department of Transportation
- Hawai'i State Legislature, House District 1
- Hawai'I State Legislature, Senate District 1
- Office of Hawaiian Affairs

County of Hawai'i

- Department of Parks & Recreation
- ✓ Department of Public Works
- Department of Research and Development
- ✓ Department of Water Supply
- Fire Department
- Mass Transit Agency
- Office of the Mayor

Planning Department
✓ Police Department
Hawai‘i County Council, District 3

Other Interested Parties and Individuals

Hawai‘i Gas
Hawaiian Electric Company
Hawaiian Telcom
Spectrum Hawai‘i
✓ Yamada and Sons, Inc.
Jas. W. Glover, Ltd.
Keaukaha Military Reservation

9. REFERENCES

County of Hawaiʻi. (2005). *County of Hawaiʻi General Plan*.

County of Hawaiʻi. (2009). *County of Hawaiʻi Integrated Resources and Solid Waste Management Plan Update: The Path to Zero Waste*.

County of Hawaiʻi Department of Environmental Management. (2018). *South Hilo Landfill Final Closure*. Prepared by Wilson Okamoto Corporation.

County of Hawaiʻi Department of Environmental Management. (2016). *Final Environmental Assessment Former Kealakehe Metal Salvage Facility Remediation and Closure: TMK 7-4-020:016 (portion), North Kona, Island of Hawaiʻi*. Prepared by Integral Consulting, Inc.

County of Hawaiʻi Department of Water Supply. (2010). *Hawaiʻi County Water Use and Development Plan Update, Hawaiʻi Water Plan*. Prepared by Fukunaga & Associates, Inc.

Department of Business, Economic Development and Tourism (DBEDT). (2018). The State of Hawaiʻi Data Book 2018. Retrieved from http://dbedt.hawaii.gov/economic/databook/db2018/

Environmental Protection Agency (EPA). (2016). Climate change indicators: weather and climate. Retrieved from https://www.epa.gov/climate-indicators/weather-climate.

Environmental Resources Management (ERM). (2008). *Preliminary Environmental Assessment, Hilo Transfer Station, Hilo, Hawaiʻi.* ERM Project No. 0061204, prepared for County of Hawaiʻi, Department of Environmental Management.

Escott, G. (2013). *Archaeological Assessment of a Fifty-Acre Quarry Site in Waiākea Ahupuaʻa, South Hilo District, Hawaiʻi Island, Hawaiʻi [TMK (3) 2-1-013:004 (Por.)].* SCS Project Number 1272-2, prepared for Jas. W. Glover, Ltd., Hilo.

Federal Emergency Management Agency, *Flood Insurance Rate Map Panel No.* 1551660885C, effective date September 19, 2012.

Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delparte, 2013: Online Rainfall Atlas of Hawaiʻi. *Bull. Amer. Meteor. Soc.* 94, 313-316, doi: 10.1175/BAMS-D-11-00228.1.

Hawaiʻi Climate Change Mitigation and Adaptation Commission. (2017). *Hawaiʻi Sea Level Rise Vulnerability and Adaptation Report.* Prepared by Tetra Tech, Inc. and the State of Hawaiʻi Department of Land and Natural Resources, Office of Conservation and Coastal Lands, under the State of Hawaiʻi Department of Land and Natural Resources Contract No: 64064.

Johnson, P. (1989). CERCLA Screening Site Inspection Report for the Hilo Rubbish Dump. Prepared for U.S. Environmental Protection Agency, Region IX.

Land Study Bureau, University of Hawaii, *Detailed Land Classification – Island of Hawaii*, L.S.B. Bulletin No. 7, May 1967.

National Cooperative Soil Survey (NCSS). (2008). Papai Series. Accessed at <https://soilseries.sc.egov.usda.gov/OSD_Docs/P/PAPAI.html>.

State of Hawaii Department of Agriculture, *Agricultural Lands of Importance to the State of Hawaii*, adopted by the Board of Agriculture, January 28, 1977.

U.S. Census Bureau. American FactFinder. Retrieved from http://factfinder2.census.gov.

Weston Solutions, Inc. (2005). *Hilo Transfer Station Draft Phase I and Phase II Targeted Brownfields Site Assessment*. USACE Contract No.: DACA45-98-D-0004. Prepared for U.S. Environmental Protection Agency, Region IX.

Wolfe, E.W., and Morris, J., 1996, Geologic map of the island of Hawaii: U.S. Geological Survey Miscellaneous Investigations Series Map I-2524-A, 18 p., 3 sheets, scale 1:100,000.

