



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
**STREAM CHANNEL ALTERATION
PERMIT APPLICATION**

For Official Use Only:

Instructions: Please print in ink or type and send one (1) completed hardcopy and one (1) digital copy of the application with attachments to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. Applications must be accompanied by a non-refundable filing fee of **\$25.00** payable to the Department of Land and Natural Resources. The Commission may not accept incomplete applications without the required signatures. For assistance, call the Stream Protection and Management Branch at **587-0234**. For further information and updates to this application form, visit <http://dlnr.hawaii.gov/cwrm>.

☒ Check here to allow Commission staff to communicate primarily via e-mail.
Legally required and other key correspondence will still be transmitted via postal mail.

PERMIT TYPE:

1. Permit Applying For: ☒ New ☐ After-The-Fact
2. Type of Construction: ☒ Installation ☐ Modification ☒ Removal

APPLICANT INFORMATION

3. APPLICANT'S NAME / COMPANY
Hawaii Department of Transportation (HDOT)
Applicant's Contact Person
Larry J. Dill
Applicant's Phone
(808) 587-2220

Applicant's Mailing Address
869 Punchbowl Street, Room 513
Honolulu, HI 96813
Applicant's E-mail Address
larry.j.dill@hawaii.gov

☒ Check here if project will impact multiple landowners. If project impacts multiple landowners, skip **Item 4** below, then complete and attach **Form LND-APP** to identify and verify landowner's approval of proposed stream channel alteration work.

4. LANDOWNER'S NAME / COMPANY
See Attached LND-APP Form
Landowner's Contact Person
Landowner's Phone

Landowner's Mailing Address
Landowner's E-mail Address

5. CONSULTANT'S NAME / COMPANY
WSP USA Inc.
Consultant's Contact Person
Darin Chinen
Consultant's Phone
(808) 566-2252

Consultant's Mailing Address
1001 Bishop St. Suite 2400, Honolulu, HI 96813
Consultant's E-mail Address
Darin.Chinen@wsp.com

6. CONTRACTOR'S NAME / COMPANY
TBD
Contractor's Contact Person
TBD
Contractor's Phone
TBD

Contractor's Mailing Address
TBD
Contractor's E-mail Address
TBD

STREAM INFORMATION

7. Island: (Check only one) ☐ Kauai ☐ Oahu ☐ Molokai ☐ Lanai ☐ Maui ☒ Hawaii

8. Tax Map Key(s) List all affected tax map key parcels.
(3)6-6-004:999: Kawaihae Road right-of-way (ROW). See Attachment A for Project Location Map

9. Stream / Gulch Name(s) List all affected streams and/or gulches.
Tributary Name: Keanuio mano, Stream Name: Waiulaula, Quadrangle: Kamuela (Per Hawaii State GIS Program data "streams_dar" downloaded from the State GIS Program May 30, 2024.

FOR OFFICIAL USE ONLY:

LAT: _____ SWHU ID: _____ FILE ID: _____
LON: _____ GWHU ID: _____ DOC ID: _____
REACH ID: _____

GENERAL PROJECT INFORMATION**10. Project Type:** Check all that apply.

- | | | | | | |
|---|--|--|---|-------------------------------------|---|
| <input type="checkbox"/> Bank Stabilization | <input checked="" type="checkbox"/> Bridge | <input type="checkbox"/> Channel Alignment | <input type="checkbox"/> Channel Lining | <input type="checkbox"/> Culvert | <input type="checkbox"/> Dam / Dike / Weir |
| <input type="checkbox"/> Desilting Area | <input type="checkbox"/> Drainage Outlet | <input type="checkbox"/> Dredging | <input type="checkbox"/> Ford Crossing | <input type="checkbox"/> Grading | <input type="checkbox"/> Levee / Flood Wall |
| <input type="checkbox"/> Restoration | <input type="checkbox"/> Retaining Wall | <input type="checkbox"/> Retention Basin | <input type="checkbox"/> Stream Gage | <input type="checkbox"/> Sewer Line | <input type="checkbox"/> Water Line |
| <input type="checkbox"/> Other - Describe: | | | | | |

11. Project Site Location(s): Provide site coordinates of downstream-most point of project in degrees, minutes, seconds (NAD83).

Latitude: 20° 01' 35.6"

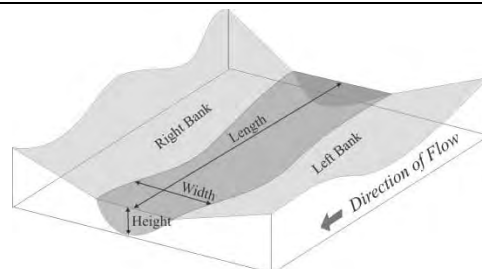
Longitude: 155° 41' 55.847"

Elevation: ~2400 ft. above mean sea level

12. Structure Dimensions: (feet)

Provide generalized dimensions for the entire project / structure area. If the project includes a pipe (e.g., culvert, drain, etc.), provide the pipe diameter.

Width:	62 ft
Height:	8 ft
Length:	71 ft - 97 ft
Diameter:	N/A

**13. Structure Location:**

Provide the general location of the stream channel alteration structure in relation to the streambank.

- | |
|--|
| <input type="checkbox"/> Left bank (downstream view) |
| <input type="checkbox"/> Right bank (downstream view) |
| <input checked="" type="checkbox"/> Across entire stream channel |

14. State Land Use Classification: (Check all that apply)

- | | | | |
|---|---------------------------------------|--------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> Agriculture | <input type="checkbox"/> Conservation | <input type="checkbox"/> Rural | <input type="checkbox"/> Urban |
|---|---------------------------------------|--------------------------------|--------------------------------|

LEGAL REQUIREMENTS

If required, the permits or approvals below must be obtained before the Commission on Water Resource Management can legally issue a permit. Visit the Commission's Applications & Forms webpage (<http://dlnr.hawaii.gov/cwrm/info/forms/>) for links to agency websites/contact information.

15. Conservation District Use Permit (CDUP): To find out if your stream channel alteration project is located in a Conservation District (CD), you may visit to the Land Use Commission (LUC) website at <http://luc.hawaii.gov/maps> to view Land Use District Boundary maps. If the stream channel alteration will be located in a CD, contact the Department of Land and Natural Resources' Office of Conservation and Coastal Lands (OCCL) at (808) 587-0377 to determine if a CDUP is required.

- | |
|---|
| <input type="checkbox"/> Stream channel alteration is in a Conservation District. |
| <input type="checkbox"/> Required. CDUP #: _____ Date CDUP approved: _____ |
| <input type="checkbox"/> Not Required. Attach documentation from Office of Conservation and Coastal Lands (OCCL), Department of Land and Natural Resources. |
| <input type="checkbox"/> I have not checked with the OCCL about whether or not a CDUP is required. |
| <input checked="" type="checkbox"/> Stream channel alteration is <u>not</u> in a Conservation District. |

16. Special Management Area Permit (SMAP): To determine if an SMAP is necessary, contact your County Planning Department.

- | |
|--|
| <input type="checkbox"/> Required. SMAP #: _____ Date SMAP approved: _____ |
| <input checked="" type="checkbox"/> Not Required. Attach documentation from applicable County agency. See Attachment A for SMA Map. |
| <input type="checkbox"/> I have not checked with the County about whether or not an SMA Permit is required. |

17. State Historic Preservation Division (SHPD), Department of Land and Natural Resources: If the parcel(s) affected by the stream alteration has been reviewed by the State Department of Land and Natural Resources Historic Preservation Division (SHPD or through an OEQC Environmental Review, Special Management Area Permit, etc.), check "yes" and attach any relevant documentation from SHPD. If the affected parcel(s) has not undergone SHPD review, attach a photograph of the affected area, a schematic diagram (showing the location, access road and infrastructure for the alteration), and a short description of the prior use(s) of the land on which the alteration resides.

*Please note: You are **strongly advised** to contact the SHPD to obtain a pre-review of your project. In the event that you do not get an HP pre-review and if during the course of either review or the permit itself it is determined that you need SHPD's concurrence, your application or permit may be held in abeyance or denied until issues with HP are resolved. To contact SHPD, please call (808) 692-8015.

- | |
|--|
| <input checked="" type="checkbox"/> I have consulted the SHPD regarding potential impacts of stream channel alteration activities on historic sites. I have attached applicable documentation from the SHPD. See Attachment D: Section 106 Effect Determination and Attachment E: HRS 6E-8 Effect Determination |
| <input type="checkbox"/> I have not consulted with the SHPD regarding potential impacts of stream channel alteration activities on historic sites. |

18. Chapter 343, Hawaii Revised Statutes, Hawaii Environmental Policy Act:

- | |
|--|
| <input checked="" type="checkbox"/> An Environmental Assessment was completed, and |
| <input type="checkbox"/> An Environmental Impact Statement was required and has been accepted (attach letter of acceptance). |
| Publication date in The Environmental Notice: _____ |
| <input checked="" type="checkbox"/> A Finding of No Significant Impact has been determined (attach letter). See Attachment F: The Environmental Notice (July 8, 2022) |
| Publication date in The Environmental Notice: <u>July 8, 2022</u> |

This project proposes:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Use of state or county lands, or use of state or county funds | <input type="checkbox"/> A wastewater treatment unit |
| <input type="checkbox"/> Use within a state conservation district | <input type="checkbox"/> Waste-to-energy facility |
| <input type="checkbox"/> Use within a shoreline setback area | <input type="checkbox"/> Landfill |
| <input type="checkbox"/> Use within a national or Hawaii registered historic site | <input type="checkbox"/> Oil refinery |
| <input type="checkbox"/> Use within the Waikiki Special District | <input type="checkbox"/> Power-generating facility |
| <input type="checkbox"/> The construction, expansion or modification of helicopter facility | <input type="checkbox"/> None of the above 11 items |

OTHER REGULATORY REQUIREMENTS

If the proposed stream channel alteration is subject to the following permits or approvals, indicate by checking the appropriate box below and submit either the approval letter from the appropriate agency or attach a copy of the application form. If the proposed stream channel alteration is not subject to the following permits or approvals, indicate by checking the "N/A" (Not Applicable) field.

	<u>Attached</u>	<u>N/A</u>
19. U.S. Army Corps of Engineers (Harbors and Rivers Act, Section 404, Clean Water Act)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20. State Department of Health, Clean Water Branch (Section 401, Clean Water Act, Water Quality Certification, Best Management Practices Plan)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21. Right-of-Entry or Right-of-Way Permit if the proposed stream channel alteration includes State lands. (Chapter 171, Hawaii Revised Statutes)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22. Hawaii Environmental Policy Act (Chapter 343, Hawaii Revised Statutes; Title 11, Chapter 200, Hawaii Administrative Rules) See Attachment F.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23. Soil and Water Conservation District	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24. County Certification of "No-Rise"	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25. County Grading Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26. County Discretionary Permit(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CULTURAL IMPACTS

Articles IX and XII of the State Constitution, other state laws, and the courts of the State, require government agencies to promote and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups. If there is not enough space available, please make a note in the field (e.g., "See attached") and attach all information with this application as requested.

