



UNIVERSITY  
of HAWAII\*

**HILO**

May 4, 2015

Jessica Wooley, Director  
Office of Environmental Quality Control  
235 South Beretania Street, Suite 702  
Honolulu HI 96813

Dear Ms. Wooley:

**Subject: Draft Environmental Assessment for University of Hawai'i at Hilo  
Kawili Street Pedestrian Overpass, TMK (3<sup>rd</sup>.) 2-4-001:005 and  
167, Hilo, Island of Hawai'i**

The University of Hawai'i at Hilo has prepared the draft environmental assessment for the subject project and anticipates a Finding of No Significant Impact (FONSI) determination. Please publish notice of availability for this project in the next available edition of the Environmental Notice. We have enclosed the following:

- One paper copy of the Draft EA;
- A CD containing the pdf file for the EA and a WORD file with the OEQC Environmental Notice Publication Form; and
- A hardcopy of the OEQC publication form

Please contact Lo-Li Chih of the Facilities Planning and Construction Office at 974-7595 if you have any questions.

Sincerely,

Marcia Sakai  
Vice Chancellor for Administrative Affairs

Enclosures: As noted above

cc: (w/o attach) Ron Terry, Ph.D, Project Environmental Consultant

RECEIVED

'15 MAY -7 A7:53

OFF. OF ENVIRONMENTAL  
QUALITY CONTROL

FILE COPY

MAY 23 2015

**ADMINISTRATION** *Administrative Affairs*

200 W. Kawili St. Hilo, HI 96720-4091 • Phone (808) 932-7650 • Fax: (808) 932-7338 • www.uhh.hawaii.edu  
An Equal Opportunity/Affirmative Action Institution

**AGENCY ACTIONS  
SECTION 343-5(B), HRS  
PUBLICATION FORM (FEBRUARY 2013 REVISION)**

**Project Name** University of Hawai'i at Hilo Kawili Street Pedestrian Overpass  
**Island:** Hawai'i  
**District:** South Hilo  
**TMK:** (3rd) 2-4-001:005 and 167  
**Permits:**  
Hawai'i County Department of Public Works: Easement; Building Permit, Grading Permit, and Drainage Approval  
Hawai'i County Planning Department: Plan Approval

**Proposing/Determination Agency:**  
University of Hawai'i at Hilo, Facilities Planning and Construction Office  
200 W. Kawili Street  
Hilo, Hawai'i 96720  
Lo-li Chih, 974-7595

**Consultant:**  
Geometrician Associates  
PO Box 396  
Hilo HI 96721  
Ron Terry Ph. (808) 969-7090 rterry@hawaii.rr.com

**Status (check one only):**

- DEA-AFNSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); a 30-day comment period ensues upon publication in the periodic bulletin.
- FEA-FONSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); no comment period ensues upon publication in the periodic bulletin.
- FEA-EISPN** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); a 30-day consultation period ensues upon publication in the periodic bulletin.
- Act 172-12 EISPN** Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)). NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
- DEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to [oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); a 45-day comment period ensues upon publication in the periodic bulletin.
- FEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to

[oeqchawaii@doh.hawaii.gov](mailto:oeqchawaii@doh.hawaii.gov)); no comment period ensues upon publication in the periodic bulletin.

\_\_\_ Section 11-200-23  
Determination

The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.

\_\_\_ Section 11-200-27  
Determination

The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.

\_\_\_Withdrawal (explain)

**Summary** The University of Hawai'i at Hilo (UH Hilo) plans a pedestrian overpass above Kawili Street between the new Student Housing and the Campus Center. The project would increase safety for pedestrians, as hundreds of students cross the intersection hourly, and improve traffic flow, as there will be far fewer pedestrians who need to cross at-grade and thus delay vehicle traffic. The bridge has been designed as an architectural landmark defining a gateway to the campus. The approaches will include sinuous paths through attractively landscaped plazas with stone and concrete features and numerous native 'ohi'a trees and hapu'u tree ferns and ornamental vegetation. The minimum clear height from the bottom of the bridge to the top of the Kawili Street roadway will be 16 feet. The bridge will be covered with roofing, with gutters and downspouts to divert water. Over Kawili Street, it will be enclosed with decorative metal panels for safety. In other areas, the sides of the bridge may be open except for the required guardrails, providing unique views. The project will be appropriately accessible in conformance with the ADA. Other features include motion sensor LED lighting, a drinking fountain, vending machines, built-in seating, security cameras, emergency phones and WiFi. The surface of the site has been completely altered by construction of campus and roadway facilities and no native vegetation, rare, threatened or endangered species, or archaeological sites are present. SHPD has determined that there will be no effects to historic properties.

# **DRAFT ENVIRONMENTAL ASSESSMENT**

## **University of Hawai‘i at Hilo Kawili Street Pedestrian Overpass**

TMK: (3rd) 2-4-001:005 and 167  
South Hilo District, Hawai‘i Island, State of Hawai‘i

May 2015

Prepared for:  
State of Hawai‘i  
University of Hawai‘i at Hilo  
200 W. Kawili Street  
Hilo, Hawai‘i 96720



# **DRAFT ENVIRONMENTAL ASSESSMENT**

## **University of Hawai'i at Hilo Kawili Street Pedestrian Overpass**

TMK: (3rd) 2-4-001:005 and 167  
South Hilo District, Hawai'i Island, State of Hawai'i

### **PROPOSING/ APPROVING AGENCY:**

State of Hawai'i  
University of Hawai'i at Hilo  
200 W. Kawili Street  
Hilo, Hawai'i 96720

### **CONSULTANTS:**

Geometrician Associates LLC  
PO Box 396  
Hilo, Hawai'i 96721

### **CLASS OF ACTION:**

Use of State Land  
Use of State Funds

This document is prepared pursuant to:

The Hawai'i Environmental Protection Act,  
Chapter 343, Hawai'i Revised Statutes (HRS), and  
Title 11, Chapter 200, Hawai'i Department of Health Administrative Rules (HAR).

**[This page intentionally left blank]**

## TABLE OF CONTENTS

SUMMARY .....	ii
PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED AND EA PROCESS ...	1
1.1 Project Location, Description and Purpose and Need .....	1
1.2 Environmental Assessment Process .....	7
1.3 Public Involvement and Agency Coordination .....	7
PART 2: ALTERNATIVES.....	8
2.1 No Action .....	8
2.2 Alternative Locations and Strategies .....	8
PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION .....	9
3.1 Physical Environment .....	9
3.1.1 Climate, Geology, Soils and Geologic Hazard .....	9
3.1.2 Drainage, Water Features and Water Quality .....	10
3.1.3 Flora, Fauna, and Ecosystems .....	10
3.1.4 Air Quality, Noise and Scenic Resources .....	11
3.1.5 Hazardous Substances, Toxic Waste and Hazardous Conditions .....	12
3.2 Socioeconomic and Cultural .....	14
3.2.1 Socioeconomic Characteristics .....	14
3.2.2 Cultural Setting .....	14
3.2.3 Archaeology and Historic Sites .....	16
3.3 Infrastructure .....	19
3.3.1 Utilities .....	19
3.3.2 Roadways and Traffic .....	20
3.4 Secondary and Cumulative Impacts.....	20
3.5 Required Permits and Approvals .....	22
3.6 Consistency With Government Plans and Policies .....	22
3.6.1 Hawai‘i State Plan.....	22
3.6.2 Hawai‘i County General Plan and Zoning .....	23
3.6.3 Hawai‘i State Land Use Law .....	24
PART 4: DETERMINATION .....	24
PART 5: FINDINGS AND REASONS .....	24
REFERENCES .....	26

### LIST OF FIGURES

FIGURE 1 USGS Map .....	2
FIGURE 2 TMK Map .....	3
FIGURE 3 Project Site Photographs .....	4
FIGURE 2 Site Plan .....	5
FIGURE 5 Visual Environment Elements .....	13

**LIST OF TABLES**

TABLE 1 Selected Socioeconomic Characteristics..... 15  
TABLE 2 Projects with Potential for Cumulative Impacts ..... 22

**LIST OF APPENDICES**

APPENDIX 1a Comments in Response to Early Consultation

**SUMMARY OF THE PROPOSED ACTION,  
ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

The University of Hawai‘i at Hilo (UH Hilo) plans to construct a new pedestrian overpass above Kawili Street between the new Student Housing project (Hale Alahonua) and the Campus Center, near the main campus entrance. The project would increase safety for pedestrians, as hundreds of students cross the intersection hourly, and improve traffic flow, as there will be far fewer pedestrians who need to cross at-grade and thus delay vehicle traffic.

The bridge has been designed to be an architectural landmark defining a gateway to the campus. The approaches to the bridge will include sinuous paths through attractively landscaped plazas with stone and concrete features and numerous native ‘ohi‘a trees and hapu‘u tree ferns, as well as palms, bromeliads and lawn. The bridge will have a minimum clear height from the bottom of the bridge to the top of the Kawili Street roadway surface of 16 feet. The entire length of the bridge will be covered with roofing, with gutters and downspouts to divert the water to the ground. Over Kawili Street, it will be enclosed with decorative metal panels for safety. In other areas, the sides of the bridge may be open except for the required guardrails, providing unique views of the campus landscape. The project will be reviewed by the Disability and Communication Access Board (DCAB) to ensure that it is appropriately accessible. Other features include LED lighting (motion sensor and dimmable), a drinking fountain, vending machines, built-in seating, security cameras, emergency phones and WiFi.

The surface of the site has been completely altered by construction of campus and roadway facilities and no native vegetation, rare, threatened or endangered species, or archaeological sites are present. The State Historic Preservation Division has determined that there will be no effects to historic properties.

## **PART 1: PROJECT DESCRIPTION, PURPOSE AND NEED AND ENVIRONMENTAL ASSESSMENT PROCESS**

### **1.1 Project Location, Description and Purpose and Need**

#### *Project Location and Description*

The University of Hawai‘i at Hilo (UH Hilo) plans to construct a new pedestrian overpass above Kawili Street between the new Student Housing project (Hale Alahonua) and the Campus Center, near the main campus entrance (Figures 1-4). The bridge would connect the main campus, which is north of Kawili Street, to an important area of future planned UH Hilo growth south of Kawili Street that includes the new residential facility and future campus residential and commercial uses. The purpose and need of the project is primarily to increase safety for pedestrians, as hundreds of students cross the intersection hourly. It will also improve traffic flow, as there will be far fewer pedestrians who need to cross at-grade and thus delay vehicle traffic.