Appendix A

Pre-Assessment Consultation Documentation

Rebecca Candilasa

From: Speerstra, Linda CIV USARMY CEPOH (US) <Linda.Speerstra@usace.army.mil>
Sent: Tuesday, November 26, 2019 11:46 AM
To: Rebecca Candilasa
Subject: Hilo scrap metal closure and remediation

Aloha Rebecca, thank you for reaching out to the Corps in regards to the Hilo Scrap Metal Closure and Remediation plan. The Honolulu District, U.S. Army Corps of Engineers (Corps), Regulatory Branch has received your request for comments on November 22, 2019 for a Department of the Army (DA) scoping comments in regards to the Hilo metal scrap metal yard closure and remediation. Your request has been assigned DA file number POH-2019-00230. Please reference this number in all future correspondence with our office relating to this action.

To determine if a DA permit is required for a proposed action, the Corps must first determine whether the proposed project is located within the Corps' geographic jurisdiction (i.e., whether the activity is located within a water of the U.S.). If the activity is within a water of the U.S., the Corps must then determine whether the proposed project is a regulated activity under Section 10 and/or Section 404 or if the activity is exempt. The determination provided in this letter pertains only to the question of geographic jurisdiction.

Based on our review of the information you provided we are not able to determine is the project area contains waters of the U.S., and/or wetlands, under the Corps' regulatory jurisdiction. The information submitted indicates that technical reports will be available in the forthcoming DEA. I'm providing the following information in regards to the Regulatory program.

DA authorization is required if you propose to place dredged and/or fill material into waters of the U.S., including wetlands and/or perform work in navigable waters of the U.S.

Section 404 of the Clean Water Act requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including jurisdictional wetlands (33 U.S.C. 1344). The Corps defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Section 10 of the Rivers and Harbors Act of 1899 requires that a DA permit be obtained for structures or work in or affecting navigable waters of the U.S. (33 U.S.C. 403). Section 10 waters are those waters subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or other waters identified by the Hawaii District.

If your proposal involves work in a waters of the US please reach out. I appreciate your cooperation with the Corps' Regulatory Program. You may contact me via email at linda.speerstra@usace.army.mil, by mail at the address above, by phone at (808) 835-4300 if you have questions. For additional information about our Regulatory Program, visit our web site at www.poh.usace.army.mil/Missions/Regulatory.aspx.

Linda Speerstra
Chief, Regulatory Branch
U.S. Army Corps of Engineers
Honolulu District
808-835-4300

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Ms. Linda Speerstra, Chief
Regulatory Branch
U.S. Army Corps of Engineers
Honolulu District
Building 230, Room 205
Fort Shafter, Hawai‘i 96858

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Ms. Speerstra:

Thank you for your e-mail dated November 26, 2019 (DA File No. POH-2019-00230) regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation.

The scope of your comments is acknowledged and will be incorporated into the EA process moving forward.

A .pdf copy of your email, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

In Reply Refer To:
01EPIF00-2020-TA-0097

January 6, 2020

Ms. Rebecca Candilasa
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Subject: Technical Assistance for the Hilo Scrap Metal Yard Environmental Assessment Pre-Consultation in Hilo, Island and County of Hawaii

Dear Ms. Cadilasa:

The U.S. Fish and Wildlife Service (Service) received your correspondence on November 12, 2019, requesting technical assistance for the Hilo Scrap Metal Yard Environmental Assessment Pre-Consultation. The Service offers the following comments to assist you in your planning process so that impacts to trust resources can be avoided through site preparation, construction, and operation. Our comments are provided under the authorities of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C 1531 *et seq.*).

Project Description

The proposed project consists of excavating all waste material and all lead-contaminated substrate in the project area. The excavated non-recyclable waste material and lead contaminated soils that exceed commercial and industrial land use will be disposed of at the West Hawaii Sanitary Landfill (WHSL); recyclable materials will be taken to the Department of Health approved recycling facilities. In addition, waste characterization sampling and analysis will be performed to ensure material is not hazardous waste and is suitable for on-island landfill disposal. If hazard waste is identified, materials will be treated to remove hazardous waste characteristics and disposed on-island or transported to a hazardous waste treatment and disposal facility in the U.S. mainland.

As an alternative, the Department of Environmental Management is also analyzing the cost and benefits of transporting only non-recyclable materials to WHSL and consolidating lead contaminated soils on-site, grading to optimize for future use, and capping with a cover system to prevent direct exposure to lead impacted soils. Other associated activities with the proposed project may include post-excavation confirmation sampling, grading, backfilling portions of the site with a clean aggregate, and vegetating. The final treatment of soil will need to be consistent

with the State of Hawaii Department of Health (DOH) guidelines for managing contaminated soils and will be subject to approval by DOH.