27. Please provide the identity and scope of cultural, historical, and natural resources in which traditional and customary native Hawaiian rights are exercised in the area.

A Historic Properties Assessment (in compliance with Section 106 of the NHPA and HAR §13-276) and Cultural Impact Assessment (in compliance with the Hawaii Environmental Policy Act) were completed for the project. The Historic Properties Assessment identified four historic properties within the APE: Waiaka Bridge (SIHP 50-10-06-29221), Keanuiomano Stream Gage (SIHP 50-10-06-23313), a large precontact agricultural complex (SIHP 50-10-06-22632), and the former location of the 1865 Waiaka Catholic Church (no site number). Of these four sites, only one of these sites (Waiaka Bridge) was located in the stream channel, and determined eligible for inclusion in the National and State Historic Register of places. - Waiaka Bridge was built in 1932 and is eligible for the National Historic Register of places under Criterion C as a good example of a 1930's reinforced concrete bridge that is typical of its period in its use of materials, method of construction, craftsmanship and design.

The Cultural Impact Analysis completed for this project identified no traditional cultural practices located within the project area. However, traditional cultural practices have been known to occur along the stream, i.e. ceremonial baths, ceremonies along the stream, and gathering of pohaku for hula practitioners.

28. Identify the extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action.

No impacts to traditional and customary Native Hawaiian rights are anticipated as a result of the project, as no Native Hawaiian practices are known to exist in the project area. Contractors will be advised to avoid disruption to any cultural practices that do occur during construction.

The proposed project will demolish Waiaka Bridge and use Site 22632 as a potential staging area. In a letter dated February 19, 2025 the SHPO concurred with HDOT's "Adverse effect" determination under 36 CFR 800.5. An MOA is being developed to mitigate the impacts of the project on the historic bridge. See Attachment D for more details on the Section 106. HDOT anticipates a determination of "Effect, with proposed mitigation commitments" in accordance HRS-6. See Attachment E for 6E-8 documentation.

29. What feasible action, if any, could be taken by the Commission on Water Resource Management in regards to your application to reasonably protect Native Hawaiian rights?

No feasible action needs to be take to protect Native Hawaiian rights in regards to this application, as this project is not anticipated to put Native Hawaiian rights at risk.

PROJECT DESCRIPTION

Please complete the following sections by providing detailed information on the project components identified below. If there is not enough space available, please make a note in the field (e.g., "See attached") and attach all information with this application as requested.

30. Describe the overall project scope and objectives.

The proposed project actions include constructing a single lane roundabout to replace the Kawaihae Road and Kohala Mountain Road intersection (outside the scope of this application) and replacing Waiaka Bridge at its existing location. The purpose of the project is threefold: to address the bridges functional deficiencies and upgrade it to meet Federal and State design guidelines; to improve the line-of-site at the roadway approaches to the bridge at Kawaihae Road and Kohaa Mountain Road; and to improve the hydraulic conditions for Keanuiomano Stream under Waiaka Bridge. To address the current bridge's functional deficiencies, the replacement bridge will have wider lanes and shoulders to reduce traffic and congestion in the area. The current Waiaka Bridge has been overtopped by stream flows during storms. The replacement bridge will be designed to carry a 100-year rain event and reduce flood risk in the surrounding areas.

The proposed channel alteration would include demolishing the existing Waiaka Bridge and its central pier in Keanuiomano Stream. The new bridge would clear span the stream and new wingwalls would be constructed on either side of the crossing. During the demolition of the old bridge and construction of the proposed bridge, a temporary detour bridge would be installed upstream of the existing Waiaka Stream Bridge to allow continuous traffic flow. This detour bridge would clear span the stream and would not alter the stream channel in any way.

Construction equipment will not be placed within the stream or below the stream's ordinary high water mark during the construction of the new bridge or temporary bridge as all work could occur from the stream banks. However, demolition of the existing Waiaka Bridge may require construction equipment to be placed in the stream. Best management practices will be implemented during construction to reduce construction related water quality impacts from work completed in the stream and from storm water runoff.

The project is pending a no permit determination from the USACE as all work will occur above the ordinary high water mark. A NPDES permit will be obtained for the project.

31. Describe existing stream channel and streamflow conditions at the site of the proposed stream channel alteration.

The subject stream channel in the vicinity of the project area is located in the South Kohala District in Waimea and carries Kawaihae Road (State Route 19) over Keanuiomano Stream. The stream bed is a natural, rock channel in the vicinity of the bridge. The stream channel is generally dry and interspersed with water pools. During drier months of the year, there is no stream flow. The stream channel sits within the FEMA flood zone A, which is categorized as having a 1% annual chance of flooding and for which no base flood elevations have been determined. See Attachment A for a FIRM Map. Waiaka Bridge has been overtopped by stream flows in the past. Keanuiomano Stream is a perennial stream with interrupted flow at lower elevations. The current bridge contains a pier in the center of the stream bed.

32. Identify and describe the project components outlined below

A. Materials

Steel, concrete, premolded joint filler, non-shrinking grout, epoxy resin, polymer modified repair mortar, concrete sealer, CLSM backfill, aggregate base course, form work.

B. Quantities

Approximately 400 cubic yards (CY) will be excavated. This will consist of the removal of the existing Waiaka Bridge's west abutment (177 CY), center pier (24 CY), and east abutment (158 CY) and around 40 CY of channel grading.

Approximately 75 CY of fill will occur. This will consist of approximately 36 CY of the new west abutment, 27 CY of the new east abutment and around 12 CY of additional wing wall area.

C. Excavation

The existing Waiaka Bridge, along with its central pier, will be removed. All of the existing bridge components that are being removed, including the central pier, are located outside of the ordinary high water mark (OHWM). Additionally, portions of the stream bed will be excavated to perform channel grading.

D. Fill

Fill will consist of the new Waiaka Bridge's abutments. The new bridge will have a larger footprint than the old bridge. Additionally, some riprap will be placed along the new bridge abutments. None of the fill will be placed below the OHWM.

E. Disposal

All asphalt concrete materials from cold planing, reconstruction and roadway excavation operations shall be properly disposed at an authorized facility. The contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to overlaying of asphalt concrete. All waste will be stored and collected in a securely lidded metal dumpster which will be emptied weekly or once it reaches two-thirds full.

F. Construction methods

Perimeter control measures above the high-water mark will be implemented. BMPs will be implemented during construction to minimize the potential impacts to water quality. BMPs for in-water and land based construction will be implemented in accordance with the documented approach as detailed in "An Integrated Storm Water Management Approach and a Summary of Clear Water Diversion and Isolation Best Management Practices for the State of Hawaii" by the Federal Highway Administration and Hawaii Department of Transportation Practitioners Guide (2016) or the Construction Best Management Practices Field Manual by the State of Hawaii Department of Transportation (2008) if in water work occurs.

G. Temporary facilities

Temporary facilities would include the temporary detour bridge which would be installed upstream of the existing Waiaka Bridge to allow for a continuous flow of traffic while construction occurs. This temporary detour bridge would span the entire stream channel and would not alter the stream channel in any way (i.e. fill or excavation). Temporary Staging is anticipated to occur on a private parcel (3)6-6-001:011, around 2000 ft east of Waiaka Bridge.

H Expected period of time required for construction

The majority of project work will occur during working hours; however, around four concrete pours of night work will be needed to construct the bridge. These pours are expected to take one night each, but may take two consecutive nights to complete. After the first pour, the three others would be spaced 4-6 weeks apart. Construction is anticipated to last around 2 years.

I. Liability during construction

The selected Contractor would be required to monitor noise and emission levels from all construction activities relating to vehicles, construction equipment, and power tools. The Contractor shall take all necessary precautions for the protection, conveniences, and safety of public traffic. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of their operations. The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities, and existing structures from damages due to construction. Repairs shall be at the Contractor's own expense to the satisfaction of the affected party.

33. Describe the project's consistency with county zoning and development plans.

The proposed replacement bridge is located entirely within the HDOT ROW surrounded by Agricultural and Urban State Land Use Districts. Zoning surrounding the ROW consists of Agricultural and Residential zones. The proposed action will not permanently alter any existing land uses or zoning patterns and is therefore consistent with zoning and development plans. See Attachment A for State Land Use District Map and Zoning Map

34. Identify potential alternatives to the project and describe the relative costs and benefits of each alternative.

The proposed alternative of bridge replacement was estimated at approximately \$15 million. The benefits of this alternative would include a reduced flood risk in the vicinity of the project area; reduced traffic congestion as a result of updating the bridge with current standards; and increased line-of-site distances while approaching the bridge.

Potential alternatives included a no-Build Alternative which would not cost anything. However, this alternative would not address the functional deficiencies of the Waiaka Bridge or the lack of the stream channel to accommodate a 100 year flood. An alternative consisting of a new T-intersection instead of the proposed roundabout was also considered; however, no alternatives to bridge replacement were considered given the need of the project.

SUBMITTALS

Please submit the following plans, maps, or drawings in legible form, preferably on 8.5" by 11" sheets.

35. Location Map: Provide a location map of the proposed project relative to major roadways. See Attachment A

36. Plans / Elevations / Sections: Provide a plan view of the proposed stream channel alteration structure in relation to the stream channel and property boundaries. Elevation and section views of the structure in relation to the stream channel should also be provided if available. See Attachment C.

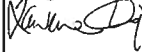
SIGNATURES

Signing below indicates that the signatories understand and swear that the information provided is accurate and true to the best of their knowledge. Further, the signatories understand that if the permit requested is granted by the Commission on Water Resource Management (Commission), the permit shall be subject to the following conditions:

- 1) The proposed work is to be completed within two (2) years from the date of permit approval.
- 2) The permittee shall notify the Commission, by letter, of the actual dates of project initiation and completion.
- 3) The permittee shall submit a set of as-built plans and photographs to the Commission upon completion of the project.
- 4) The permit may be revoked if work is not started within six (6) months after the date of approval or if work is suspended or abandoned for six (6) months.
- 5) If the commencement or completion date is not met, the Commission may revoke the permit after giving the permittee notice of the proposed action and an opportunity to be heard.