As shown in Figure 4, the bridge has been designed to be an architectural landmark defining a gateway to the campus. The approaches to the bridge will include sinuous paths through attractively landscaped plazas with stone and concrete features and numerous native ‘*ohi ‘a* trees and *hapu ‘u* tree ferns, as well as palms, bromeliads and lawn. The bridge will consist of three 144-foot sections and will have a minimum clear height from the bottom of the bridge to the top of the Kawili Street roadway surface of 16 feet, a height that is conformant with County requirements for bridges. The bridge span over Kawili Street will be approximately 144 feet, but the total length of the overpass, including pedestrian approach ramps at each end, is approximately 536 feet. The entire length of the bridge will be covered with roofing, with gutters and downspouts to divert the water to the ground. Over Kawili Street, it will be enclosed with decorative metal panels for safety. In other areas, the sides of the bridge may be open except for the required guardrails, providing unique views of the campus landscape. The project will be reviewed by the Disability and Communication Access Board (DCAB) to ensure that it is appropriately accessible. Other features include LED lighting (motion sensor and dimmable), a drinking fountain, vending machines, built-in seating, security cameras, emergency phones and WiFi.

The cost of the project is estimated at \$6 million; cost estimates for construction are at this point approximate and will be refined during design. If the project is approved, design would be completed by July 2015. Construction would begin in December 2015 and be complete within about 16 months.

**Figure 1  
Location Maps**

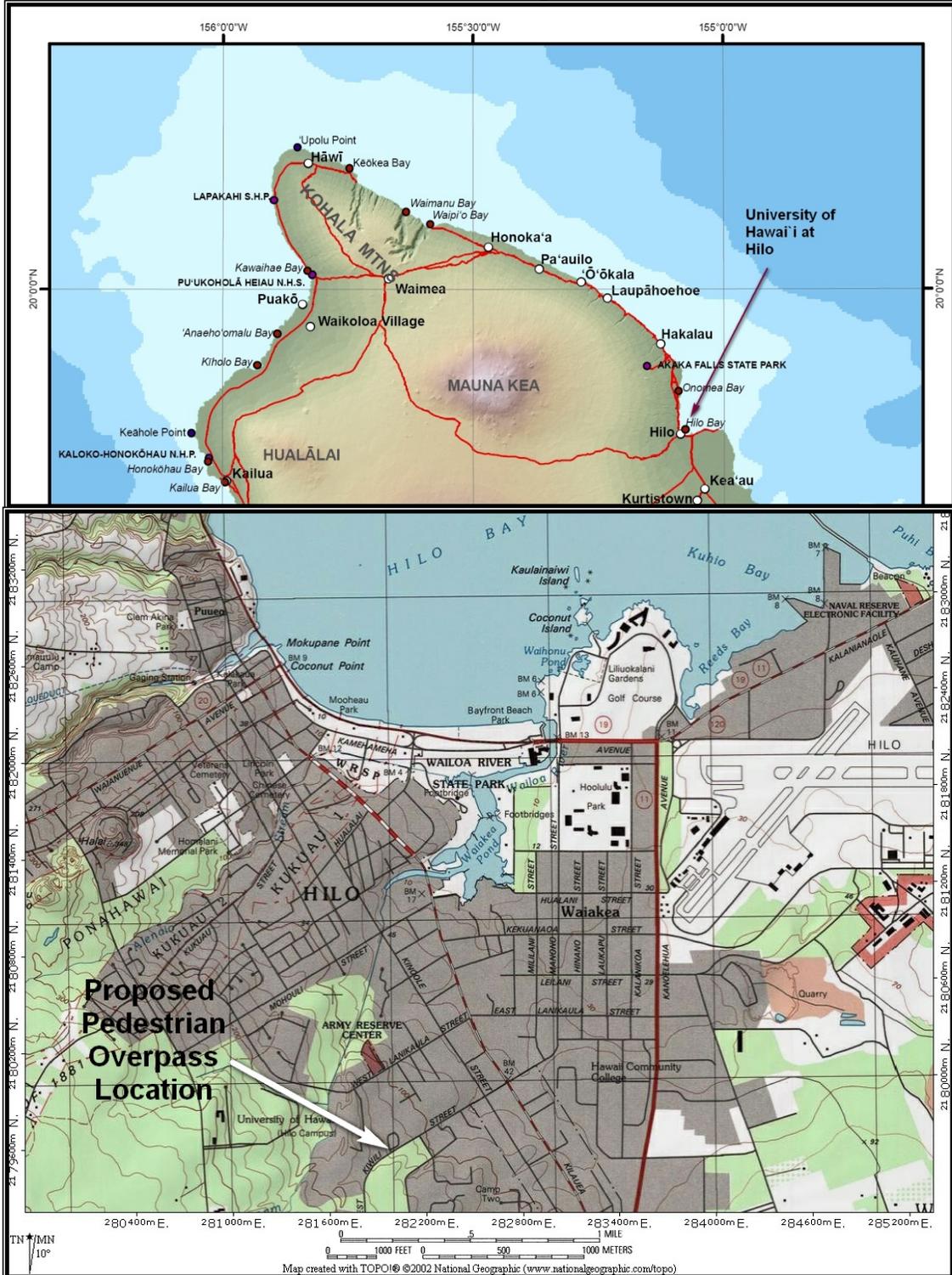
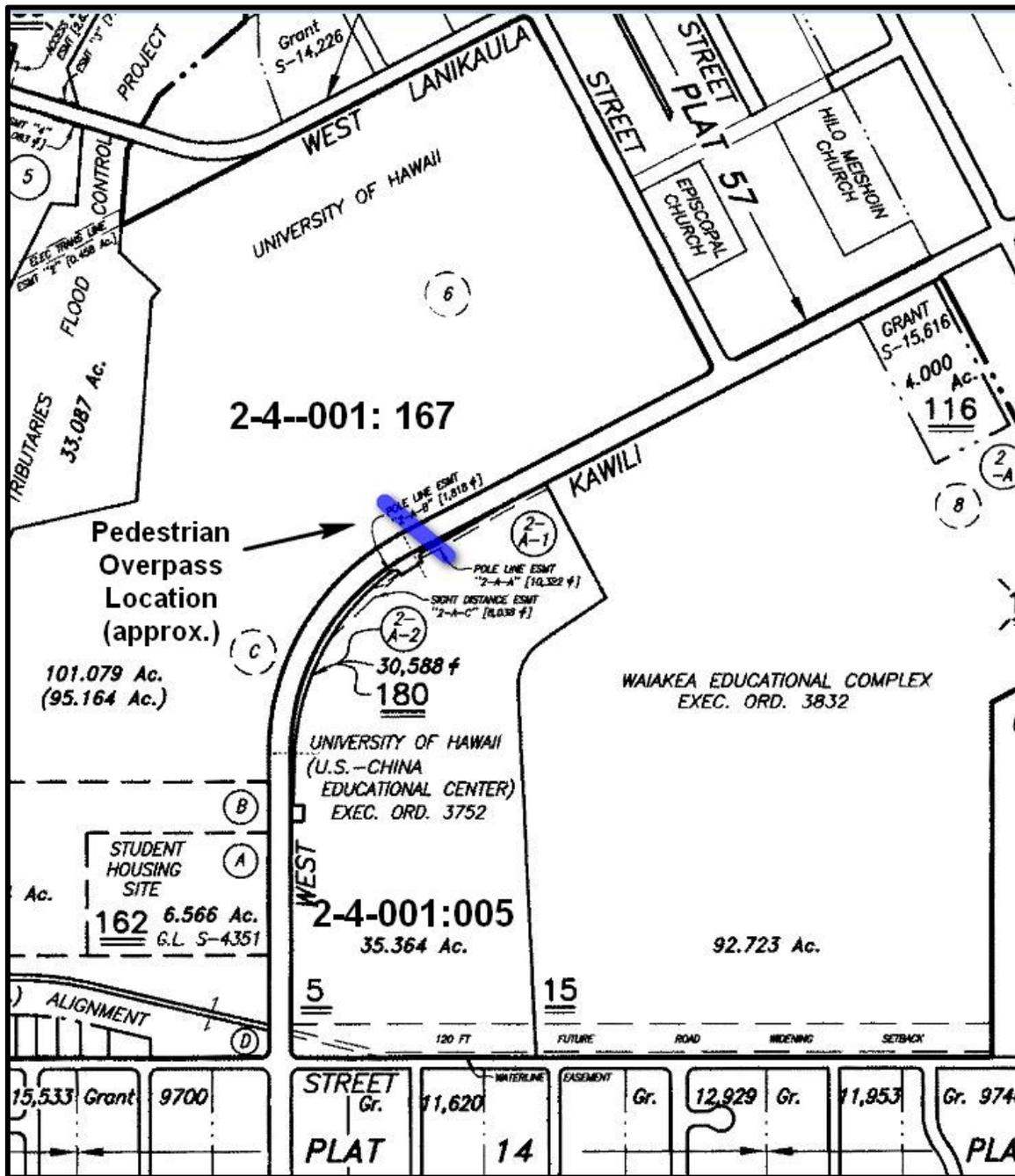


Figure 2  
TMK Map



Source for Base Map: Hawai'i County Real Property Tax Records

**Figure 3 – Project Site Photographs**



**3a. Overpass outline on Google Earth Image**



**3b. Panoramic view of area planned for overpass**

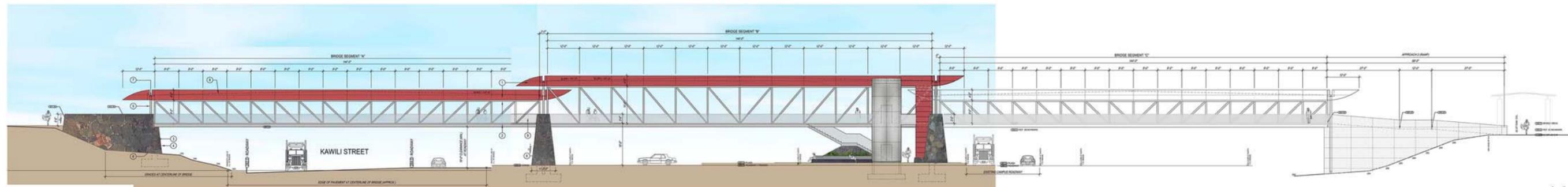


**3c. Students crossing Kawili Street at current at-grade crosswalk**



**KAWILI STREET PEDESTRIAN OVERPASS**

**CONCEPT DESIGN**



0' 4' 8'  
SCALE IN FEET

**[this page intentionally left blank]**

## **1.2 Environmental Assessment Process**

This Environmental Assessment (EA) process is being conducted in accordance with Chapter 343 of the Hawai'i Revised Statutes (HRS). This law, along with its implementing regulations, Title 11, Chapter 200, of the Hawai'i Administrative Rules (HAR), is the basis for the environmental impact process in the State of Hawai'i. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to thirteen specific criteria. Part 4 of this document states the finding (anticipated finding, in the Draft EA) that no significant impacts are expected to occur; Part 5 lists each criterion and presents the findings (preliminary, for the Draft EA) for each made by the University of Hawai'i at Hilo, the proposing/approving agency. As part of the EA process, if the approving agency determines after considering comments to the Draft EA that no significant impacts would likely occur, then the agency issues a Finding of No Significant Impact (FONSI), and the action is permitted to proceed to other necessary permits and approvals. If the agency concludes that significant impacts are expected to occur as a result of the proposed action, then an Environmental Impact Statement (EIS) is prepared.