Based on information you provided in the Use Permit Application and pertinent information in our files, including data compiled by the Hawaii Biodiversity and Mapping Project, there are five listed animal species in the immediate vicinity of the project area: The federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*), Hawaiian hawk (*Buteo solitarius*), Hawaiian petrel (*Pterodroma sandwichensis*), band-rumped storm-petrel (*Oceanodroma castro*), and the threatened Newell's shearwater (*Puffinus auricularis newelli*).

The Service recommends the following measures to avoid and minimize project impacts to the following listed species:

Hawaiian hoary bat

The Hawaiian hoary bat roosts in both exotic and native woody vegetation across all islands and will leave young unattended in trees and shrubs when they forage. If trees or shrubs 15 feet or taller are cleared during the pupping season, there is a risk that young bats could inadvertently be harmed or killed since they are too young to fly or may not move away. Additionally, Hawaiian hoary bats forage for insects from as low as 3 feet to higher than 500 feet above the ground and can become entangled in barbed wire used for fencing.

To avoid and minimize impacts to the endangered Hawaiian hoary bat we recommend you incorporate the following applicable measures into your project description:

- Do not disturb, remove, or trim woody plants greater than 15 feet tall during the bat birthing and pup rearing season (June 1 through September 15).
- Do not use barbed wire for fencing.

Hawaiian hawk

The Hawaiian hawk is known to occur across a broad range of forest habitats throughout the Island of Hawaii. Loud, irregular and unpredictable activities, such as using heavy equipment or building a structure, near an endangered Hawaiian hawk nest may cause nest failure. Harassment of Hawaiian hawk nesting sites can alter feeding and breeding patterns or result in nest or chick abandonment. Nest disturbance can also increase exposure of chicks and juveniles to inclement weather or predators.

To avoid and minimize impacts to Hawaiian hawks we recommend you incorporate the following applicable measures into your project description:

- If work must be conducted during the March 1 through September 30 Hawaiian hawk breeding season, have a biologist familiar with the species conduct a nest search of the project footprint and surrounding areas immediately prior to the start of construction activities.
    - Pre-disturbance surveys for Hawaiian hawks are only valid for 14 days. If disturbance for the specific location does not occur within 14 days of the survey, conduct another survey.

- No clearing of vegetation or construction activities should occur within 1,600 feet of any active Hawaiian hawk nest during the breeding season until the young have fledged.
- Regardless of the time of year, no trimming or cutting trees containing a hawk nest, as nests may be re-used during consecutive breeding seasons.

Hawaiian petrel, Newell's shearwater, and band-rumped storm petrel

Hawaiian seabirds may traverse the project area at night during the breeding, nesting and fledging seasons (March 1 to December 15). Outdoor lighting could result in seabird disorientation, fallout, and injury or mortality. Seabirds are attracted to lights and after circling the lights they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable.

To avoid and minimize potential project impacts to seabirds we recommend you incorporate the following applicable measures into your project description:

- Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when necessary.
- Install automatic motion sensor switches and controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 through December 15.

Biosecurity and Invasive Species

Please see the attached Biosecurity Protocols to prevent the introduction and spread of harmful invasive species on the island of Hawaii.

For all alternatives, we recommend you evaluate and consider human health considerations in conjunction with your evaluation of environmental effects. We suggest you coordinate with DOH and adjacent landowners as you finalize remediation measures to ensure that the present and future threat to public health and the environment is addressed.

Thank you for participating with us in the protection of our endangered species. If you have any further questions or concerns regarding this consultation, please contact Eldridge Naboa, Fish and Wildlife Biologist, 808-284-0037, e-mail: eldridge_naboa@fws.gov. When referring to this project, please include this reference number: ***01EPIF00-2020-TA-0097***.

Sincerely,

MICHELLE BOGARDUS

Digitally signed by MICHELLE BOGARDUS
Date: 2020.01.06 16:16:59 -10'00'

Michelle Bogardus
Island Team Manager
Maui Nui and Hawaii Island

BIOSECURTY PROTOCOL – HAWAII ISLAND (JULY 2018)

The following biosecurity protocol (based on National Park Service, State of Hawaii, U.S. Fish and Wildlife, U.S. Geological Survey, and the DOI Office of Native Hawaiian Relations guidance) should be followed when operating on Hawaii Island to prevent the introduction of harmful invasive species including frogs, ants, weeds, and fungi into local natural areas (e.g., Hawaii Volcanoes National Park, Hakalau Forest National Wildlife Refuge, State of Hawaii "Natural Areas") and areas with native habitat (habitat that is primarily composed of native vegetation), other islands in Hawaiian archipelago, or the U.S. mainland. The protocol also includes suggestions for keeping field staff safe from certain invasive species.