37. APPLICANT**Print Name:**

Larry J. Dill

Signature:**Date:**

Apr 25, 2025

38. CONSULTANT**Print Name:**

Darin Chinen

Signature:**Date:**

4/29/2025

39. CONTRACTOR**Print Name:**

Not yet known

Signature:**Date:****40. LANDOWNER** (If multiple landowners, skip Section 53, then complete and attach Form SCAP-LND with appropriate landowner signatures.)**Print Name:**

See Attached SCAP-LND

Signature:**Date:**

CHECKLIST FOR A COMPLETE APPLICATION and ITEM DESCRIPTIONS (ITEMS 1 - 14)

- ☐ Fill in the most recent application form (check <http://dlnr.hawaii.gov/cwrm> or call 587-0234 for updates).
- ☐ Fill in every line which includes Items 1-40, as indicated (total 8 pages).
- ☐ Enclose a check for \$25 payable to the Department of Land and Natural Resources.
- ☐ Mark the proposed stream channel alteration location on: the appropriate USGS quad map, TMK map, photo and schematic, and attach to the application.
- ☐ Attach Form LND-APP to identify and obtain authorizations for the project if multiple landowners will be impacted.
- ☐ Attach a grading plan and cross section profiles showing existing and finish grades, if available.
- ☐ Attach documentation from CDUP, SMAP, SHPD when applicable regarding Items 15-17.
- ☐ Attach letters from U.S. Army Corps of Engineers, Hawaii Department of Health, Office of Conservation and Coastal Lands, and appropriate county agencies regarding Items 18-26.
- ☐ Provide digital copies on CD-ROM or via e-mail, if available.
- ☐ Obtain the necessary signatures for the application form.

Send the application and maps, copies, and the filing fee to:

Commission on Water Resource Management

P.O. Box 621

Honolulu, HI 96809

PERMIT TYPE

1. **Permit Status:** Indicate whether this application is for a new stream channel alteration project (including medication or abandonment) or if the project has already been completed and an after-the-fact permit is being applied for.
2. **Type of Construction:** Is the permit application for the installation of a new stream channel alteration, or modification or removal of an existing stream channel structure.

APPLICANT INFORMATION

3. **Applicant's Information:** Fill in the information for the applicant. This should be the entity that will be responsible for the maintenance of the stream channel alteration when the project is completed.
4. **Landowner's Information:** Fill in the information for the landowner of the property where the stream channel alteration will be located.
5. **Consultant's Information:** Fill in the information for the consultant who will assist with plan and design preparation for the subject project.
6. **Contractor's information:** Fill in the information for the contractor who will perform the work on the subject stream channel alteration project.

STREAM INFORMATION

7. **Island:** The island name where the stream channel alteration will be located.
8. **TMK:** Tax Map Key number (generally there is no lot number, but where a parcel is divided into two lots, fill in the lot number)
9. **Stream / Gulch Name:** Name of the stream or gulch where the stream channel alteration will be located.

GENERAL PROJECT INFORMATION

10. **Project Type:** Identify the type of work being performed, and select all that apply to the project.
11. **Project Site Location(s):** Fill in stream channel alteration location coordinates taken from a GPS unit at the project site. Units are Degrees, Minutes and Seconds (seconds should be filled out to at least one decimal place; e.g. 19°59'32.8"N, 155°14'51.5"W). If more than one site, attach separate sheet. Elevations should be provided in feet above mean sea level.
12. **Structure Dimensions:** What are the physical dimensions of the stream channel alteration structure that will be located in or adjacent to the stream channel?
13. **Structure Location:** Will the structure be located on the right or left bank (facing downstream) or across the entire stream channel?
14. **State Land Use Classification:** Identify the current State Land Use Classification.

Please see header descriptions for remaining Sections in completing Items 15 to 40.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
MULTIPLE LANDOWNERS/LOCATIONS FORM

For Official Use Only:

Instructions: Please print in ink or type and send completed form attached to stream channel alteration or stream diversion works permit application to the Commission on Water Resource Management, P.O. Box 621, Honolulu, Hawaii 96809. The Commission may not accept incomplete applications without the required landowner signatures. For assistance, contact the Stream Protection and Management Branch at 587-0234. For further information and updates to this application form, visit <http://dlnr.hawaii.gov/cwrm>.

A. LANDOWNER INFORMATION

For proposed stream channel alterations and stream diversion works affecting multiple landowners, complete the sections below for each individual landowner. **Form LND-APP** provides space for information on five (5) landowners. Complete as many forms as necessary to identify all, and only those, landowners affected by the proposed stream channel alteration or stream diversion works.

1. LANDOWNER'S NAME/COMPANY State of Hawaii Department of Transportation- Highways Division		Landowner's Contact Person Larry Dill	Landowner's Phone (808) 587-2220
Landowner's Mailing Address 869 Punchbowl Street, Room 513 Honolulu, HI 96813		Tax Map Key Parcel(s) Kawaihae Rd. and Kohala Mountain Rd. Right-of-Way	
Landowner's E-mail Address larry.j.dill@hawaii.gov			
Print Name: Larry J. Dill	Signature: 	Date: Apr 25, 2025	
2. LANDOWNER'S NAME/COMPANY Hawaii Preparatory Academy		Landowner's Contact Person TJ Kalaniopio	Landowner's Phone 808.640.0081
Landowner's Mailing Address 65-1692 Kohala Mountain Road Kamuela, HI 96743-8476		Tax Map Key Parcel(s) 6-5-001:033	
Landowner's E-mail Address tkalaniopio@hpa.edu			
Print Name: TJ Kalaniopio	Signature: 	Date: Apr 25, 2025	
3. LANDOWNER'S NAME/COMPANY		Landowner's Contact Person	Landowner's Phone
Landowner's Mailing Address		Tax Map Key Parcel(s)	
Landowner's E-mail Address			
Print Name:	Signature:	Date:	
4. LANDOWNER'S NAME/COMPANY		Landowner's Contact Person	Landowner's Phone
Landowner's Mailing Address		Tax Map Key Parcel(s)	
Landowner's E-mail Address			
Print Name:	Signature:	Date:	
5. LANDOWNER'S NAME/COMPANY		Landowner's Contact Person	Landowner's Phone
Landowner's Mailing Address		Tax Map Key Parcel(s)	
Landowner's E-mail Address			
Print Name:	Signature:	Date:	

Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches

Project No. BR-NH-019-1(045)

Attachment A: Maps

Project Location Map

USGS Quadrangle Map

TMK Map

SMA Map

Flood Insurance Rate Map

State Land Use District Map

Zoning Map

Attachment B: Photos

Attachment C: Proposed Work – Project Plans

Attachment D: Section 106 Effect Determination

Attachment E: HRS 6E-8 Effect Determination

Attachment F: The Environmental Notice (July 8, 2022)

Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches

Attachment A: Maps

Project Location Map

Quadrangle Map

TMK Map

SMA Map

Flood Insurance Rate Map

State Land Use District Map

Zoning Map

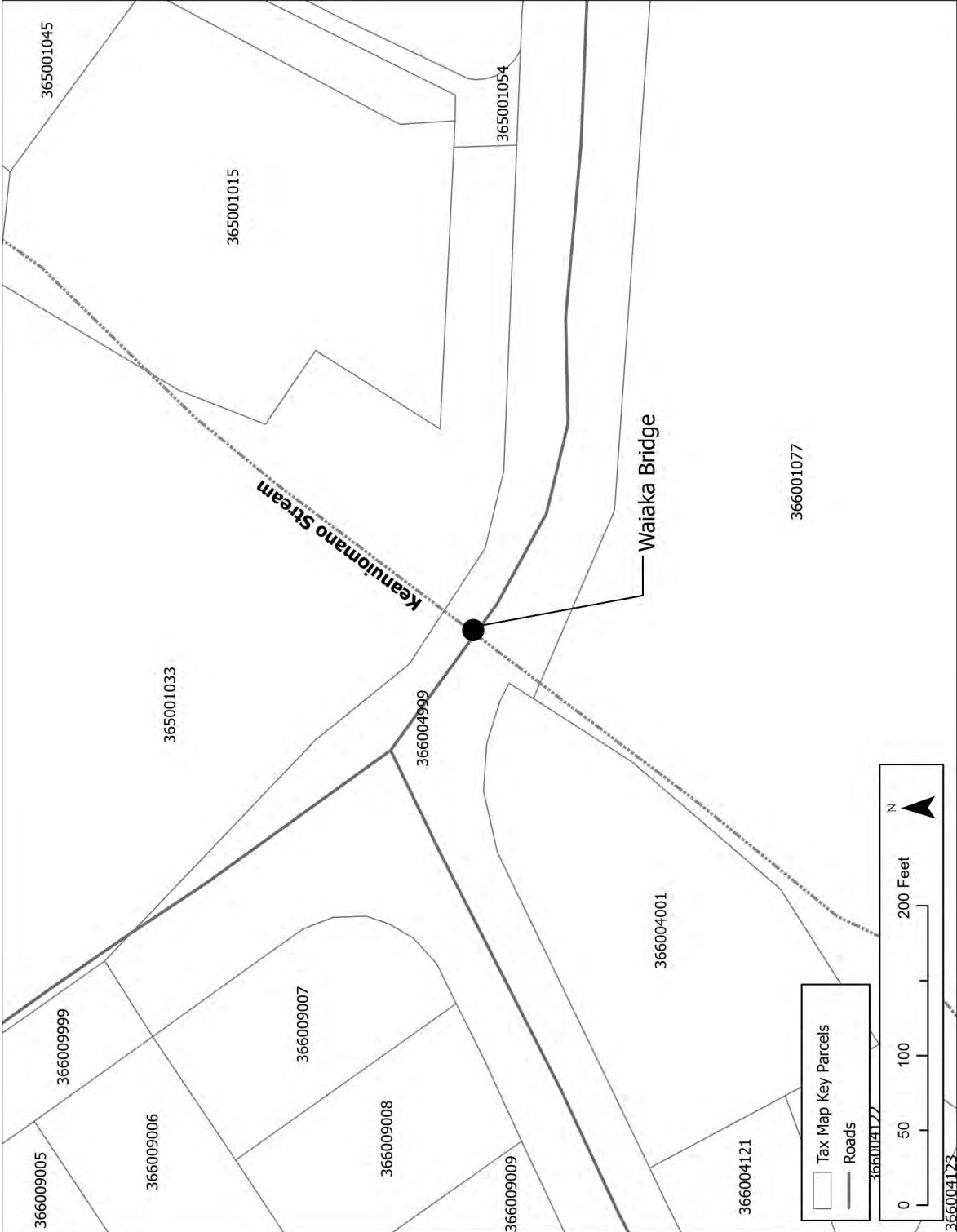
[illegible]