## **1.3 Public Involvement and Agency Coordination**

The following agencies were consulted in the development of the environmental assessment:

State:

Department of Education                      Department of Health  
Department of Land and Natural Resources: Chairman, Historic  
Preservation Division and Division of Forestry and Wildlife  
Office of Hawaiian Affairs

County:

Department of Public Works                      County Council  
Department of Water Supply                      Fire Department  
Planning Department                              Police Department  
Department of Environmental Management  
Civil Defense Agency

Copies of communications received during early consultation are contained in Appendix 1a.

## **PART 2: ALTERNATIVES**

### **2.1 No Action**

Under the No Action Alternative, the pedestrian overpass would not be constructed. Students and the community would not benefit from improvements in pedestrian safety and traffic flow.

### **2.2 Alternative Locations or Strategies**

UH Hilo considered the issue of how connect the portion of the campus across Kawili Street with the main portion of campus and was not able to envision any alternative location or strategy that could effectively accomplish the purpose and need to the project. An underpass is feasible but not practical because of issues of cost, security and drainage. The location for the overpass is constrained by a number of factors, most importantly the presence of the new campus housing at Hale Alahonua. Any location further *mauka* or *makai* would not likely attract much usage as it would be inconvenient for most users. The precise design minimized disturbance to existing parking, walkways, landscaping and campus art.

## **PART 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES**

### *Basic Geographic Setting*

The area that will be utilized for the pedestrian overpass across Kawili Street is referred to throughout this EA as the *project site*. The overhead crossing is located 180 feet *makai* of the main, signalized entrance to the UH Hilo campus on Kawili Street. The term *project area* is used to describe the general environs of UH Hilo.

### **3.1 Physical Environment**

#### **3.1.1 Climate, Geology, Soils and Geologic Hazards**

##### *Environmental Setting*

The climate in the area is mild and moist, with an average annual rainfall of about 140 inches (UH Hilo-Geography 1998:57). Geologically, the project site is located on the flanks of Mauna Loa volcano, and the surface consists of lava flows from 5,000 to 10,000 years before the present (Wolfe and Morris 1996). Small areas of younger lava flows are also present in the project area. The project site soil is classified by the U.S. Natural Resources Conservation Service (formerly Soil Conservation Service) as Keaukaha extremely rocky muck (rKFD). This soil is found on 6 to 20 percent slopes and is an organic and strongly acid soil approximately 0 to 8 inches thick, with about 25% of the area occupied by lava outcrops. Permeability is rapid, runoff is slow, and erosion hazard slight. The capability subclass for the soil is VIIs, which means that it has very severe limitations such as shallowness or stoniness that make it very unsuited for cultivation, and restrict its use to mainly pasture, woodland or wildlife (U.S. Soil Conservation Service 1973).

The entire Big Island is subject to geologic hazards, especially lava flows and earthquakes. Volcanic hazard as assessed by the U.S. Geological Survey in this area of Hilo is Zone 3, on a scale of ascending risk from 9 to 1 (Heliker 1990:23). The relatively high hazard risk is based on the fact that Mauna Loa is an active volcano. Volcanic hazard Zone 3 areas have had 1-5% of their land area covered by lava or ash flows since the year 1800, but are at lower risk than Zone 2 areas because of their greater distances from recently active vents and/or because the local topography makes it less likely that flows will cover these areas.

In terms of seismic risk, the entire Island of Hawai'i is rated Zone 4 Seismic Hazard (*Uniform Building Code, 1997 Edition*, Figure 16-2). Zone 4 areas are at risk from major earthquake damage, especially to structures that are poorly designed or built, as the 6.7-magnitude quake of October 15, 2006, demonstrated. The project site does not appear to be subject to subsidence, landslides or other forms of mass wasting.

### *Impacts and Mitigation Measures*

In general, geologic conditions impose no constraints on the proposed action, and it is not imprudent to construct an overpass on the project site. Designers estimated the wind loads in accordance with standard specifications for structural supports for highway signs, luminaires, and traffic signals, and the structure has been designed to withstand winds of 105 MPH, with a roof designed to withstand 100 MPH winds.

#### **3.1.2 Drainage, Water Features and Water Quality**

##### *Existing Environment*

According to Flood Insurance Rate Map (FIRM) FM1551660880C, the project site is located entirely within Zone X, which is comprised of areas determined to be outside the 500-year flood plain. The intermittent Waiakea Stream, located approximately 1,000 feet west of the project site, constitutes a special hazard area inundated by the 100-year flood with base flood elevations determined (Zone AE). No known areas of local (non-stream related) flooding are present.

##### *Impacts and Mitigation Measure*

Because the property is already developed and has not been known to flood in the past, and because of the lack of sensitive waters nearby, the risks for flooding or impacts to water quality are negligible. Waiākea Stream will not be affected. Only negligible additional impermeable surface will be added, because the project site consists mostly of streets and parking lots. Rooftop runoff from the overpass will be dealt with by diverting it into gutters and thence to a drainage ditch, where this runoff already flows after falling on the street.

#### **3.1.3 Flora, Fauna and Ecosystems**

##### *Existing Environment*

Based on elevation, rainfall and geologic substrate, the area probably supported a Lowland Wet Forest (Gagne and Cuddihy 1990) dominated by 'ohi'a (*Metrosideros polymorpha*) before human alteration. Agricultural activities, including sugar cane cultivation and grazing in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, long ago destroyed the original vegetation. The present vegetation consists of weedy road verges and landscaped areas and is now almost entirely alien (see Figure 3). The most prominent plants are various non-native trees in a narrow strip between the campus housing complex and Kawili Street, including gunpowder tree (*Trema orientalis*), Chinese banyan (*Ficus microcarpa*), *Cecropia obtusifolia*, octopus tree (*Schefflera actinophylla*), autograph tree (*Clusia rosea*) and African tulip tree (*Spathodea campanulata*). One

prominent rainbow eucalyptus tree (*Eucalyptus deglupta*) is present west of Kawili Street near the parking lot. No native plants were observed during a biological reconnaissance by Geometrician Associates in January 2014.

Because of the non-native vegetation and urban context, there is little habitat for native animal species. Most birds that could be observed on the site, including virtually all that might nest or forage there, are non-native.

Two wide-ranging endangered species, Hawaiian Hawks (*Buteo solitarius*) and Hawaiian hoary bats (*Lasiurus cinereus semotus*), can be observed in the area, as they are throughout all forested locations on the island of Hawai'i. The tall trees favored by Hawaiian Hawks for nesting are not present in the alien vegetation on the project site and immediately surrounding areas. The urban setting of the project site also lessens its value as habitat for bats, which prefer forests or orchards. Nevertheless, the small area of brushy vegetation east of Kawili Street could conceivably harbor roosts for the Hawaiian hoary bats, which are vulnerable to disturbance during the pupping season from June 1 to September 15 each year.

In sum, no rare, threatened or endangered plant or animal species listed by the U.S. Fish and Wildlife Service are present or extensively utilize the project site, nor are there unique or valuable wildlife habitats.

#### *Impacts and Mitigation Measures*

Because of the lack of native ecosystems, or threatened or endangered plant species, no adverse impacts to botanical resources would occur as a result of utilizing the project site for a pedestrian overpass, and no endangered animal species would be harmed. The landscape plan includes numerous native 'ohi'a trees and hapu'u tree ferns among its plantings, which would appropriately replace non-native weed trees. Use of the overpass would not cause any secondary impacts to biological resources. In order to avoid impacts to the endangered Hawaiian hoary bat, no woody vegetation taller than 15 feet will be removed or disturbed between June 1 and September 15, when Hawaiian hoary bats may be sensitive to disturbance.

### **3.1.4 Air Quality, Noise, and Scenic Resources**

#### *Environmental Setting*

Under the Clean Air Act, the U.S. Environmental Protection Agency (EPA) establishes primary and secondary air quality standards. Primary air quality standards protect the public health, including the health of "sensitive populations, such as people with asthma, children, and older adults." Secondary air quality standards protect public welfare by promoting ecosystems health, preventing decreased visibility, and damage to crops and buildings. EPA has set national ambient air quality standards (NAAQS) for six of the following criteria pollutants; ozone (O<sub>3</sub>), particulate matter (PM 2.5 and 10), nitrogen

dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and lead (Pb). The entire State of Hawai‘i is classified as in attainment, meaning criteria air pollutants do not exceed the NAAQS.

Air pollution in East Hawai‘i is minimal, and is mainly derived from volcanic emissions of sulfur dioxide, which convert into particulate sulfate and produce a volcanic haze (vog) that occasionally blankets the district, particularly during instances of southerly or “kona” wind conditions. The persistent tradewinds keep the project area relatively free of vog for most of the year.

Noise on the project site – part of a busy campus – is moderate to moderately high and derived mainly from motor vehicles, with occasional noise from various University and maintenance activities.

The project area does not contain any sites considered significant for their scenic character in the Hawai‘i County General Plan. The crossing of Kawili Street has little scenic value. Views up and down Kawili Street do not contain scenic vistas of mountains or shorelines that could be interfered with by imposition of a built feature (Figure 5). However, although the campus area west of Kawili Street into which the overpass will extend mainly contains internal roads and parking lots, there are a few scenic elements. A rainbow eucalyptus tree (*Eucalyptus deglupta*) is present west of Kawili Street near the parking lot, and a prominent sculpture entitled *Makali‘i* is located just south of the proposed overpass alignment, in a grass space between an internal campus road and a parking lot (see Figure 5c).