1. All work vehicles, machinery, and equipment should be cleaned, inspected by its user, and found free of mud, dirt, debris and invasive species prior to entry into the natural areas or native habitat.

a. Vehicles, machinery, and equipment must be thoroughly pressure washed in a designated cleaning area and visibly free of mud, dirt, plant debris, insects, frogs (including frog eggs) and other vertebrate species such as rats, mice and non-vegetative debris. A hot water wash is preferred. Areas of particular concern include bumpers, grills, hood compartments, areas under the battery, wheel wells, undercarriage, cabs, and truck beds (truck beds with accumulated material (intentionally placed or fallen from trees) are prime sites for hitchhikers).

b. The interior and exterior of vehicles, machinery, and equipment must be free of rubbish and food. The interiors of vehicles and the cabs of machinery must be vacuumed clean. Floor mats shall be sanitized with a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.

c. Any machinery, vehicles, equipment, or other supplies found to be infested with ants (or other invasive species) must not enter natural areas or native habitat. Treatment is the responsibility of the equipment or vehicle owner and operator.

2. Little Fire Ants – All work vehicles, machinery, and equipment should be inspected for invasive ants prior to entering the natural areas or native habitat.

a. A visual inspection for little fire ants should be conducted prior to entry into natural areas or native habitat.

b. Hygiene is paramount but even the cleanest vehicle can pick up a little fire ant. Place MaxForce Complete Brand Granular Insect Bait (1.0% Hydramethylnon; http://littlefireants.com/Maxforce%20Complete.pdf) into refillable tamper resistant bait stations. An example of a commercially available refillable tamper resistant bait station is the Ant Café Pro (https://www.antcafe.com/). Place a bait station (or stations) in vehicle. Note larger vehicles, such as trucks, may require multiple stations. Monitor bait stations frequently (every week at a minimum) and replace bait as needed. If the station does not have a sticker to identify the contents, apply a sticker listing contents to the station.

c. Any machinery, vehicles, equipment, or other supplies found to be infested with ants (or other invasive species) must not enter natural areas or native habitat until it is sanitized and re-tested following a resting period. Infested vehicles must be sanitized following recommendations by

the Hawaii Ant Lab (http://www.littlefireants.com/) or other ant control expert and in accordance with all State and Federal laws. Treatment is the responsibility of the equipment or vehicle owner.

d. Gravel, building materials, or other equipment such as portable buildings should be baited using MaxForce Complete Brand Granular Insect Bait (1.0% Hydramethylnon; http://littlefireants.com/Maxforce%20Complete.pdf) or AmdroPro (0.73% Hydramethylnon; http://littlefireants.com/Amdro%20Pro.pdf) following label guidance.

e. Storage areas that hold field tools, especially tents, tarps, and clothing should be baited using MaxForce Complete Brand Granular Insect Bait (1.0% Hydramethylnon; http://littlefireants.com/Maxforce%20Complete.pdf) or AmdroPro (0.73% Hydramethylnon; http://littlefireants.com/Amdro%20Pro.pdf) following label guidance.

3. Base yards and staging areas inside and outside areas must be kept free of invasive species.
a. Base yards and staging areas should be inspected at least weekly for invasive species and any found invasive removed immediately. Pay particular attention to where vehicles are parked overnight, keeping areas within 10-meters of vehicles free of debris. Parking on pavement and not under trees, while not always practical is best.

b. Project vehicles or equipment stored outside of a base yard or staging area, such as a private residence, should be kept in a pest free area.

4. All cutting tools must be sanitized to prevent the Rapid Ohia Death (ROD) fungus.
a. Avoid wounding ohia trees and roots with mowers, chainsaws, weed eaters, and other tools. Cut only the minimum amount of trees and branches as approved for the project.

b. All cutting tools, including machetes, chainsaws, and loppers must be sanitized to remove visible dirt and other contaminants prior to entry into natural areas or areas with native habitat, and when moving to a new project area within the native habitat area. Tools may be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution. One minute after sanitizing, you may apply an oil based lubricant to chainsaw chains or other metallic parts to prevent corrosion.

c. Only dedicated tools and chainsaws should be used to sample known or suspected ROD infected trees.

d. Vehicles, machinery, and equipment must be cleaned as described in (1) above.