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

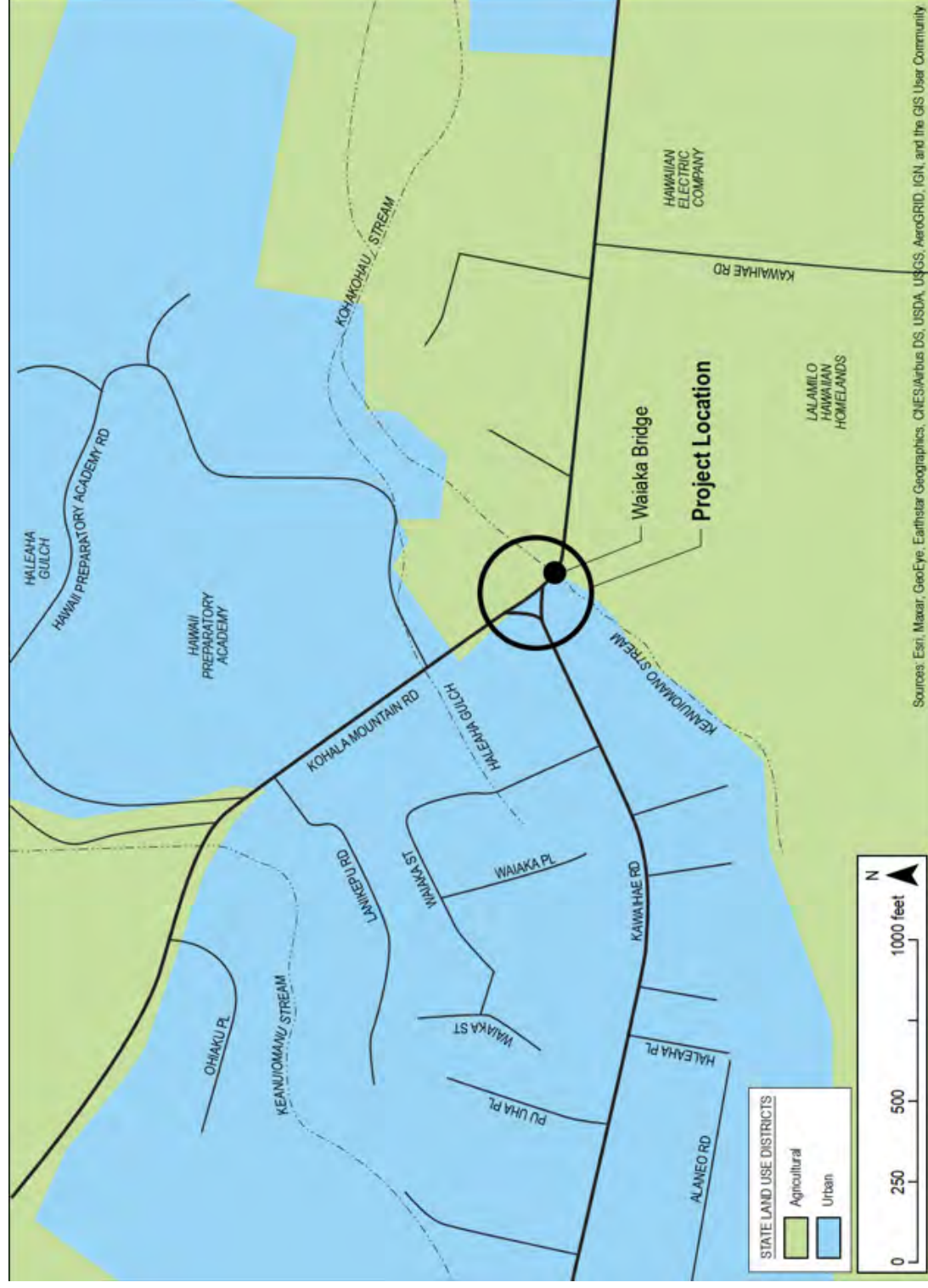
USGS Quadrangle Map



TMK Map



State Land Use District Map



Zoning Map



Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches

Attachment B: Site Photos

Waiaka Bridge Photos

November 26, 2022 : Three (3) Photos



November 26, 2022: View looking West



November 26, 2022: View looking West



November 26, 2022: View looking North



Figure 10. Keanu'imanō Stream with Waiaka bridge in the background, view to the south.



Figure 11. East bound lane of Kawaihae Road, view to the east.



Figure 14. Waiaka Bridge with Keanu'imanō Stream below; traffic in background is traveling westbound; view towards southeast.



Figure 15. Exiting the northern portion of Waiaka Bridge with Kohala Mountain Road (left); view to the north.

black wattle (*Acacia mearnsii*) are seen in the foreground along the eastern bank with cook pines (*Araucaria columnaris*) in the background along the western back.



Figure 8. Large Boulders and a Dry, Rocky Stream Bed to the South of the Waiaka Bridge
Note: Silk oak (*Grevillea robusta*) tree to the left and large clump of giant reed (*Arundo donax*) seen to the right (red arrow) near the bridge.



Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches

Attachment C: Proposed Work – Project Plans

TRUE NORTH
SCALE: 1" = 80'

Future R/W (approx.)

R/W

EP

Kohala Mountain Road (State Route 250)

Temporary Bridge

Temporary Road

Proposed Bridge

Existing Waiaka Bridge

R/W

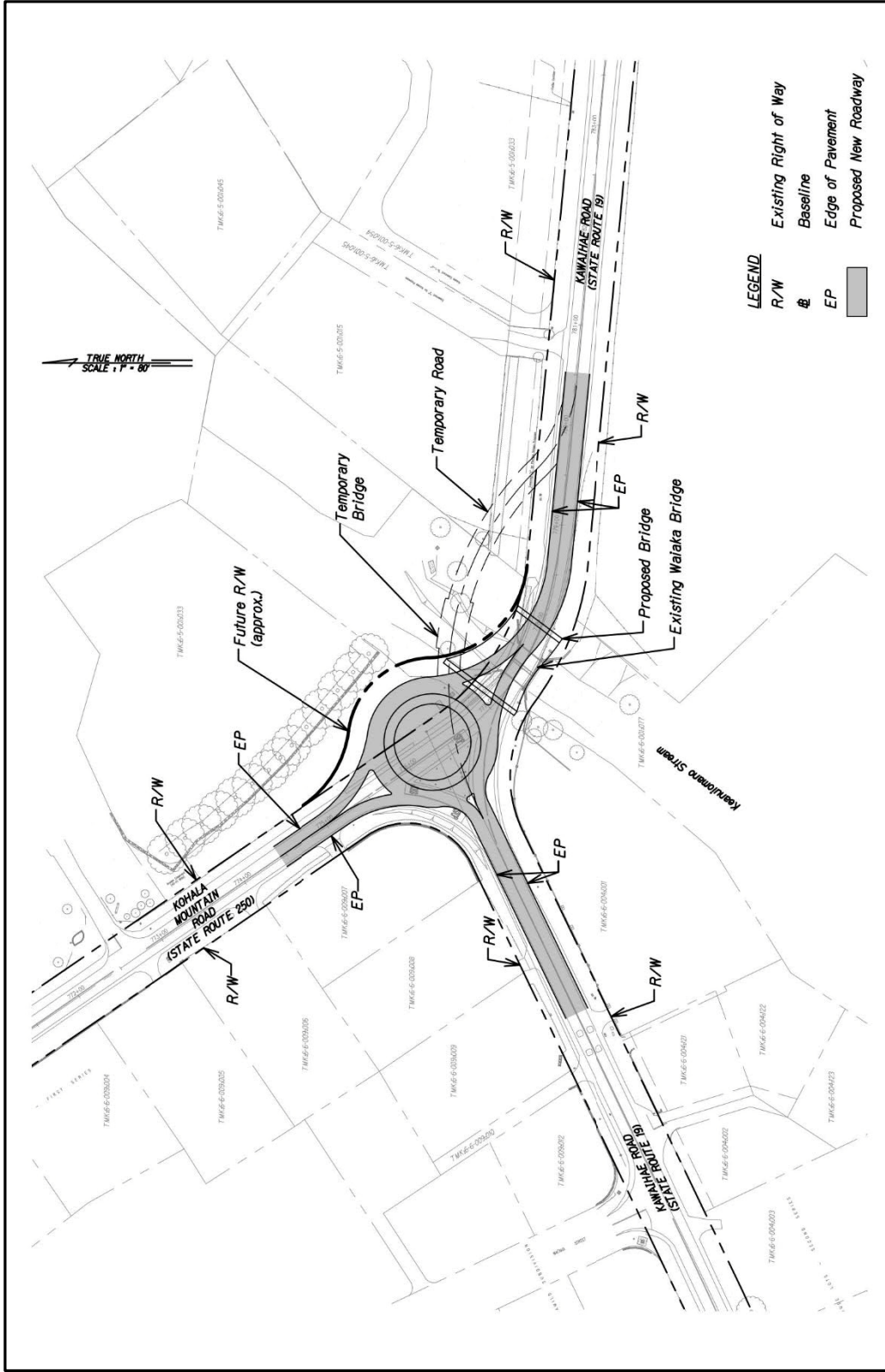
EP

Kawaihale Road (State Route 19)

Proposed New Roadway

LEGEND

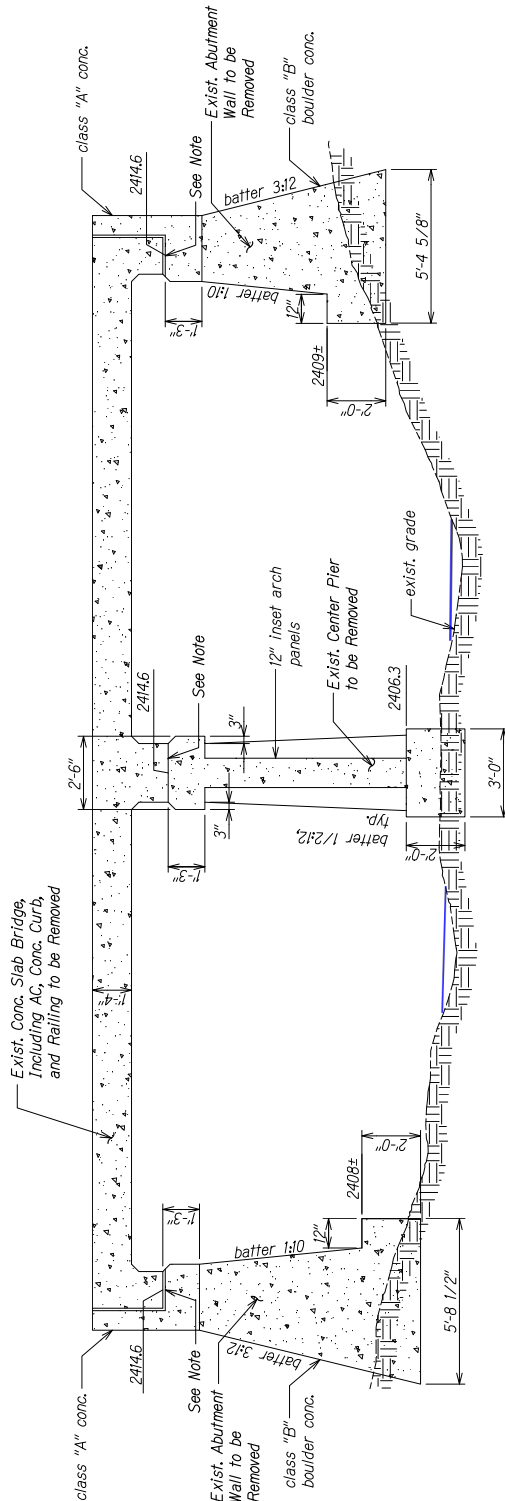
Symbol	Description
---	Existing Right of Way
---	R/W
---	Baseline
---	EP
---	Proposed New Roadway



FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	BR-NH-09-1045	2024	77	154

To Waikeae

To Hana



NOTE:

Existing slab superstructure bears on abutments and pier and is separated by roofing paper and may not be anchored. Contractor shall submit demolition plan to Engineer for review and approval. Demolition plan shall include intended BMP measures to prevent debris and dust from entering the surrounding stream.