#### *Impacts and Mitigation Measures*

The proposed project would not measurably affect air quality or noise levels beyond those already present on the site. The beneficial effect on traffic flow would lead to slight decreases in noise and motor vehicle emissions associated with braking and acceleration.

No important viewplanes or scenic sites recognized in the Hawai‘i County General Plan would be affected. The views up and down Kawili Street will now contain the overpass, which has been designed to be visually striking and prominent and to define a landmark at the gateway of UH Hilo. No scenic views would be obstructed by the overpass, as shown diagrammatically in Figure 5. The approaches to the bridge will include sinuous paths through attractively landscaped plazas that will have stone and concrete features as well as plantings.

**Figure 5. Visual Environment Elements**



5a. Existing View Mauka, with Overpass Outline Superimposed



5b. Existing View Makai, with Overpass Outline Superimposed



5c. Makali'i Sculpture and Rainbow Eucalyptus Tree

Because of the numerous constraints on the location of the overpass, project designers were not able to avoid the rainbow eucalyptus tree. The loss of the tree is compensated for by a landscaping plan that will include a large number of native and Polynesian species, including numerous native *'ohi'a* trees and *hapu'u* tree ferns, as well as palms, bromeliads and lawns, among its plantings.

One of the constraints on the overpass location was preserving the context and viewing area of the *Makali'i* sculpture. The overpass will not interfere with the sculpture, and will actually offer another view that may increase appreciation of this art work.

### **3.1.5 Hazardous Substances, Toxic Waste and Hazardous Conditions**

No systematic records evaluation (i.e. Phase I Environmental Site Assessment and subsequent investigations) or intensive field investigation has been undertaken at the project site. The project site has been part of the campus and street infrastructure crossing for many years or even decades, with no known history of industrial use, and there is no obvious evidence of dumping. It is unlikely that any potentially hazardous, toxic or radioactive waste would be found on the proposed project site. However, reasonable precautions will be undertaken in the context of the project's BMP plan to include provisions for the appropriate response and remediation should any such hazardous, toxic, or radioactive material be encountered during the construction phase of the project, in accordance with Department of Health requirements.

## **3.2 Socioeconomic and Cultural**

### **3.2.1 Socioeconomic Characteristic**

Table 1 details Hilo's population and socioeconomic characteristic. Hilo has a diverse population with over 80 percent minorities, mainly Asian and Pacific Islander, within one of the 100 fastest-growing counties in the U.S. It has a median age of over 40 years and more than 37 percent of the population is 65 or older, one of the oldest populations in the State of Hawai'i. At the same time, more than 4,000 students at UH Hilo, many of whom are not counted in census statistics because their permanent residences are elsewhere, are also present. Several segments of the population that typically exhibit disadvantaged measures of social welfare are disproportionately represented in the population of Hilo as compared to the County or State of Hawai'i. Median family income is 10 percent less than that of the County as a whole. More than 15 percent of individuals in the County have income below the poverty level, double the statewide rate. Similar patterns pertain to households receiving welfare, food stamps, and disability payments.

The UH Hilo student population is a rich blend of local, mainland and international students, making it among the nation's most diverse universities. About 70 percent of students are from the State of Hawai'i, and over 8 percent are foreign or from U.S. affiliated territories or Micronesia. Native Hawaiian students make up about 24 percent of the UH Hilo enrollment, and those with Asian or other Pacific Islander ancestry about

**Table 1**  
**Selected Socioeconomic Characteristics Hilo**

<b>SUBJECT</b>	<b>NUMBER</b>	<b>PERCENT</b>
<b>SEX AND AGE</b>		
Total population	43,263	100.0
Median age (years)	40.5	( X )
16 years and over	35,193	81.3
65 years and over	7,807	18.0
<b>RACE</b>		
Total population	43,263	100.0
One Race	29,199	67.5
White	7,617	17.6
Black or African American	227	0.5
American Indian and Alaska Native	132	0.3
Asian	14,833	34.3
Asian Indian	49	0.1
Chinese	645	1.5
Filipino	2,637	6.1
Japanese	9,550	22.1
Korean	419	1.0
Native Hawaiian	4,467	10.3
Two or More Races	14,064	32.5
<b>HOUSEHOLDS BY TYPE</b>		
Total households	15,483	100.0
Family households (families)	10,287	66.4
With own children under 18 years	3,766	24.3
Female householder, no husband present	2,278	14.7
With own children under 18 years	1,027	6.6
Nonfamily households	5,196	33.6
Householder living alone	3,992	25.8
Households with individuals under 18 years	4,770	30.8
Households with individuals 65 years and over	5,386	34.8
Average household size	2.69	( X )
Average family size	3.20	( X )
<b>HOUSING OCCUPANCY</b>		
Total housing units	16,905	100.0
Occupied housing units	15,483	91.6
Vacant housing units	1,422	8.4
Rental vacancy rate (percent)	6.9	( X )

Source: 2010 U.S. Census of Population (<http://2010.census.gov/2010census/data/>)

24 percent as well. The second-largest employer in East Hawai‘i, UH Hilo consists of five academic colleges offering 35 baccalaureate degrees, eight master degrees and four doctorates or first professional degrees, including one approved in 2006 in Hawaiian and Indigenous Language and Culture Revitalization. UH Hilo has sustained steady growth in the statewide University of Hawai‘i system, growing almost 50 percent since 1977, with a 2013 enrollment of 4,043 (<http://www.hawaii.edu/campuses/hilo.html>).

### *Impacts*

The proposed project would benefit public welfare in the Hilo area as well as the County and State of Hawai‘i through improvement of safety conditions at the largest college in the region.

### **3.2.2 Cultural Resources and Practices**

#### *Existing Environment*

The earliest historical knowledge of Hilo comes from legends recounted by Samuel Kamakau (1961) of a 16<sup>th</sup> century chief ‘Umi-a-Liloa (son of Liloa), who at that time ruled the entire island of Hawai‘i. Descendants of Umi and his sister-wife were referred to as “Kona” chiefs, controlling Ka‘ū, Kona, and Kohala, while descendants of Umi and his Maui wife were “Hilo” chiefs, controlling Hāmākua, Hilo, and Puna (Kelly 1981:1). According to Kamakau (1961), both sides fought over control of the island, desiring access to resources such as feathers, *māmaki* tapa, and canoes on the Hilo side, and *wauke* tapa and warm lands and waters on the Kona side (Kelly 1981:3).

Sometime near the end of the 16<sup>th</sup> century or early in the 17<sup>th</sup> century, the lands of Hilo were divided into *ahupua‘a*, which till today retain their original names (Kelly 1981:3). These include the *ahupua‘a* of Pu‘u‘eo, Pi‘ihonua, Punahoa, Pōnohawai, Kūkūau and Waiākea. The design of these land divisions was such that residents could have access to all that they needed to live, with ocean resources at the coast, and agricultural and forest resources in the interior. However, only Pi‘ihonua and Waiākea provided access to the full range of resources stretching from the sea up to 6,000 feet along the slopes of Mauna Kea (Kelly 1981:5).

Historical accounts (McEldowney 1979) place the project site in a zone of agricultural productivity. As Isabella Bird recorded upon arriving in Hilo in 1873:

“Above Hilo, broad lands sweeping up cloudwards, with their sugar cane, *kalo*, melons, pine-apples, and banana groves suggest the boundless liberality of Nature” (Bird 1964:38).

Handy and Handy (1972) also describe the general region as an agricultural area:

“On the lava strewn plain of Waiakea and on the slopes between Waiakea and Wailuku River, dry taro was formerly planted wherever there was enough soil. There were forest plantations in Panaewa and in all the lower fern-forest zone above Hilo town along the course of the Wailuku River” (Handy and Handy 1972:539).

Maly (1996) refers to a 1922 article from the Hawaiian Language newspaper, *Ka Nupepa Kū'oku'a*, where planting on *pāhoehoe* lava flats is described:

“There are *pāhoehoe* lava beds walled in by the ancestors in which sweet potatoes and sugar cane were planted and they are still growing today. Not only one or two but several times forty (*mau ka 'au*) of them. The house sites are still there, not one or two but several times four hundred in the woods of the Panaewa. Our indigenous bananas are growing wild, these were planted by the hands of our ancestors” (Maly 1996:A-2).

#### *Waiākea Ahupua'a*

The project site is in the *ahupua'a* of Waiākea, a very large land division that includes all land in and near UH Hilo as well as the land *mauka* and *makai*. As part of an archaeological inventory survey, Maly (1996) conducted historical research for the lands of Wainaku, Pōnohawai, Waiākea, and Pi'ihonua. He discusses the significance of the use of the Hawaiian word *wai* in the place names: Waiākea, Pōnohawai, Wainaku, and Wailuku (River). According to Maly, the word *wai* (water) has strong metaphorical associations with the Hawaiian concept of wealth (*waiwai*), stressing its cultural importance (Maly 1996:A-2). In this context, the importance of Hilo can be better understood, with its copious streams that fed taro pondfields and its numerous fishponds.

Waiākea along with Punahoa and Pi'ihonua were held by Kamehameha I until the time of his death in 1819, at which time his holdings, including Waiākea, were passed down to his son, Liholiho. Following the *Māhele*, the population of Hilo grew and the scattered upland habitations gave way to sugar cultivation (McEldowney 1979:37).

By 1905, according to Thrum (1923) the Hawaii Mill Company had 10 miles of cane flumes and produced twenty-five tons of sugar per day. In 1920 Hawaii Mill Company was taken over by the Hilo Sugar Company (Kelly 1981). Commercial sugar production lasted in Waiākea until the mid twentieth century, at which time many of the fields were converted to pasturage associated with cattle ranching.

Following the *Māhele*, Kamehameha IV leased large portions of Waiākea to outside interests for pasture and sugarcane cultivation. In 1861 S. Kipi leased the Crown Lands of Waiākea for the rate of \$600 dollars a year to be used as pasture land for five years (Kelly et al. 1981; Maly 1996). In 1874 the first lease for sugarcane cultivation in Waiākea was

granted to Rufus A. Lyman for a term of 25 years. The lease granted him all the privileges of the land including the use of the fishponds and the cutting of firewood (Maly 1996). This lease was eventually transferred to the Waiakea Mill Company, founded by Alexander Young and Theo H. Davis, and the Waiākea sugar plantation was established.