5. Imported firewood, logs, and ohia parts:
a. Ohia firewood, ohia logs, and ohia parts should not be transported.

6. For individuals working in the field:
a. **Before going into the field**, visually inspect and clean your clothes, boots, pack, radio harness, tools and other personal gear and equipment, for seeds, soil, plant parts, insects, and other debris. A small brush is handy for cleaning boots, equipment and gear. Soles of shoes

should be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.

b. **Immediately before leaving the field,** visually inspect and clean your clothes, boots, pack, radio harness, tools, and other personnel gear and equipment, for seeds, soil, plant parts, insects, and other debris. Soles of shoes should be sanitized using a solution of >70% isopropyl alcohol or a freshly mixed 10% bleach solution.

c. **Little fire ants nest in trees.** If you are under a tree and that tree is bumped or somehow stressed, the threat response of the ants is to fall from the leaves and sting the person under the tree. If you are subject to an ant attack, do not panic. The ants are extremely small but their stings are painful so make sure you remove all ants from your body and clothing. The stings cause inch long welts that are itchy and painful, and can last for weeks. Treat stings as you would other insect stings. In some persons stings can produce life threatening reactions. Stocking antihistamine in the first aid kit is a reasonable precaution.

d. **Rat Lungworm disease** is caused by a parasite that can infect humans who consume raw or undercooked infected snails or slugs or consume raw produce that contains a small infected snail or slug. Infection is rare but can be serious. Symptoms can include severe headache, neck stiffness, low grade fever, nausea, and vomiting anywhere from 1-6 weeks after exposure. The disease is not spread person to person. Anyone who handles snails or slugs should wear gloves and/or wash hands. Eating unwashed produce is discouraged.

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Ms. Michelle Bogardus, Island Team Manager
Maui Nui and Hawaii Island
Pacific Islands Fish and Wildlife Office
U.S. Fish and Wildlife Service
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawai‘i 96850

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Ms. Bogardus:

Thank you for your letter dated January 6, 2020 (Reference No. 01EPIF00-2020-TA-0097) regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation.

The scope of your comments is acknowledged and will be incorporated into the EA process moving forward.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 2, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

DAVID Y. IGE
GOVERNOR OF HAWAII

BRUCE S. ANDERSON, Ph.D.
DIRECTOR OF HEALTH

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

In reply, please refer to:
File:

December 3, 2019 S1119TN

RECEIVED
DEC 06 2019
WILSON OKAMOTO CORPORATION

Ms. Rebecca Candilasa
Wilson Okamoto Corporation
1907 S. Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Ms. Candilasa:

SUBJECT: November 8, 2019, Request for Comments
Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Closure and Remediation
Hilo, Hawaii, TMK: (3) 2-1-013:150

The Department of Health (DOH), Solid Waste Section is in receipt of the following request for comments and has the following comments.

1. The environmental assessment for the site should address the former landfill at the site (see September 7, 1995, DOH, Hazard Evaluation and Emergency Response (HEER) Office, Site Inspection Prioritization, Hilo Rubbish Dump, HID000606582; and US EPA, September 2005, Hilo Transfer Station Draft Phase I and Phase II Targeted Brownfields Site Assessment). If you require a copy of the aforementioned documents, please feel free to contact us.

2. The site is located within the General Lyman Field formerly used defense site and was used by the Army and the Navy, for activities that included training activities. The environmental assessment should consider this and address any potential hazards that may be associated with this past activity. Please contact the DOH-HEER Office as soon as possible to discuss potential munitions of concerns and how to address them properly.

3. As noted in the project summary, the subject facility encroached onto neighboring properties. The environmental assessment should include any properties that were encroached on.

Should you have any questions regarding this letter, please contact Mr. Todd Nichols of our Solid Waste Section at (808) 586-4226.

Sincerely,

for LENE ICHINOTSUBO, P.E., ACTING CHIEF
Solid and Hazardous Waste Branch

c: Ms. Fenix Grange, DOH-HEER Office

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Ms. Lene Ichinotsubo, P.E., Acting Chief
Solid and Hazardous Waste Branch
Department of Health
State of Hawai‘i
P.O. Box 3378
Honolulu, Hawai‘i 96801-3378

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Ms. Ichinotsubo:

Thank you for your letter dated December 3, 2019 (Reference No. S1119TN) regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation.

The scope of your comments is acknowledged and will be incorporated into the EA process moving forward.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 5, 2019

Wilson Okamoto Corporation
Attn: Ms. Rebecca Candilasa
1907 South Beretania St., Ste. 400
Honolulu, Hawaii 96826

via email: woc@wilsonokamoto.com

Dear Ms. Candilasa:

SUBJECT: Environmental Assessment Pre-Assessment Consultation for **Hilo Scrap Metal Closure and Remediation Project** located at Hilo, Island of Hawaii; TMK: (3) 2-1-013:150 and (3) 2-1-012:029 on behalf of County of Hawaii Department of Environmental Management

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

At this time, enclosed are comments from the (a) Engineering Division, (b) Division of Forestry & Wildlife, and (c) Land Division – Hawaii District on the subject matter. Should you have any questions, please feel free to contact Darlene Nakamura at (808) 587-0417 or email: darlene.k.nakamura@hawaii.gov. Thank you.