Legend

— Ordinary High Water Mark

LONGITUDINAL SECTION A
Scale: 1/2" = 1'-0"



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

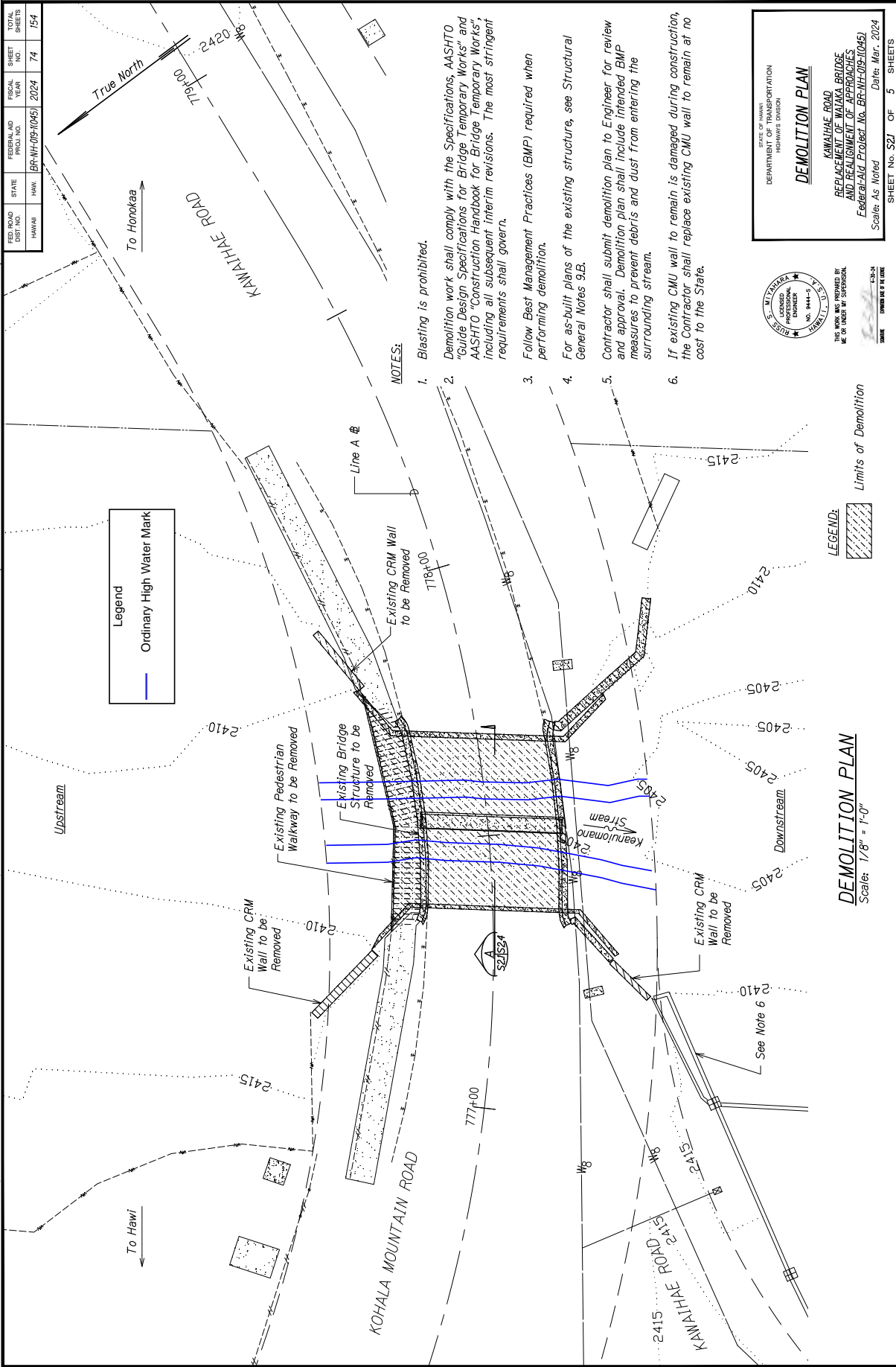
DATE: 1-25-24

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DEMOLITION
LONGITUDINAL SECTION
KAWAHAE ROAD
REPLACEMENT OF KAWAHAE BRIDGE
AND REALIGNMENT OF APPROACHES
Federal-Aid Project No. BR-NH-09-1045
Scale: As Noted Date: Mar. 2024

SHEET NO. 524 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HA-001	HA	BR-WH-05-1045	2024	74	154



NO.	DATE	BY
1	03/14/24	WMA
2	03/14/24	WMA
3	03/14/24	WMA
4	03/14/24	WMA
5	03/14/24	WMA
6	03/14/24	WMA
7	03/14/24	WMA
8	03/14/24	WMA
9	03/14/24	WMA
10	03/14/24	WMA

STATE	PROJ. NO.	SHEET NO.	TOTAL SHEETS
HAWAII	BR-NH-019-1(045)	1	186

SHEET NO.	INDEX OF DRAWINGS
1	TITLE SHEET
2	STANDARD PLANS SUMMARY
3-4	GENERAL NOTES
5-6	AND ABBREVIATIONS
7-10	UTILITY NOTES
11-12	WATER POLLUTION & EROSION
13-14	CONTROL NOTES AND DETAILS
15-17	DEMOLITION PLANS
18-19	ESCPs
20-23	TYPICAL SECTIONS
24-29	SURVEY CONTROL PLANS
30-33	ALIGNMENT PLANS
34-36	ROADWAY CONSTRUCTION PLANS
37-40	GUARDRAIL PLANS
41-45	ROADWAY PLAN AND PROFILES
46-50	SPOT ELEVATION PLANS
51-56	SIGNING & PAVEMENT MARKING
57-60	PLANS, NOTES AND DETAILS
61	EVC PLANS
62-82	TRAFFIC CONTROL PLANS
83-182	WATERLINE RELOCATION
183	PLAN & PROFILES
184-186	TEMPORARY BRIDGE PLAN
	ELECTRICAL PLANS
	STRUCTURAL PLANS
	CROSS SECTIONS PLAN
	CROSS SECTIONS

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

HONOLULU, HAWAII

PLANS FOR

KAWAIHAE ROAD

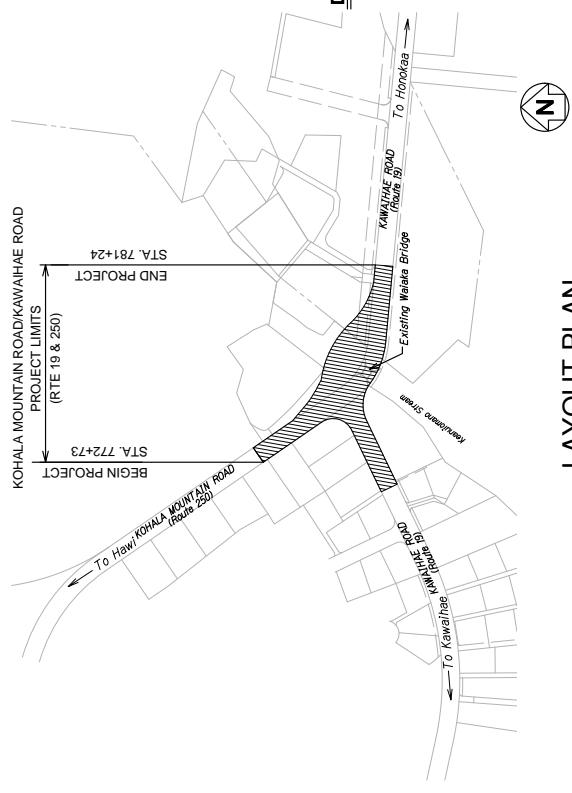
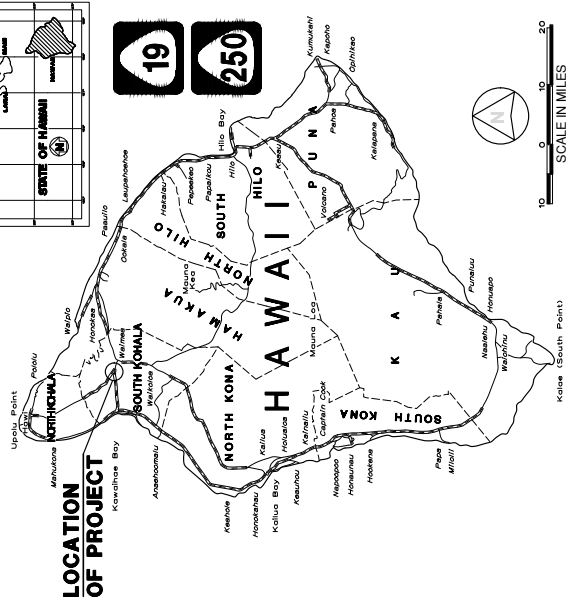
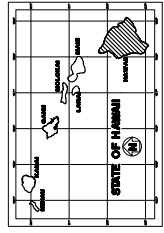
REPLACEMENT OF WAIKA BRIDGE

AND REALIGNMENT OF APPROACHES

FEDERAL-AID PROJECT NO. BR-NH-019-1(045)

DISTRICT OF SOUTH KOHALA

ISLAND OF HAWAII



LAYOUT PLAN

NOT TO SCALE

DESIGNED BY

WSP USA

DATE

MAR 2025

MANAGED BY

PHONE

DESIGN DESIGNATION (ROUTE 19)	DESIGN DESIGNATION (ROUTE 250)
ADT (2023) 13,500	ADT (2023) 2,700
ADT (2043) 15,900	ADT (2043) 3,000
DHV 1,280	DHV 260
D 57/43	D 57/43
T 2.72 %	T 2.09 %
V(Circular) 25 M.P.H.	V(Circular) 25 M.P.H.
V(Approaches) 35 M.P.H.	V(Approaches) 35 M.P.H.
V(Temp Rd.) 30 M.P.H.	