Established in 1879, the Waiakea Mill Company started with about 350 acres of cultivated lands they had acquired from Lyman. In 1888 the company acquired a 30-year lease that increased its land holdings in Waiākea. By the time the lease ran out in 1918, the acreage under cultivation had increased to nearly 7,000; but without a lease the *ahupua'a* fell under the homesteading laws, which required the government to lease the land to individual growers. Waiakea Mill Company was expected to grind the crop for the independent growers under a contract that gave the company 40% of the proceeds from the sale of the refined sugar. Contractual and legal problems combined with a declining sugar market and the devastating *tsunami* of 1946 led the Waiakea Mill Company to cease operation in 1947. During the 68 years of its operation, the Waiakea Mill Company was a major force in shaping the economic and social growth of Hilo, and certainly left its mark on both the cultural and physical landscapes of the area. The productive areas were interconnected with a plantation railroad system connecting fields with the mill at Wailoa Stream. A 1918 map of Waiakea Mill Company's holdings indicates that the project site was under cultivation (Rechtman Consulting 2006:10).

No caves, springs, *pu'u*, native forest groves, gathering resources or other natural features are present on or near the entirely developed project site. The vegetation is highly disturbed and does not contain the quality and quantity of resources that would be important for native gathering. As discussed in the next section, no archaeological remains reflecting cultural history or supporting cultural values are present. The project site does not support any traditional resource uses, nor are there any Hawaiian customary and traditional rights or practices known to be associated with this highly urban site. Based on this, it would appear that no known valuable natural, cultural or historical resources are present on the project site.

### *Impacts and Mitigation Measures*

As part of the EA, an effort was made to obtain information about any potential traditional cultural properties and associated practices that might be present, or have taken place at the project site. Property neighbors and various agencies including the Office of Hawaiian Affairs and the State Historic Preservation Division were contacted. Although there are no initial indications that there are any traditional cultural properties in the immediate vicinity of the current project area or current use of the area for traditional and customary practices, OHA and other parties were supplied a copy of the Draft EA in order to help finalize this finding.

As it currently appears that no resources or practices of a potential traditional cultural nature (i.e., landform, vegetation, etc.) appear to be present on or near the project site,

and there is no evidence of any traditional gathering uses or other cultural practices, the proposed construction and use of the pedestrian overpass would not likely impact any culturally valued resources or cultural practices. Instead, increased pedestrian safety for students at an institution that focuses on the perpetuation and advancement of Hawaiian culture will encourage and benefit cultural resources and practices.

### **3.2.3 Archaeology and Historic Sites**

#### *Existing Environment*

As discussed above, the project area is located in the *ahupua'a* of Waiākea in the zone described as upland agricultural areas (McEldowney 1979). Prehistoric use of this land was likely for farming and gathering of resources, including plants for food, fiber, medicine and firewood. Housing in the area is believed to be predominately temporary use associated with agriculture. The project site was part of a large area of Waiākea used for sugar cane cultivation for some years prior to 1937. However, the land is rocky and poorly suited for mechanical cane cultivation, and by mid-century the plantations were no longer growing sugar cane there and grazing was taking place. Over time, Kawili Street and the UH Hilo campus were built and expanded, almost completely grading the project site in the process. No sites listed in the National or State Registers of Historic Sites are present on or near the project site.

#### *Impacts and Mitigation Measures*

The project site was inspected for surface archaeological sites and other historic properties, and none appeared to be present. Geometrician Associates coordinated on behalf of UH Hilo with the State Historic Preservation Division, which concurred with UH Hilo's finding that no historic properties would be affected by the action (see letter in Appendix 1a). However, UH Hilo will ensure that in the unlikely event that human skeletal remains or undocumented archaeological resources are encountered during construction, work in the immediate area of the discovery shall be halted and the State Historic Preservation Division contacted as outlined in Hawai'i Administrative Rules 13§13-275-12.

## **3.3 Infrastructure**

### **3.3.1 Utilities**

#### *Existing Facilities and Services, Impacts and Mitigation Measures*

All necessary utilities, including water service, electrical, telephone, and CATV/data service, are available at the project site. Water service will be used for drinking fountains and a water bottle filler. An emergency phone will be present on the overpass, and WiFi will be available. Electrical service will continue to be provided from a Hawai'i Electric

Light Company (HELCO) circuit on Kapiolani Street. Existing connections to County water services would remain unchanged.

No permanent effect to existing water lines, wastewater lines, electrical, telephone and CATV would occur. The locations of all such lines have been ascertained by the project architect and will be made available to the contractor to ensure that no disruption would occur during construction.

### **3.3.2 Roadways and Traffic**

#### *Existing Facilities and Conditions*

As the project does not involve any increase in traffic or adverse alteration of road facilities or traffic conditions, no Traffic Impact Analysis Report (TIAR) was conducted for the project. However, observations of the project site at adjacent-street peak hours (approximately 7-8 am and 3-4 pm) indicate that congestion can periodically occur, mainly related to the presence of UH Hilo, Waiakea High School, and Hawai'i Community College along a four-block stretch of Kawili Street, a main thoroughfare for conducting work traffic to employment area of Hilo.

#### *Impacts and Mitigation Measures*

Construction of the project will have a minor adverse effect on traffic periodically during the 16-month construction period, whenever segments of the project that involve construction over Kawili Street are underway. As noted in Section 1.1, no on-ground construction on Kawili Street will occur, as the overpass will span the street completely with no supports within the right-of-way. UH Hilo will work with the County DPW to ensure that at least one lane is open at all times and will supply professional traffic control. Construction that affects Kawili Street traffic will avoid local street peak hours associated with work and school traffic. Construction will be limited to reasonable hours, and no night construction will be allowed unless an emergency situation develops.

The bridge will consist of three 144-foot sections and will have a minimum clear height from the bottom of the bridge to the top of the Kawili Street roadway surface of 16 feet. This height is conformant with County requirements for bridges and will not cause adverse impacts for trucks.

### **3.4 Secondary and Cumulative Impacts**

The proposed project would not involve major secondary or cumulative impacts, such as population changes or effects on public facilities.

Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. The potential for adverse cumulative effects from induced or subsequent

growth is covered in the previous section. Most of the adverse effects of the project are related to construction and are temporary – minor disturbance to air quality, traffic, noise and visual quality– and thus very limited in severity, nature and scale. However, there are a number of construction projects occurring nearby within a three-year timeframe that could generate similar construction impacts, with which these minor and temporary effects could accumulate. This interaction thus requires attention. According to current schedules, most of the construction activity on the pedestrian overpass site would occur from late 2015 to early 2017.

Most nearby projects are related to new buildings on or near the UH Hilo campus. UH Hilo projects currently underway include facilities for the College of Pharmacy off of Nowelo Street and water infrastructure on University land located above Komohana Street adjacent to the Puainako Extension. UH Hilo is also planning sidewalk improvements directly on the corner of Kawili Street and extending along Kapiolani Street, a few hundred feet *makai* of the proposed overpass. Non-UH Hilo projects are the Kapiolani Street Extension, which began construction in March 2014 and will take about a year to complete; Puainako Street Widening (with no firm timetable), and the Thirty Meter Telescope base facilities (slated for the later phases of the telescope’s construction). Table 2 summarizes these projects and their potential interaction with the UH Hilo pedestrian overpass.

In summary, most of these projects are located at least half a mile from the project site, outside the area that would involve any potential to contribute dust, noise, runoff or similar construction impacts that might accumulate with similar impacts from the proposed water well project. Minor impacts to traffic on Kawili Street and/or Kapiolani Street could occur, but these could be mitigated through traffic control plans and construction timing that would be specified as construction managers neared the start date and examined the schedules of other, concurrent projects. Some projects are fairly uncertain or will not likely overlap in terms of timing. There is little or no chance for adverse interactions or cumulative effects during construction of such projects.

However, if the construction schedules for the Kapiolani Street Extension or Kapiolani Street/Kawili Street Sidewalk Improvements overlap with the UH Hilo Pedestrian Overpass project, there is potential for cumulative impacts from construction. If unmitigated, there could be cumulative impacts to dust, noise, sedimentation and erosion, visual quality and particularly traffic congestion. These impacts can be mitigated through close communication between responsible agencies and construction managers on scheduling of construction activity and the delivery of equipment and materials and supplies. Joint traffic control plans may be required. UH Hilo will work closely with the Hawai‘i County Department of Public Works to resolve potential issues, as they have in the past for similar situation. With proper coordination, adverse interactions or cumulative effects during construction can be reduced to negligible levels.

**Table 2  
Projects with Potential for Cumulative Impacts**

<b>Project</b>	<b>Scope and Scale</b>	<b>Construction Timing</b>	<b>Location Relative to Overpass</b>	<b>Adverse Interaction Potential</b>
<b>FUNDED AND IN CONSTRUCTION/SLATED FOR CONSTRUCTION</b>				
UH Hilo Water Infrastructure	New well and related infrastructure	2013-2015	1.2 miles SW	Very low, due to distance and timing
College of Pharmacy	40,000 sq. ft. new perm bldg.	2014-2016 (groundbreaking December 2014)	Lower Nowelo Street, 0.6 miles (1.2 miles by road)	Low, due to distance.
Kapiolani Street Extension	0.5 mile new two-lane road connects to Mohouli Street	Early 2015 to Mid-2016 (groundbreaking March 2015)	0.3 miles NW	Moderate if timing overlaps, potential traffic.
UH Hilo Kapiolani-Kawili Streets Sidewalk Improvements	1,100 feet of new sidewalk and related improvements	Mid 2015- Mid 2016	0.1 miles N	Moderate if timing overlaps, potential traffic
Thirty Meter Telescope Base Facilities	New building to house up to 140 workers.	2017 or later	Upper Nowelo Street, 0.8 miles (1.2 miles by road)	Low, due to distance and timing
<b>NOT YET FUNDED OR IN CONSTRUCTION/SLATED FOR CONSTRUCTION</b>				
Puainako Street Widening	Widening to 4-lanes of 1.6 miles existing 2-lane road	Not funded or scheduled	Puainako Street, 0.2 miles S.	Low, due to timing and distance.
Waiakea Uka Bible Church	New Church and Parking	Not yet permitted or scheduled	Off Kapiolani Street Extension, 0.4 miles NW	Low, due to timing and distance and scale.