Sincerely,

for Russell Y. Tsuji
Land Administrator

Enclosures
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
LAND DIVISION
2019 NOV 22 AM 11:47
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

November 18, 2019

MEMORANDUM

TO: FROM

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
__Office of Conservation & Coastal Lands
X Land Division – Hawaii District
X Historic Preservation

FROM: TO Russell Y. Tsuji, Land Administrator
SUBJECT: Environmental Assessment Pre-Assessment Consultation for **Hilo Scrap Metal Closure and Remediation Project**
LOCATION: Hilo, Island of Hawaii; TMK: (3) 2-1-013:150 and (3) 2-1-012:029
APPLICANT: Wilson Okamoto Corporation on behalf of County of ~~Maui~~ Hawaii, Department of Environmental Management

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit comments by **December 4, 2019.**

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 Darlene Nakamura at 587-0417 or by email at darlene.k.nakamura@hawaii.gov. Thank you.

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

Signed: _____

Print Name: Carty S. Chang, Chief Engineer

Date: 11/21/19

Attachments
cc: Central Files

2342

DAVID Y. IGE
GOVERNOR OF HAWAII

RECEIVED
LAND DIVISION
DEC -3 AM 11:10
DEPT. OF LAND
NATURAL RESOURCES
STATE OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

November 18, 2019

MEMORANDUM

FROM

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
__Office of Conservation & Coastal Lands
X Land Division – Hawaii District
X Historic Preservation

TO

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Environmental Assessment Pre-Assessment Consultation for **Hilo Scrap Metal Closure and Remediation Project**
LOCATION: Hilo, Island of Hawaii; TMK: (3) 2-1-013:150 and (3) 2-1-012:029
APPLICANT: Wilson Okamoto Corporation on behalf of County of ~~Maui~~ Hawaii, Department of Environmental Management

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit comments by **December 4, 2019.**

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 Darlene Nakamura at 587-0417 or by email at darlene.k.nakamura@hawaii.gov. Thank you.

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

Signed: _____

Print Name: **DAVID G. SMITH, Administrator**

Date: 11/29/19

Attachments
cc: Central Files

DAVID Y. IGE
GOVERNOR OF HAWAII

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

November 18, 2019

RECEIVED
LAND DIVISION
HILO, HAWAII
2019 NOV 20 P 2:23

RECEIVED
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII
2019 NOV 27 PM 2:39

RECEIVED
LAND DIVISION

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
__Office of Conservation & Coastal Lands
X Land Division – Hawaii District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Environmental Assessment Pre-Assessment Consultation for **Hilo Scrap Metal Closure and Remediation Project**
LOCATION: Hilo, Island of Hawaii; TMK: (3) 2-1-013:150 and (3) 2-1-012:029
APPLICANT: Wilson Okamoto Corporation on behalf of County ~~of Maui~~ Hawaii, Department of Environmental Management

Transmitted for your review and comment is information on the above-referenced subject matter. Please submit comments by **December 4, 2019.**

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 Darlene Nakamura at 587-0417 or by email at darlene.k.nakamura@hawaii.gov. Thank you.

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

Signed: [signature]

Print Name: GORDON C. HEIT

Date: 11/27/19

Attachments
cc: Central Files

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Mr. Russell Y. Tsuji, Land Administrator
Land Division
Department of Land and Natural Resources
State of Hawai‘i
P.O. Box 621
Honolulu, Hawai‘i 96809

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Mr. Tsuji:

Thank you for your letter dated December 5, 2019 with comments from the (a) Engineering Division, (b) Division of Forestry & Wildlife, and (c) Land Division – Hawai‘i District regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation. We acknowledge that all either had no comments or no objections to the proposed action.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

DAVID Y. IGE
GOVERNOR

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:
DIR 1157
STP 8.2804

December 7, 2019

Ms. Rebecca Candilasa
Project Manager
Wilson Okamoto Corporation
1907 Beretania Street, Suite 400
Honolulu, Hawaii 96826

RECEIVED
DEC 09 2019
WILSON OKAMOTO CORPORATION

Dear Ms. Candilasa:

Subject: Hilo Scrap Metal Closure and Remediation
Environmental Assessment Pre-Assessment Consultation
Hilo, Hawaii
TMK: (3) 2-1-013:150

The Hawaii Department of Transportation (HDOT) understands the County of Hawaii Department of Environmental Management (DEM) is proposing to permanently close and remediate the site of the former Hilo Scrap Metal Yard located at the Hilo Transfer Station.