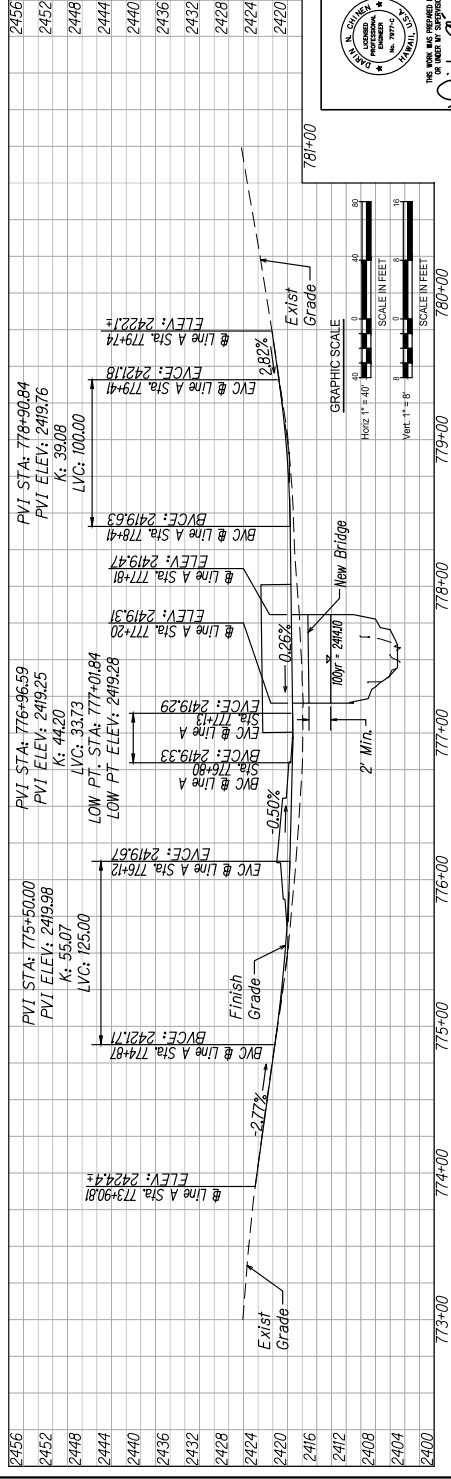
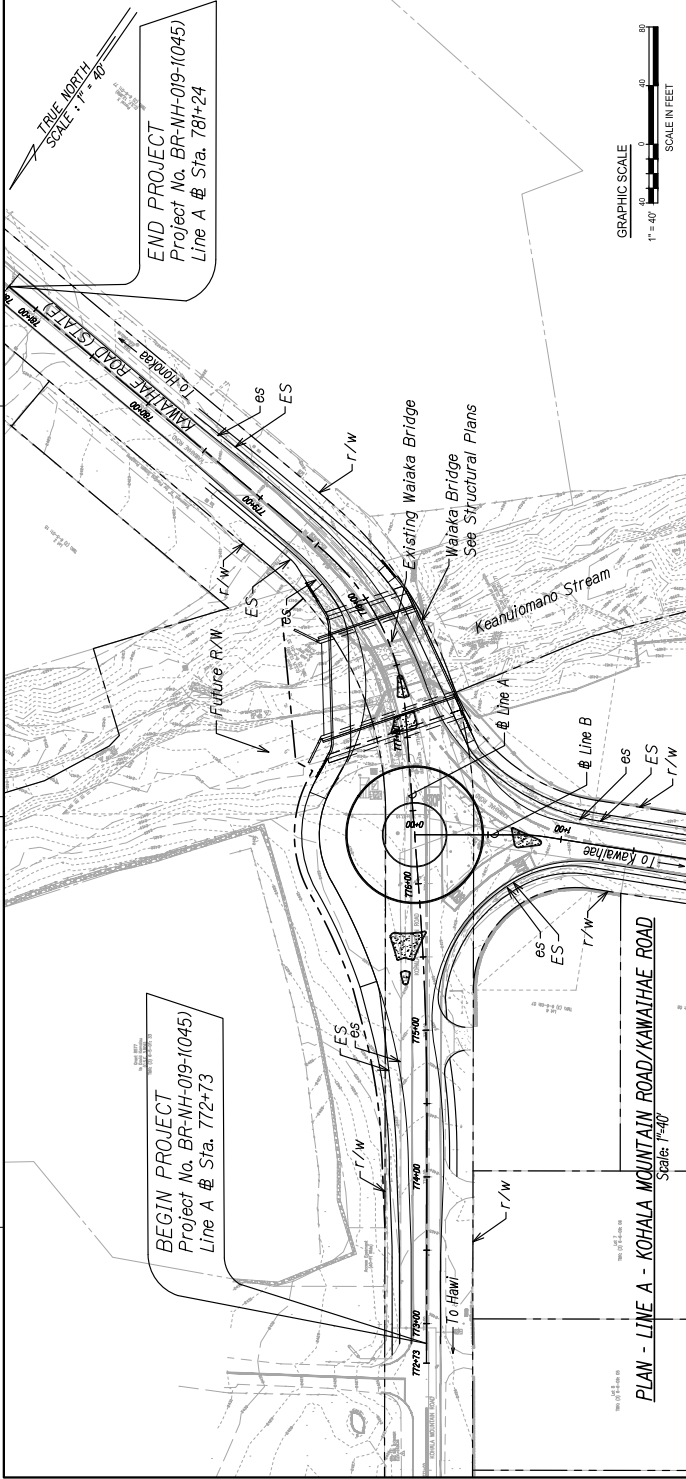
FEDERAL AID INTERSTATE PROJECTS PREVIOUSLY CONSTRUCTED OR UNDER CONSTRUCTION

ROUTE 19: MILE POST 58.72 TO MILE POST 58.88

ROUTE 250: MILE POST 0.00 TO MILE POST 0.07

DEPARTMENT OF TRANSPORTATION	DATE
STATE OF HAWAII	
APPROVED:	
DIR. OF TRANSPORTATION	

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-NH-019-1045	2026	34	186



GENERAL NOTES	NOTES
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF HIGHWAYS, EDITION 2014, AS AMENDED.	1. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF HIGHWAYS, EDITION 2014, AS AMENDED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RIGHTS-OF-WAY.	2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND RIGHTS-OF-WAY.
3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.	3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.	4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.
5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE THROUGHOUT THE PROJECT.	5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE THROUGHOUT THE PROJECT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EXCESS MATERIAL AND DEBRIS.	6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL EXCESS MATERIAL AND DEBRIS.
7. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES.	7. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ENVIRONMENTAL FEATURES.	8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ENVIRONMENTAL FEATURES.
9. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SAFETY MEASURES DURING CONSTRUCTION.	9. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SAFETY MEASURES DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION MATERIALS.	10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION MATERIALS.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN & PROFILE

KAWAIIHAE ROAD
REPLACEMENT OF WAIKAKE BRIDGE
AND REALIGNMENT OF APPROACHES
Federal Aid Project No. BR-NH-019-1045
Scale: As Noted Date: Mar. 2025

THIS DRAWING IS THE PROPERTY OF THE STATE OF HAWAII. IT IS LOANED TO YOU BY THE STATE OF HAWAII. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE STATE OF HAWAII.

SHEET NO. PP-1 OF 3 SHEETS

34

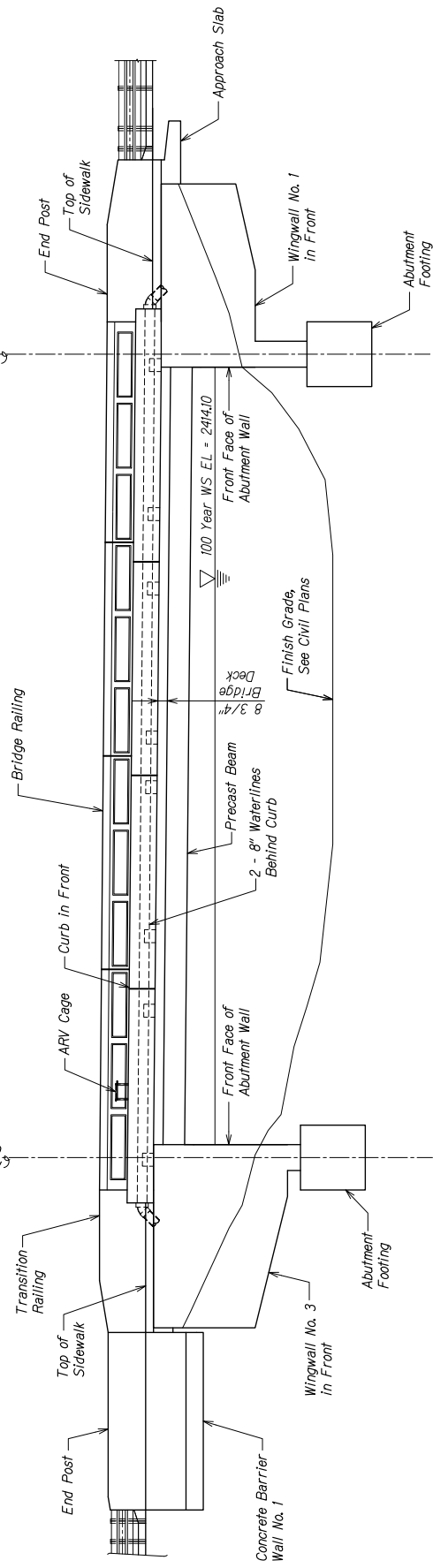
FED. ROAD DIST. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	BR-NH-05-1045	2026	92	186

To Hawi →

← To Honokaa

Abutment No. 1
Center Bearing

Abutment No. 2
Center Bearing



UPSTREAM ELEVATION A
Scale: 1/4" = 1'-0"



THE ENGINEER HAS REVIEWED THE PROJECT AND APPROVES THE CONSTRUCTION OF THE PROJECT. THIS IS NOT A GUARANTEE OF THE PROJECT. DATE: MAR. 2025
Joe S. M...
ENGINEER