Sources: Sidewalk Improvements, UH Hilo Water Well: UH Hilo Facilities Planning and Construction Office [http://hilo.hawaii.edu/UH Hilo/planning/const\\_plan\\_graph.php](http://hilo.hawaii.edu/UH%20Hilo/planning/const_plan_graph.php); Kapiolani Street Extension; Pers. comm. Hawai'i County DPW: Puainako Extension: Pers. comm. Hawai'i DOT Highways Division; College of Pharmacy: <http://hilo.hawaii.edu/news/press/release/1513>

### **3.5 Required Permits and Approvals**

The following agency permits and approvals would be required:

- Hawai'i County Department of Public Works: Easement; Building Permit, Grading Permit, and Drainage Approval
- Hawai'i County Planning Department: Plan Approval

### **3.6 Consistency With Government Plans and Policies**

#### **3.6.1 Hawai'i State Plan**

Adopted in 1978 and last revised in 1991 (Hawai'i Revised Statutes, Chapter 226, as amended), the Plan establishes a set of themes, goals, objectives and policies that are meant to guide the State's long-run growth and development activities. The three themes that express the basic purpose of the *Hawai'i State Plan* are individual and family self-sufficiency, social and economic mobility and community or social well-being. The

proposed project would promote these goals by enhancing educational facilities on the Island of Hawai‘i, thereby enhancing quality-of-life and community and social well-being.

The project is also highly consistent with the 2013 Hawai‘i Statewide Pedestrian Master Plan (<http://hidot.hawaii.gov/highways/statewide-pedestrian-master-plan-and-hawaii-pedestrian-toolbox>). The Plan describes pedestrian overpasses as integral parts of Pedestrian Access Routes (PARs), as long as they are easy and convenient for pedestrians to access. The Plan states that where an overpass segment of a PAR is supported by a structure, such as an underpass, overpass, or bridge, it shall comply with ADAAG requirements.

### **3.6.2 Hawai‘i County General Plan and Zoning**

The *General Plan* for the County of Hawai‘i is a policy document expressing the broad goals and policies for the long-range development of the Island of Hawai‘i. The plan was adopted by ordinance in 1989 and revised in 2005 (Hawai‘i County Planning Department). The *General Plan* itself is organized into thirteen elements, with policies, objectives, standards, and principles for each. There are also discussions of the specific applicability of each element to the nine judicial districts comprising the County of Hawai‘i. Most relevant to the proposed project are the following Goal and Policies, and Courses of Action:

#### **EDUCATION – GOALS**

- Utilize publicly owned lands in the best public interest and to the maximum benefit.

#### **EDUCATION – COURSES OF ACTION**

- Encourage the establishment of additional schools as the need arises.
- Support the continued expansion of the University system and the University of Hawaii at Hilo and Hawaii Community College campus and encourage the continuing education programs throughout the community.
- Encourage continual improvements to existing educational facilities.

The Hawai‘i County General Plan quotes a statement from the *University of Hawaii at Hilo Long Range Development Plan* concerning “the ‘spine’ concept that organizes all campus structures along a main pedestrian accessway and assures that future development would continue in relation to the various existing structures.”

Discussion: The proposed project satisfies relevant goals, policies, and courses of action related to educational facilities in Hawai‘i County, and helps complement and enhance the existing network of pedestrian access facilities.

The *Hawai‘i County General Plan Land Use Pattern Allocation Guide (LUPAG)*. The LUPAG map component of the *General Plan* is a graphic representation of the Plan’s goals, policies, and standards as well as of the physical relationship between land uses. It also establishes the basic urban and non-urban form for areas within the planned public and cultural facilities, public utilities and safety features, and transportation corridors. The project site is classified as University Use in the LUPAG. The proposed project is consistent with this designation.

*Hawai‘i County Zoning and Special Management Area*. The project site has RS-10 zoning (Single-Family Residential, 10,000 sf minimum lot size) and the proposed project is consistent with these designations. A separate zoning category for the University District was approved by the County Council per Hawai‘i County Ordinance No. 07 104, effective August 1, 2007. UH Hilo may include the area in an application for a change of zone to this more appropriate district at some time in the future. The project site is not situated within the County’s Special Management Area (SMA).

### **3.6.3 Hawai‘i State Land Use Law**

All land in the State of Hawai‘i is classified into one of four land use categories – Urban, Rural, Agricultural, or Conservation – by the State Land Use Commission, pursuant to Chapter 205, HRS. The project site is within the State Land Use Urban District. The proposed use is consistent with intended uses for this District.

## **PART 4: DETERMINATION**

The University of Hawai‘i at Hilo has preliminarily determined that the proposed project will not significantly alter the environment, as impacts will be minimal, and intends to issue a Finding of No Significant Impact (FONSI). This determination will be reviewed based on comments to the Draft EA, and the Final EA will present the final determination.

## **PART 5: FINDINGS AND REASONS**

Chapter 11-200-12, Hawai‘i Administrative Rules, outlines those factors agencies must consider when determining whether an Action has significant effects:

1. *The proposed project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* No valuable natural or cultural resources would be committed or lost.
2. *The proposed project will not curtail the range of beneficial uses of the environment.* The proposed project expands and in no way curtails beneficial uses of the environment.
3. *The proposed project will not conflict with the State's long-term environmental policies.* The State’s long-term environmental policies are set forth in Chapter 344, HRS. The broad goals of this policy are to conserve natural resources and enhance

the quality of life. The project fulfills aspects of these policies calling for an improved social environment. It is thus consistent with all elements of the State's long-term environmental policies.

4. *The proposed project will not substantially affect the economic or social welfare of the community or State.* The project will benefit the social welfare of the community.
5. *The proposed project does not substantially affect public health in any detrimental way.* The proposed project will benefit public health by increasing pedestrian safety at the UH Hilo campus.
6. *The proposed project will not involve substantial secondary impacts, such as population changes or effects on public facilities.* No secondary effects are expected to result from the proposed action, which would improve educational facilities and conditions and would not induce permanent in-migration or affect public facilities.
7. *The proposed project will not involve a substantial degradation of environmental quality.* The project is environmentally benign, and would thus not contribute to environmental degradation.
8. *The proposed project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.* The project site supports only non-native vegetation. Impacts to rare, threatened or endangered species of flora or fauna will not occur, given planned restrictions on timing of vegetation removal.
9. *The proposed project is not one which is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.* The project is not related to additional activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions. Cumulative effects to air quality, dust, and traffic during construction would be avoided by coordination and scheduling.
10. *The proposed project will not detrimentally affect air or water quality or ambient noise levels.* No adverse effects on these resources would occur through proper adherence to construction best management practices and mitigation measures that will be contained in permits from the County Department of Public Works.
11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.* Although the project is located in an area with volcanic and seismic risk, the entire Island of Hawai'i shares this risk, and the project employs design and construction standards appropriate to the seismic zone and is not imprudent to construct.
12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.* No scenic vistas and viewplanes identified in the Hawai'i County General Plan or any other scenic resources will be adversely affected by the project. The project does not interfere with mountain or shoreline views, as none are present. The overpass and associated plazas have been designed as a landmark feature that will be a visually striking and attractive gateway to UH Hilo.

13. *The project will not require substantial energy consumption.* Construction of a pedestrian overpass will require energy use, but this will likely be more than compensated for by more efficient traffic flow, as there will be far less stop and start for motorists on Kawili Street as the crosswalk use is reduced. Use of the overpass will require minimal energy for lighting at night and vending machine operation.

## REFERENCES

Bird, I. 1964. *Six Months in the Sandwich Islands*. Honolulu: University of Hawai'i Press

Borthwick, D., Collins, J. Folk, W.H. and H.H. Hammatt. 1993. *Archaeological Survey and Testing of Lands Proposed for Research and Technology Lots and the University of Hawaii at Hilo*. Prep. for UH-Hilo and Engineering Concepts. Honolulu.

Gagne, W., and L. Cuddihy. 1990. "Vegetation," pp. 45-114 in W.L. Wagner, D.R. Herbst, and S.H. Sohmer, eds., *Manual of the Flowering Plants of Hawai'i*. 2 vols. Honolulu: University of Hawai'i Press.

Handy, E.S.C., and E. Handy. (With M.K. Pukui). 1972. *Native Planters in Old Hawai'i*. B.P. Bishop Museum Bulletin 233. Honolulu: Bishop Museum Press.

Hawai'i County Department of Public Works. 2000. *Final Environmental Impact Statement, Puainako Street Extension and Widening Project*. 2000. Prep. in coop. with the U.S. Department of Transportation, Federal Highway Administration (FHWA), State of Hawai'i, Department of Transportation, Highways Division. Hilo, Hawai'i.

Hawai'i County Planning Department. 2005. *The General Plan, County of Hawai'i*. Hilo.

Heliker, C. 1990. *Volcanic and Seismic Hazards on the Island of Hawai'i*. Washington: U.S. GPO.

Kamakau, S. 1961. *Ruling Chiefs of Hawai'i*. Honolulu: The Kamehameha Schools Press.

Kelly, M. 1981. "Archaeological and Historical Studies for the Alenaio Stream Flood Damage Reduction Study, Hilo Hawai'i. Report 1. Background History." Department of Anthropology, B.P. Bishop Museum, Honolulu. Prepared for U.S. Army Engineer District, Pacific Ocean.

Maly, K. 1996a. Appendix In: "Archaeological Assessment Study Hilo Judiciary Complex Project, Lands of Wainaku, Pōnohawai, Pi'ihonua, and Waiākea, South Hilo District, Island of Hawai'i (TMK: 2-6-15:1,2; 2-6-16:2; 2-4-49:18,19; 2-2-15:33; 2-4-1:12)." Paul H. Rosendahl, Inc., Hilo. PHRI Report 1721-061496. Prepared for State of Hawai'i, Honolulu.

Maly, K. 1996b. *Historical Documentary Research and Oral History Interviews, Waiakea Cane Lots (12, 13, 17, 18, 19, 20 & 20A)*. Hilo: Kumu Pono Associates.

McEldowney, H. 1979. "Archaeological and Historical Literature Search and Research Design: Lava Flow Control Study, Hilo Hawai'i." Manuscript on file, Department of Land and Natural Resources-State Historic Preservation Division.

Thrum, T. 1907. Tales from the Temples. *Hawaiian Almanac and Annual for 1908*, pp. 48-58.