Since the proposed action is for the closure and remediation of the prior activity at the site, it is not anticipated that there would be any significant impact to our highway facilities. DEM should coordinate their actions with the Highways Division, Hawaii District Engineer and obtain any permits that may be necessary.

If there are any questions, please contact Mr. Blayne Nikaido of the HDOT Statewide Transportation Planning Office at (808) 831-7979 or via email at blayne.h.nikaido@hawaii.gov.

Sincerely,

JADE T. BUTAY
Director of Transportation

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Mr. Jade T. Butay, Director
Department of Transportation
State of Hawai‘i
869 Punchbowl Street
Honolulu, Hawai‘i 96813-5097

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Mr. Butay:

Thank you for your letter dated December 7, 2019 (Reference No. DIR 1157; STP 8.2804) regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation.

The scope of your comments is acknowledged and will be incorporated into the EA process moving forward.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

Harry Kim
Mayor

Wil Okabe
Managing Director

David Yamamoto, P.E.
Director

Allan G. Simeon, P.E.
Deputy Director

County of Hawai'i
DEPARTMENT OF PUBLIC WORKS
Aupuni Center
101 Pauahi Street, Suite 7 · Hilo, Hawai'i 96720-4224
(808) 961-8321 · Fax (808) 961-8630
public_works@hawaiicounty.gov

November 15, 2019

RECEIVED
NOV 18 2019
WILSON OKAMOTO CORPORATION

Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
Attention: Ms. Rebecca Candilasa

SUBJECT: EARLY CONSULTATION FOR ENVIRONMENTAL ASSESSMENT FOR HILO SCRAP METAL CLOSURE AND REMEDIATION
HILO, ISLAND OF HAWAII, HAWAII
TMK: (3) 2-1-013:150

We have reviewed the request for early consultation for an Environmental Assessment dated September 8, 2019 and have the following comments:

1. All development generated runoff shall be disposed of on-site and shall not be directed toward adjacent properties. A drainage study shall be prepared by a licensed civil engineer and the recommended drainage system shall be constructed meeting the approval of the Department of Public Works.

2. All earthwork and grading activity shall conform to Chapter 10, Erosion and Sedimentary Control, of the Hawaii County Code.

3. The subject parcel is in an area designated as Zone X on the Flood Insurance Rate Map (FIRM) by the Federal Emergency Management Agency (FEMA). Zone X is an area determined to be outside the 500-year floodplain.

Should there be any questions concerning this matter, please contact Bryce Harada of our Engineering Division at (808) 961-8042.

For BEN ISHII, Division Chief
Engineering Division

BH

cc: DPW Engineering – Hilo
Planning Department
Mr. Gene Quiamas, County of Hawaii - DEM

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Mr. Ben Ishii, Division Chief
Engineering Division
County of Hawai‘i
Department of Public Works
101 Pauahi Street, Suite 7
Hilo, Hawai‘i 96720-4224

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Mr. Ishii:

Thank you for your letter dated November 15, 2019 regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation.

The scope of your comments is acknowledged and will be incorporated into the EA process moving forward.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAI'I
345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAI'I 96720
TELEPHONE (808) 961-8050 • FAX (808) 961-8657

November 26, 2019

RECEIVED
DEC 02 2019
WILSON OKAMOTO CORPORATION

Ms. Rebecca Candilasa
1907 South Beretania Street, Suite 400
Honolulu, HI 96826

Dear Ms. Candilasa:

Subject: Pre-Assessment Consultation for Hilo Scrap Metal Closure and Remediation
Hilo, Hawai'i Isalnd, Hawai'i
Tax Map Key 2-1-013:150

Dear Ms. Candilasa:

This is in response to your Pre-Environmental Assessment letter dated November 8, 2019.

Please be informed that the subject parcel has an existing water service for the East Hawai'i Regional Sort Station. There is an existing 12-inch waterline along Ho'olaulima Road and within the subject parcel.

If water is required, the Department would request estimated maximum daily water usage calculations, prepared by a professional engineer licensed in the State of Hawai'i, for review. After review of the calculations, the Department will determine if a water commitment can be issued, a water commitment deposit amount, facilities charges due, water system improvements, and other conditions for final approval.

Please also be informed that any meter(s) serving the proposed project will require the installation of a reduced principle type backflow prevention assembly within five feet of the meter on private property. The Department must inspect and approve the installation prior to commencement of water service.

Should there be any questions, please contact Mr. Ryan Quitoriano of our Water Resources and Planning Branch at 961-8070, extension 256.