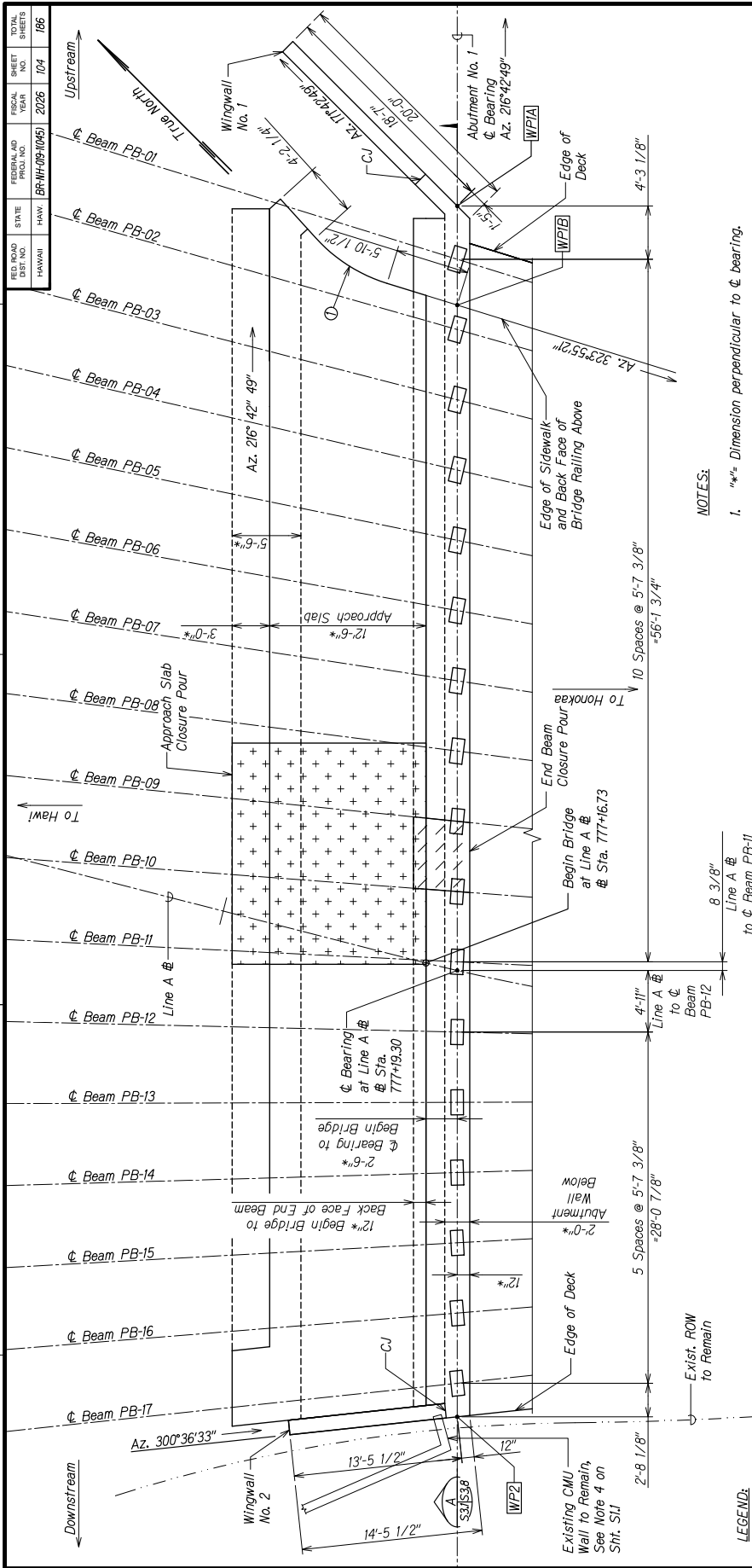
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UPSTREAM ELEVATION
KAWAHAE ROAD
REPLACE/REPAIR OF KAWAHAE BRIDGE
AND REALIGNMENT OF APPROACHES
Federal-Aid Project No. BR-NH-05-1045
Scale: As Noted Date: Mar. 2025

REVISION	DATE	BY

DRAWING NAME: 25100 0502000-05-022-KAWAHAE BRIDGE-REPAIR/REPLACE AND REALIGNMENT OF APPROACHES
DATE: 05-10-25 3:14 PM
PLOT TIME: 05-10-25 3:14 PM
FILE: 25100 0502000-05-022-KAWAHAE BRIDGE-REPAIR/REPLACE AND REALIGNMENT OF APPROACHES

FEED ROAD DIST NO.	STATE	SECTION AND PROJ. NO.	YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	BR-HW-05(1045)	2026	104	186



NOTES:

1. "W" Dimension perpendicular to bearing.
2. Azimuths for precast beams shown on Sht. S66.
3. Construction joints for the end beam closure pour shall be placed at Beam PB-09 and Beam PB-10.

ABUTMENT NO. 1 PLAN
Scale: 1/4" = 1'-0"

① Curve Data

Δ	= 30° 34' 43"
R	= 1283'
T	= 3.51'
C	= 6.77'
L _c	= 6.85'

- LEGEND:**
- WP Work Point
 - WP1 End Beam Closure Pour
 - WP2 Approach Slab Closure Pour

Work Point Schedule		
Work Point	Station	Offset
WP1A	777+04.15	59.23' Left
WP1B	777+06.11	51.56' Left
WP2	777+25.97	34.91' Right



THE SEAL OF THE PROFESSIONAL ENGINEER OF THE STATE OF HAWAII IS HEREBY CERTIFIED TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE HAWAIIAN ENGINEERING ACT.

Joe S. Miller
Professional Engineer
No. 9444-S
Exp. 12/31/2028

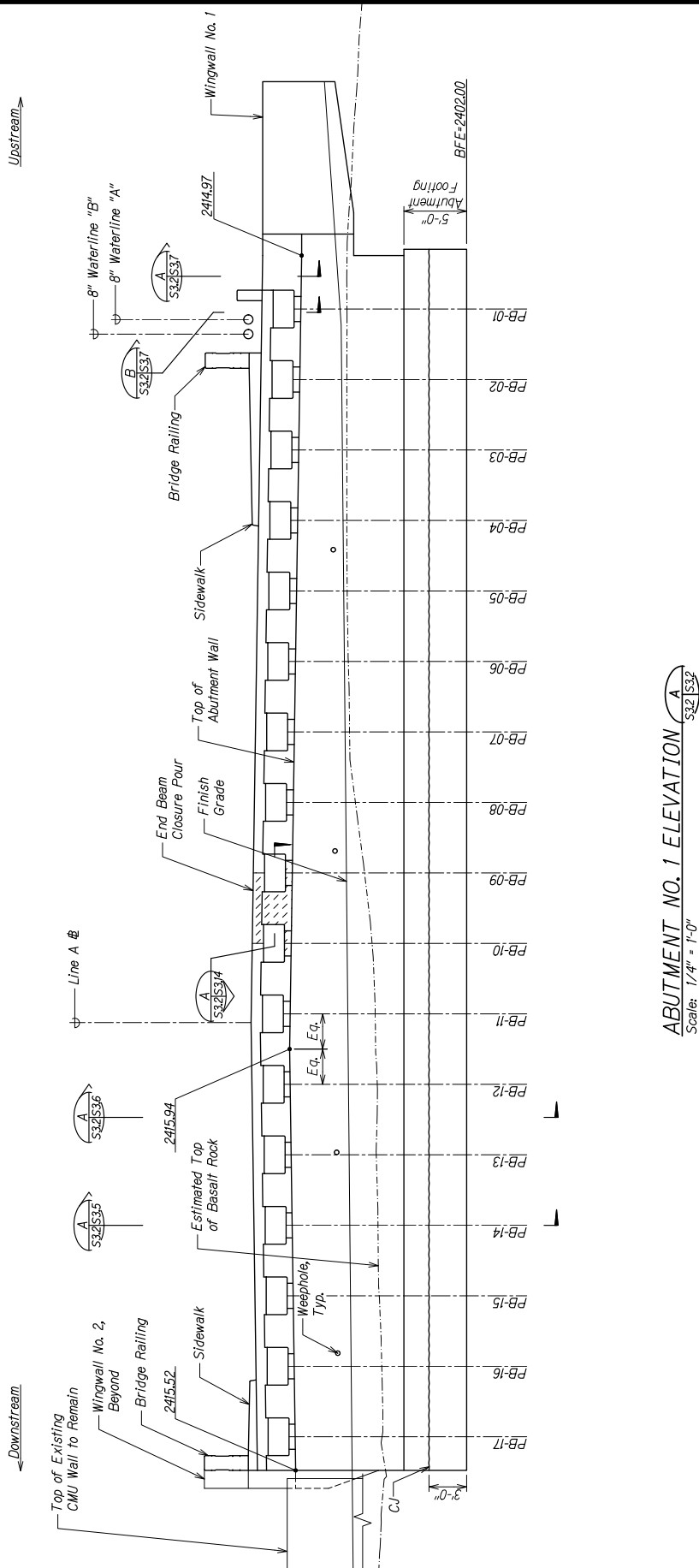
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ABUTMENT NO. 1 PLAN

KAWAIAHAE ROAD
REPLACEMENT OF WAIKAKA BRIDGE
AND REALIGNMENT OF APPROACHES
Federal-Aid Project No. BR-HW-05(1045)
Scale: As Noted
Date: Mar. 2025

SHEET No. S31 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	BR-NH-05-1045	2026	105	186



ABUTMENT NO. 1 ELEVATION
Scale: 1/4" = 1'-0"

NOTES:

- Top of abutment wall elevations at each end are taken at **WPIA** and **WPI2**.
- For concrete seat elevations, see Sheet S33.6.
- For added reinforcing at weepholes, see **S32S07**.



THE SEAL AND SIGNATURE OF THE ENGINEER ARE REQUIRED FOR ALL PROJECTS. THE SEAL MUST BE USED IN CONJUNCTION WITH THE SIGNATURE.