U.S. Dept. of Commerce, Bureau of the Census. 2001. <http://factfinder.census.gov/>.

U.S. Soil Conservation Service. 1973. *Soil Survey of Island of Hawai'i, State of Hawai'i*. Washington: U.S.D.A. Soil Conservation Service.

University of Hawai'i at Hilo, Dept. of Geography. 1998. *Atlas of Hawai'i*. 3rd ed. Honolulu: University of Hawai'i Press.

U.S. Fish and Wildlife Service (USFWS). 2010. *Threatened and endangered plants in Hawai'i*. Washington: GPO.

Wolfe, E.W., and J. Morris. 1996. *Geologic Map of the Island of Hawai'i*. USGS Misc. Investigations Series Map i-2524-A. Washington, D.C.: U.S. Geological Survey.

**[This page intentionally left blank]**

# **ENVIRONMENTAL ASSESSMENT**

## **University of Hawai‘i at Hilo Kawili Street Pedestrian Overpass**

### **APPENDIX 1a**

#### **Comments in Response to Early Consultation**

**[This page intentionally left blank]**

DAVID Y. IGE  
GOVERNOR OF HAWAII



VIRGINIA PRESSLER, M.D.  
DIRECTOR OF HEALTH

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

In reply, please refer to:  
File:

EPO 15-010

January 13, 2015

Mr. Ron Terry, Principal  
Geometrician Associates  
PO Box 396  
Hilo, HI 96721  
[rterry@hawaii.rr.com](mailto:rterry@hawaii.rr.com) (via email)

Dear Mr. Terry:

**SUBJECT: EC for DEA for Kawili Street Pedestrian Overpass, Hilo**

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges electronic receipt of your EC for the DEA to our office on January 12, 2015. Thank you for allowing us to review and comment on the proposed project. The letter was routed to the District Health Office on Hawaii Island. They will provide specific comments to you if necessary. EPO recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: <http://health.hawaii.gov/epo/home/landuse-planning-review-program/>. Projects are required to adhere to all applicable standard comments. Please note that the standard comments for the Clean Water Branch were updated in December 2014.

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

You may also wish to review the revised Water Quality Standards Maps that have been updated for all islands. The Water Quality Standards Maps can be found at: <http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/water-quality-standards/>.

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

Mahalo nui loa,

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

c: DHO Hawaii (via email only)

**William P. Kenoi**  
*Mayor*



**Darren J. Rosario**  
*Fire Chief*

**Renwick J. Victorino**  
*Deputy Fire Chief*

**County of Hawai'i**  
**HAWAII FIRE DEPARTMENT**  
25 Aupuni Street • Room 2501 • Hilo, Hawai'i 96720  
(808) 932-2900 • Fax (808) 932-2928

January 15, 2015

Mr. Ron Terry  
Geometrician Associates, LLC  
PO Box 396  
Hilo, Hawai'i 96721

Dear Mr. Terry,

SUBJECT: Early Consultation for Kawili Street Pedestrian Overpass, Job NO.  
UHH – 2014 - 402  
TMK: (3<sup>rd</sup>) 2-4-057:025; 2-4-001:005 Hilo, Island of Hawaii

---

The Hawai'i Fire Department does not have any comments to offer at this time regarding the above-referenced project consultation.

Thank you for the opportunity to comment.

Sincerely,

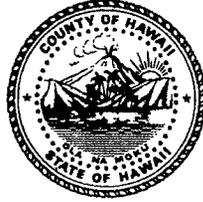
A handwritten signature in black ink, appearing to read "Darren J. Rosario".

*f* **DARREN J. ROSARIO**  
Fire Chief

KV:lpc



**William P. Kenoi**  
Mayor



**Harry S. Kubojiri**  
Police Chief

**Paul K. Ferreira**  
Deputy Police Chief

## **County of Hawai`i**

### **POLICE DEPARTMENT**

349 Kapi`olani Street • Hilo, Hawai`i 96720-3998  
(808) 935-3311 • Fax (808) 961-2389

January 23, 2015

Mr. Ron Terry, Principal  
Geometrician Associates  
P. O. Box 396  
Hilo, HI 96721

Dear Mr. Terry:

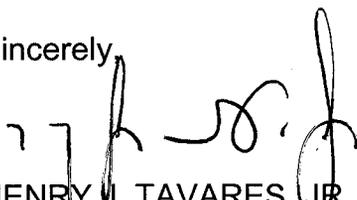
**SUBJECT: EARLY CONSULTATION FOR KAWILI STREET PEDESTRIAN  
OVERPASS, JOB NO. UHH-2014-402, TMKs: (3) 2-4-057:025; 2-4-001:  
005, HILO, ISLAND OF HAWAII**

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

Thank you for allowing us the opportunity to comment.

If you have any questions, please contact Captain Richard Sherlock, S. Hilo Patrol Commander, at 961-2214.

Sincerely,



HENRY J. TAVARES, JR.  
ASSISTANT POLICE CHIEF  
AREA I OPERATIONS BUREAU

RS:lli  
150030

William P. Kenoi  
Mayor



Duane Kanuha  
Director

Bobby Command  
Deputy Director

West Hawai'i Office  
74-5044 Ane Keohokalole Hwy  
Kailua-Kona, Hawai'i 96740  
Phone (808) 323-4770  
Fax (808) 327-3563

**County of Hawai'i**  
PLANNING DEPARTMENT

East Hawai'i Office  
101 Pauahi Street, Suite 3  
Hilo, Hawai'i 96720  
Phone (808) 961-8288  
Fax (808) 961-8742

January 28, 2015

Ron Terry, Ph.D.  
Geometrician Associates, LLC  
P.O. Box 396  
Hilo, HI 96721

Dear Dr. Terry:

**SUBJECT: Pre-Consultation for Draft Environmental Assessment**  
**Project: Kawili Street Pedestrian Overpass University of Hawai'i at Hilo**  
**TMK: (3) 2-4:001:005, (3) 2-4-001:167; South Hilo, Hawai'i**

Thank you for your letter dated January 10, 2015, requesting comments from this office regarding the preparation of a Draft Environmental Assessment (DEA) for the subject project.

The University of Hawai'i (UH) is proposing to construct a new pedestrian overpass between the new Student Housing project and the Campus Center over Kawili Street adjacent to the main campus entrance. The purpose of the bridge is to connect the main campus, which is north of Kawili Street, to an important area of future planned UHH growth south of Kawili Street. The overpass will greatly increase pedestrian safety and also improve traffic flow, as there will be far fewer pedestrians who need to cross at-grade and thus delay vehicle traffic.

The subject properties are zoned University by the County. The properties are situated within the State Land Use Urban District. In addition, the Hawai'i County General Plan Land Use Pattern Allocation Guide (LUPAG) Map designates the parcels as University Use. The subject parcels are not located within the Special Management Area (SMA).

Section 25-7-37(a) of the Hawai'i County Code (Zoning) states that Plan approval is required for all new structures and additions to existing structures in the University district. Therefore, Plan approval will be required for any proposed structures on the subject parcels. Also, please consider and include discussion about the project's consistency with the Hawai'i Statewide Pedestrian Master Plan and the Hawai'i Pedestrian Toolbox in the Draft Environmental Assessment. These can be accessed on the State of Hawai'i Department of Transportation website at: (<http://hidot.hawaii.gov/highways/statewide-pedestrian-master-plan-and-hawaii-pedestrian-toolbox/>).

Ron Terry, Ph.D.  
Geometrician Associates, LLC  
January 28, 2015  
Page 2

We have no further comments to offer, at this time. However, please provide our department with a copy of the Draft Environmental Assessment for our review and comment.

If you have any questions, or if you need further assistance, please feel free to contact Bethany Morrison of this office at (808) 961-8138.

Sincerely,



*fk* DUANE KANUHA  
Planning Director

BJM:cs

\\COH33\planning\public\wpwin60\Bethany\EA-EIS Review\preconsultdraft\ea Kawili Pedestrian Overpass UHH.doc

DAVID Y. IGE  
GOVERNOR OF HAWAII



CARTY S. CHANG  
INTERIM CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**  
**LAND DIVISION**

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

February 5, 2015

Geometrician Associates  
Attention: Mr. Ron Terry  
P.O. Box 396  
Hilo, Hawaii 96721

via email: [rterry@hawaii.rr.com](mailto:rterry@hawaii.rr.com)

Dear Mr. Terry:

**SUBJECT:** Early Consultation for Kawili Street Pedestrian Overpass Job No. UHH 2014-402, Geometrician Associates, LLC for University of Hawaii at Hilo, Applicant, South Hilo, Hawaii, TMKs: (3) 2-4-057:025 and 2-4-001:005

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

At this time, enclosed are comments from the (i) Engineering Division and (ii) Hawaii District Land Office on the subject matter. Should you have any questions, please feel free to call Kevin Moore at (808) 587-0426. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Y. Tsuji".

Russell Y. Tsuji  
Land Administrator

Enclosure(s)

DAVID Y. IGE  
GOVERNOR OF HAWAII



CARTY S. CHANG  
ACTING 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

2015 JAN 30 PM 12:42

January 14, 2015

MEMORANDUM

TO: FR:

**DLNR Agencies:**

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Hawaii District
- Historic Preservation

FROM: TO:  
SUBJECT:

Russell Y. Tsuji, Land Administrator  
Early Consultation for Kawili Street Pedestrian Overpass Job No. UHH  
2014-402

LOCATION: South Hilo, Hawaii, TMKs: (3) 2-4-057:025 and 2-4-001:005  
APPLICANT: Geometrician Associates, LLC for University of Hawaii at Hilo

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by February 4, 2015.