Sincerely yours,

Keith K. Okamoto, P.E.
Manager-Chief Engineer

RQ:dfg

copy –County of Hawai'i, Department of Environmental Management

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Mr. Keith K. Okamoto, P.E., Manager-Chief Engineer
Department of Water Supply
County of Hawai‘i
345 Kekūanaō‘a Street, Suite 20
Hilo, Hawai‘i 96720

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Mr. Okamoto:

Thank you for your letter dated November 26, 2019 regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation.

The scope of your comments is acknowledged and will be incorporated into the EA process moving forward.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

Harry Kim
Mayor

Paul K. Ferreira
Police Chief

Kenneth Bugado Jr.
Deputy Police Chief

County of Hawai`i

POLICE DEPARTMENT
349 Kapiolani Street • Hilo, Hawai`i 96720-3998
(808) 935-3311 • Fax (808) 961-8865

November 22, 2019

RECEIVED
NOV 27 2019
WILSON OKAMOTO CORPORATION

Ms. Rebecca Candilasa
Project Manager
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, HI 96826

Dear Ms. Candilasa:

Subject: Environmental Assessment Pre-Assessment Consultation for Hilo Scrap Metal Closure and Remediation Hilo, Hawaii Island, Hawaii TMK: (3) 2-1-013:150

Staff, upon reviewing the provided documents, does not anticipate any significant impact to traffic and/or public safety concerns.

Thank you for allowing us the opportunity to comment.

If you have any questions, please contact Captain Kenneth Quiocho, South Hilo Patrol, at 961-2214, or via email at Kenneth.Quiocho@hawaiicounty.gov.

Sincerely,

JAMES B. O'CONNOR
ASSISTANT POLICE CHIEF
AREA I OPERATIONS BUREAU

KQ:lli/19HQ1173

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Mr. James B. O'Connor, Assistant Police Chief
Area I Operations Bureau
County of Hawai'i
Police Department
349 Kapiolani Street
Hilo, Hawai'i 96720-3998

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai'i Island, Hawai'i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Mr. O'Connor:

Thank you for your letter dated November 22, 2019 regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation. We acknowledge that the Police Department does not anticipate any significant impact to traffic and/or public safety concerns based on the documents provided.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai'i

From: Shellby Yamada <syamada@yamadasons.com>
Sent: Friday, November 15, 2019 4:14 PM
To: Rebecca Candilasa
Cc: Quiamas, Gene (Gene.Quiamas@hawaiicounty.gov)
Subject: RE: Pre-Assessment Consultation for Hilo Scrap Metal Closure and Remediation

Rebecca,

Thank you for allowing us the opportunity to comment on the subject project. We have no comment at this time.

Being that our crushing operation is in close proximity to the subject area we would appreciate if we could be notified once the Draft EA is completed and available for review.

Thank you.

Shellby Yamada

Yamada and Sons, Inc.
733 Kanoelehua Ave.
Hilo, HI 96720
Main: (808) 933-8400
Direct: (808) 933-8434
Fax: (808) 933-8415
Email: syamada@yamadasons.com

CONFIDENTIALITY NOTICE: This e-mail message, including any attachments, is for the sole purpose of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS

10455-01
July 2, 2020

Ms. Shellby Yamada
Yamada and Sons, Inc.
733 Kanoelehua Avenue
Hilo, Hawai‘i 96720

Subject: Environmental Assessment Pre-Assessment Consultation
Hilo Scrap Metal Yard Closure and Remediation
Hilo, Hawai‘i Island, Hawai‘i
Tax Map Key: (3) 2-1-013:150 (por.)

Dear Ms. Yamada:

Thank you for your e-mail dated November 15, 2019 regarding the subject Environmental Assessment (EA) Pre-Assessment Consultation. We acknowledge that Yamada and Sons, Inc. has no comments at this time and note that the company's crushing operations are in close proximity to the project area.

A .pdf copy of your email, along with this response, will be reproduced and included in the forthcoming Draft EA. It is anticipated that the Draft EA will be published and available for review in the July 8, 2020 issue of the Office of Environmental Quality Control's (OEQC) Environmental Notice. Please use the following link to view this issue of the Notice:

(http://oeqc2.doh.hawaii.gov/The_Environmental_Notice/2020-07-08-TEN.pdf)

We appreciate your participation in the EA Pre-Assessment Consultation review process.

Sincerely,

Rebecca Candilasa
Project Manager

cc: Mr. Gene Quiamas, Department of Environmental Management, County of Hawai‘i

WILSON OKAMOTO
CORPORATION
INNOVATORS • PLANNERS • ENGINEERS
1907 South Beretania Street, Suite 400
Honolulu, Hawaii, U.S.A. 96826
www.wilsonokamoto.com
PH 808-946-2277 FX 808-946-2253