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 Kevin Moore at 587-0426. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed:

Print name: Cary S. Chang, Chief Engineer

Date: 1/20/15

cc: Central Files

15 JAN 15 PM 09:28 ENGINEERING

DEPARTMENT OF LAND AND NATURAL RESOURCES  
ENGINEERING DIVISION

LD/ Russell Y. Tsuji

Ref.: Early Consultation for Kawili Street Pedestrian Overpass, Job No. UHH-2014-402, South Hilo Hawaii.006

COMMENTS

- ( ) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone \_\_\_\_.
- (X) **Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone X. The National Flood Insurance Program (NFIP) does not regulate developments within Zone X.**
- ( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is \_\_\_\_.
- ( ) Please note that the project site must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

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

- ( ) Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.
  - ( ) Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public Works.
  - ( ) Mr. Carolyn Cortez at (808) 270-7253 of the County of Maui, Department of Planning.
  - ( ) Mr. Stanford Iwamoto at (808) 241-4896 of the County of Kauai, Department of Public Works.
- 
- ( ) The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
  - ( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

( ) Additional Comments: \_\_\_\_\_  
\_\_\_\_\_

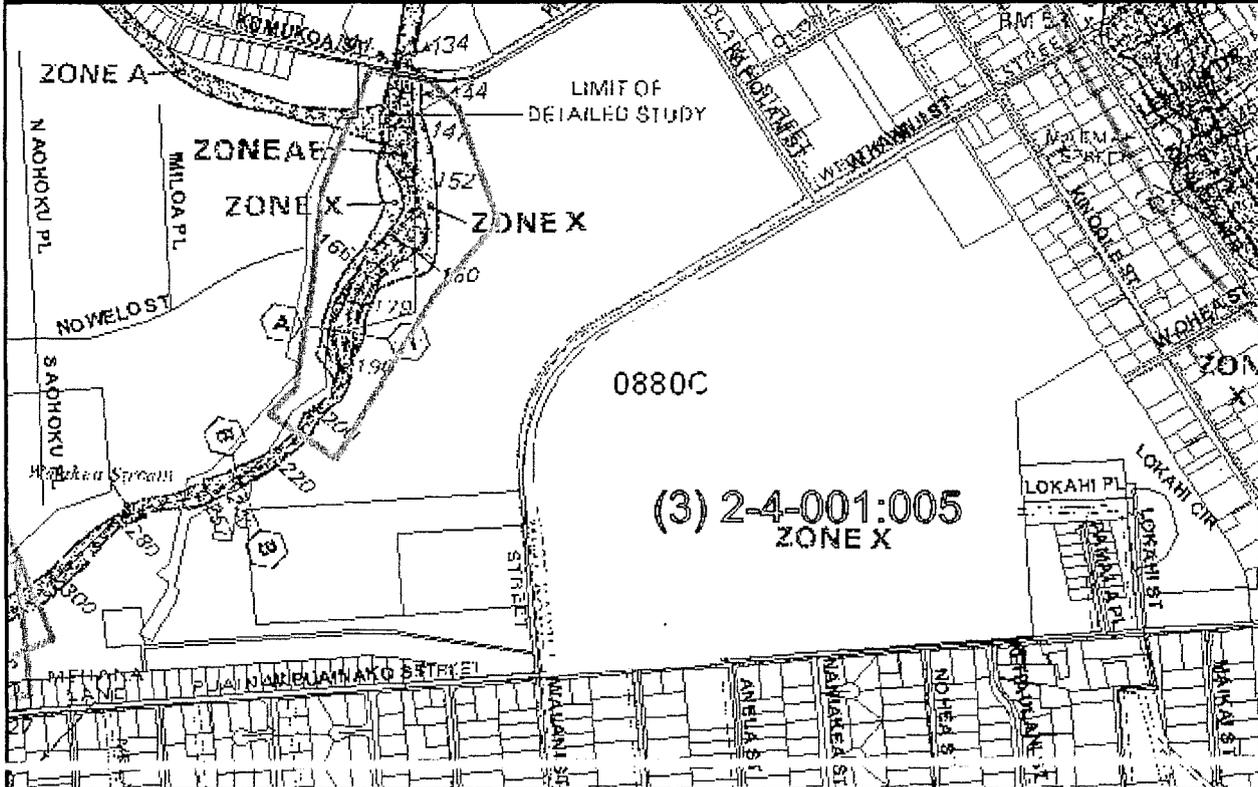
( ) Other: \_\_\_\_\_

Should you have any questions, please call Mr. Dennis Imada of the Planning Branch at 587-0257.

Signed: Chris J. Chang  
CARTY S. CHANG, CHIEF ENGINEER  
Date: 6/30/15



# FLOOD HAZARD ASSESSMENT REPORT



## NATIONAL FLOOD INSURANCE PROGRAM

### FLOOD ZONE DEFINITIONS

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

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

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

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

### OTHER FLOOD AREAS

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

### PROPERTY INFORMATION

COUNTY: HAWAII  
 TMK NO: (3) 2-4-001-005  
 PARCEL ADDRESS: W KAWILI STREET  
 HILO, HI 96720  
 FIRM INDEX DATE: APRIL 02, 2004  
 LETTER OF MAP CHANGE(S): NONE  
 FEMA FIRM PANEL(S): 1551660880C  
 PANEL EFFECTIVE DATE: SEPTEMBER 16, 1988

PARCEL DATA FROM: JUNE 2013  
 IMAGERY DATA FROM: MAY 2005

### IMPORTANT PHONE NUMBERS

County NFIP Coordinator  
 County of Hawaii  
 Frank DeMarco, CFM (808) 961-8042  
State NFIP Coordinator  
 Carol Tyau-Beam, P.E., CFM (808) 587-0267

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

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

DAVID Y. IGE  
GOVERNOR OF HAWAII



CARTY S. CHANG  
ACTING 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

2015 JAN 20 A 11:24

RECEIVED  
LAND DIVISION  
HILO, HAWAII

January 14, 2015

MEMORANDUM

TO:

**DLNR Agencies:**

- Div. of Aquatic Resources
- Div. of Boating & Ocean Recreation
- Engineering Division
- Div. of Forestry & Wildlife
- Div. of State Parks
- Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- Land Division – Hawaii District
- Historic Preservation

2015 JAN 27 AM 11:08  
OFFICE OF THE ATTORNEY GENERAL  
STATE OF HAWAII

FROM:

Russell Y. Tsuji, Land Administrator

SUBJECT:

Early Consultation for Kawili Street Pedestrian Overpass Job No. UHH 2014-402

LOCATION:

South Hilo, Hawaii, TMKs: (3) 2-4-057:025 and 2-4-001:005

APPLICANT:

Geometrician Associates, LLC for University of Hawaii at Hilo

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by February 4, 2015.

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 Kevin Moore at 587-0426. Thank you.

Attachments

- We have no objections.
- We have no comments.
- Comments are attached.

Signed: 

Print name: GORDON C. HEST

Date: 1/26/15

cc: Central Files

DAVID Y. IGE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

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

CARTY S. CHANG  
INTERIM CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN  
INTERIM FIRST DEPUTY

W. ROY HARDY  
ACTING DEPUTY DIRECTOR - WATER

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

February 11, 2015

Russell Y. Tsuji  
DLNR-Land Division  
PO Box 621  
Honolulu, Hawai'i 96809  
Attn. Kevin Moore

LOG NO: 2015.00197  
DOC NO: 1502SN06  
Archaeology

Dear Mr. Tsuji:

SUBJECT: **Chapter 6E-8 Historic Preservation Review –  
Early Consultation for an Environmental Assessment for the Kāwili Street  
Pedestrian Overpass (Job No. UHH 2014-402)  
Waiākea Ahupua‘a, South Hilo District, Island of Hawai‘i  
TMK: (3) 2-4-001:005 and 2-4-057:025**

Thank you for the early effort to initiate consultation with our office regarding the preparation of a Draft Environmental Assessment (EA) for this project; we received your letter on January 16, 2015. The proposed project area is located on portions of the aforementioned parcels. The University of Hawai‘i at Hilo (UHH) plans to construct a new pedestrian overpass between the Student Housing Complex (Hale Alahonua) and the Campus Center spanning the distance between the two and over Kāwili Street to facilitate pedestrian safety.

Our records indicate an archaeological inventory survey (PHRI 1998) was conducted for TMK 2-4-001:005 which was accepted by our office (Log No. 26281, Doc. No. 0010RC01). A more recent archaeological assessment (PHRI 2006) for has been conducted for TMK: (3) 2-4-001:167 (previously known as TMK: (3) 2-4-057:025), which also was accepted by our office. These reports resulted in no adverse effects to historic properties following appropriate mitigation measures that were put in place. The project area has been impacted by previous disturbance and its current urban use.

There are no known historic properties within or adjacent to the proposed project area. Based on current information, SHPD believes that **no historic properties will be affected** by the current project. We request the opportunity to review the EA when it is completed. Please contact Sean Nāleimaile at (808) 933-7651 or at [Sean.P.Naleimaile@hawaii.gov](mailto:Sean.P.Naleimaile@hawaii.gov) if you have any questions or concerns regarding this letter.

Aloha,

A handwritten signature in black ink that reads "Susan A. Lebo".

Susan A. Lebo, PhD  
Acting Archaeology Branch Chief

cc: Dr. Ron Terry  
Geometrician Associates, LLC.  
PO Box 396  
Hilo, Hawai‘i 96721  
([rterry@hawaii.rr.com](mailto:rterry@hawaii.rr.com))



**DEPARTMENT OF WATER SUPPLY • COUNTY OF HAWAII**

345 KEKŪANAŌ'A STREET, SUITE 20 • HILO, HAWAII 96720

TELEPHONE (808) 961-8050 • FAX (808) 961-8657

February 24, 2015

Mr. Ron Terry  
Geometrician Associates, LLC  
PO Box 396  
Hilo, HI 96721

**DRAFT ENVIRONMENTAL ASSESSMENT  
EARLY CONSULTATION FOR KAWILI STREET PEDESTRIAN OVERPASS  
JOB NO. UHH-2014-402  
TMK'S 2-4-057:025; 2-4-001:005**

This is in response to your Draft Environmental Assessment letter dated January 10, 2015.

Water is available from an existing 8-inch waterline within Kawili Street. Please be informed that there are existing meters serving parcels on both sides of the proposed bridge.

The Department will request estimated maximum daily water usage calculations, prepared by a professional engineer licensed in the State of Hawai'i, for review and approval. After review of the calculations, the Department will determine if the existing meter serving the parcel is adequate to support the additional water demand or if a larger or additional meter will be required. Should the water demand for the proposed improvements exceed the original water allocation for the parcel, additional facilities charges may also be required.

Please be informed that the facility would require that there be 2,000 gallons per minute available at the site for fire protection. The existing 8-inch waterline with Kawili Street is inadequate to provide the required fire flow per the Department's Water System Standards. The Fire Department should be contacted to determine any other fire protection requirements.

Should there be any questions, please contact Mr. Troy Samura of our Water Resources and Planning Branch at 961-8070, extension 255.

Sincerely yours,

Quirino Antonio, Jr., P.E.  
Manager-Chief Engineer

TS:dfg