Joe S. Miller
DATE: Mar. 2025
SHEET No. S32 OF 20 SHEETS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ABUTMENT NO. 1 ELEVATION

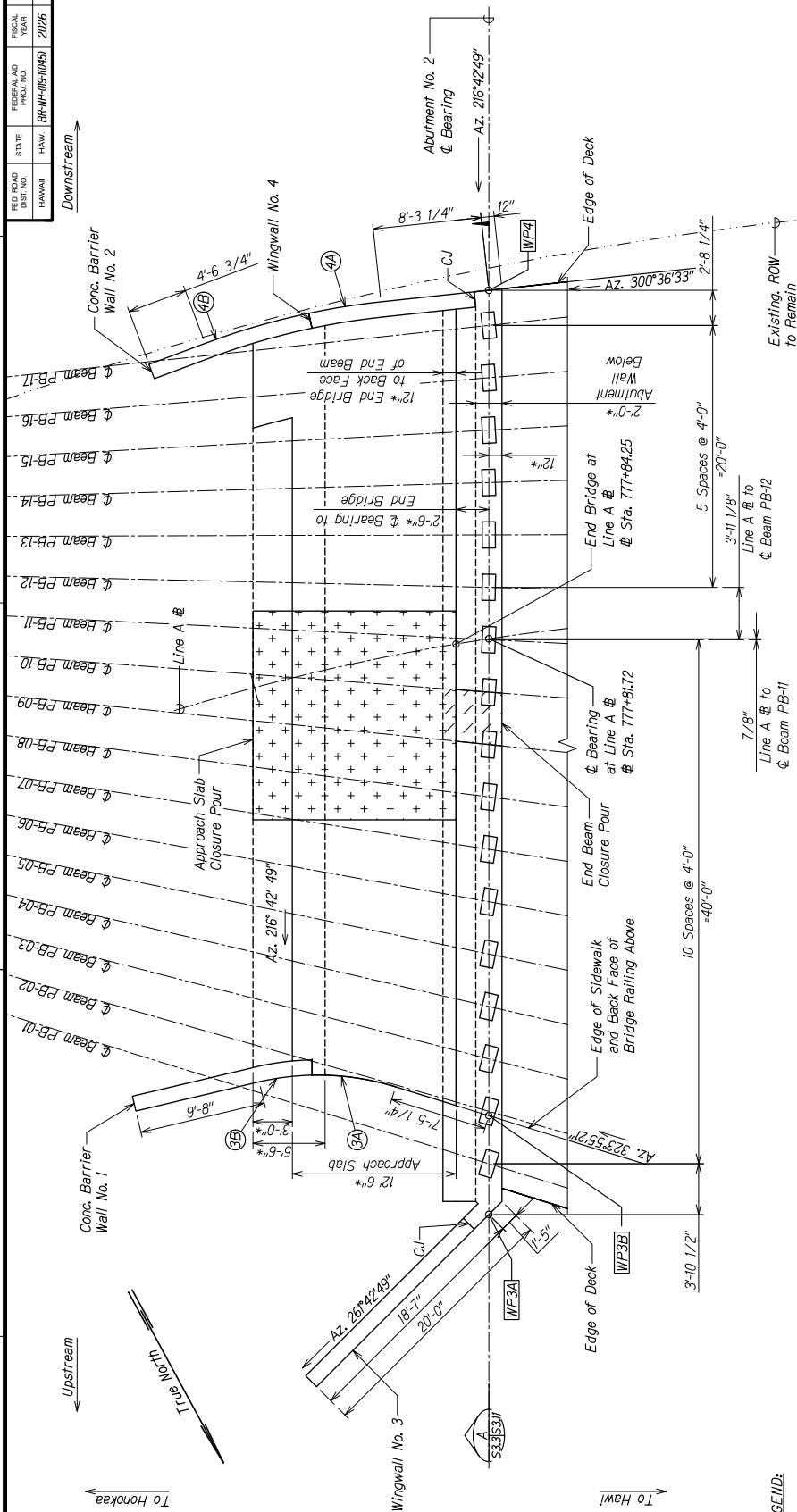
KAWAHAE ROAD
REPLACEMENT OF KAWAHAE BRIDGE
AND REALIGNMENT OF APPROACHES
Federal-Aid Project No. BR-NH-05-1045

Scale: As Noted
Date: Mar. 2025

DATE	BY	REVIEWED BY	DATE

FEED ROAD DIST. NO.	STATE	SECTION AND PROJ. NO.	FEED ROAD YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	BR-NH-09-1045	2026	106	186

Downstream



ABUTMENT NO. 2 PLAN A
Scale: 1/4" = 1'-0"

LEGEND:

- WP- Work Point
- End Beam Closure Pour
- Approach Slab Closure Pour

Work Point Schedule			
Work Point	Station	Offset	
WP3A	777+90.63	43.28' Left	
WP3B	777+88.67	35.88' Left	
WP4	777+78.30	26.35' Right	

- NOTES:
1. "x" = Dimension perpendicular to bearing.
 2. Azimuths for precast beams shown on Sheet S6.6.
 3. Construction joints for end beam closure pour shall be placed at Beam PB-09 and Beam PB-10.



THE SEAL AND SIGNATURE OF THE ENGINEER ARE REQUIRED FOR ALL PROJECTS. THE SEAL MUST BE PLACED ON THE DRAWING.

DATE: 12/1/2021
DRAWN BY: [Signature]
CHECKED BY: [Signature]

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ABUTMENT NO. 2 PLAN

KAWAHA ROAD
REPLACEMENT OF WAIKAKA BRIDGE
AND REALIGNMENT OF APPROACHES
Federal-Aid Project No. BR-NH-09-1045
Scale: As Noted
Date: Mar. 2025

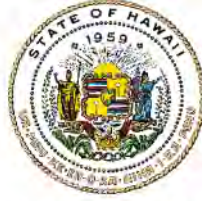
SHEET No. S3.3 OF 20 SHEETS

Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches

Attachment D: Section 106 Effect Determination

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

P.O. BOX 621
HONOLULU, HAWAII 96809

DAWN N.S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

RYAN K.P. KANAKA'OLE
FIRST DEPUTY

CIARA W.K. KAHAHANE
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 28, 2025

IN REPLY REFER TO:

Project No.: 2021PR00849

Document No.: 2502JLP01

Architecture, Archaeology

Richelle Takara, P.E.
Division Administrator
Federal Highway Administration,
Hawaii Federal-Aid Division
United States Department of Transportation
300 Ala Moana Boulevard
Room 3-229, Box 50206
Honolulu, HI 96850
c/oRichelle.Takara@dot.gov

Dear Richelle Takara:

**RE: National Historic Preservation Act Section 106 Consultation
Kawaihae Road Replacement of Waiaka Bridge and Realignment of Approaches
Ref. HAD-HI, Federal-Aid Project No. BR-NH-019-1(045)
Waimea, Lalamilo and Keanuiomano Ahupuaa, Kohala District, Island of Hawaii
TMK: (3) 6-5-001:015; (3) 6-5-001:033, (3) 6-6-001:011, (3) 6-6-004:099 (Kawaihae Road
Right-of-Way), (3) 6-6-009:999 (Kohala Mountain Road Right-of-Way)**

The Hawaii State Historic Preservation Division (SHPD) was requested to provide further clarity by the Hawaii State Department of Transportation (HDOT) regarding our concurrence letter, dated February 19, 2025 (Doc No. 2502SH08) for the Kawaihae Road Replacement of Waiaka Bridge and Realignment of Approaches Project (Ref. HAD-HI, Federal-Aid Project No. BR-NH-019-1(045)). FHWA has determined that this project is an undertaking, as defined in 36 CFR § 800.16(y). The State Historic Preservation Division (SHPD) originally received this submittal on July 21, 2021; and supplemental information on March 9, 2022; April 16, 2022; May 29, 2024; and June 12, 2024. Similarly, SHPD provided response letters on August 18, 2021; March 7, 2022; June 17, 2024; and our most recent letter on February 19th of this year.

As previously identified, the proposed undertaking is located in South Kohala, at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. The area of potential affect (APE) includes a 6.6 acre area. The undertaking includes the demolition of Waiaka Bridge, including its center pier. A new bridge will be constructed in the same general location. A temporary bypass road will be established to maintain Kawaihae Road traffic during construction, which will be disassembled and the landscape restored and returned to the property owner upon completion of the undertaking.

Based on the information provided, SHPD has reviewed the undertaking pursuant to 36 CFR § 800.5(a), and the Hawaii State Historic Preservation Officer **concurs** with the determination of FHWA that the effects of the proposed undertaking will have an **adverse effect** on Waiaka Bridge. The SHPO looks forward to consulting with FHWA on a Memorandum of Agreement to identify appropriate mitigation for the effect.

FHWA is the office of record for this undertaking. Please maintain a copy of this letter with your environmental review record. The opinion of the SHPO is based on the materials provided for our review.

If you have any questions about this undertaking or if there is a change to the scope of work, please contact Jessica Puff, State Historic Preservation Administrator, at (808) 692-8015 or by email at jessica.puff@hawaii.gov.

Sincerely,



Dawn N.S. Chang, Esq.
Hawaii State Historic Preservation Officer

CC: Matthew Walker, Matthew.Walker1@dot.gov
Messa Otani, Messa.Otani@dot.gov
Andrew Hirano, Andrew.J.Hirano@hawaii.gov
Lawrence M. Laus, Lawrence.M.Laus@hawaii.gov
Henry Kennedy, Henry.Kennedy@hawaii.gov
Holly Yuen, Holly.Yuen@hawaii.gov
Trisha Watson, Watson@honuaconsulting.gov
Kevin Sullivan, Kevin.Sullivan@hawaiicounty.gov
Darin Chinen, Darin.Chinen@wsp.com

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



DAWN N. S. CHANG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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RYAN K.P. KANAKA'OLE
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BOATING AND OCEAN RECREATION
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

**STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA**

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

February 19, 2025

Richelle Takara, P.E.
Division Administrator
Federal Highway Administration, Hawaii Federal-Aid Division
United States Department of Transportation
300 Ala Moana Boulevard, Room 3-229, Box 50206
Honolulu, Hawai'i 96850
Email Reply to: Richelle.Takara@dot.gov
Electronic Transmittal Only, No Hard Copy to Follow

IN REPLY REFER TO:
Project No.: 2021PR00849
Doc No.: 2502SH08
Archaeology
Architecture

Dear Richelle Takara:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –
Continued Consultation and Request for Concurrence with the Effect Determination
Kawaihae Road Replacement of Waiaka Bridge and Realignment of Approaches
Ref. HDA-HI, Federal-Aid Project No. BR-NH-019-1(045)
Waimea, Lalamilo and Keanuio mano Ahupua'a, Kohala District, Island of Hawai'i
TMK: (3) 6-5-001:015, (3) 6-5-001:033, (3) 6-6-001:011, (3) 6-6-004:999 (Kawaihae Road
Right-of-Way), (3) 6-6-009:999 (Kohala Mountain Road Right-of-Way)**

The State Historic Preservation Division (SHPD) received a letter dated January 29, 2025 from the United States Department of Transportation, Federal Highway Administration (FHWA) to continue the Section 106 historic preservation process, provide information previously requested (SHPD Doc. No. 2407SL03), and to request the State Historic Preservation Officer's (SHPO's) concurrence with the effect determination for the Kawaihae Road Replacement of Waiaka Bridge and Realignment of Approaches project on the island of Hawai'i. The SHPD received this letter along with additional attachments including a draft Memorandum of Agreement (MOA) on January 29, 2025 (HICRIS Submission No. 2021PR00849.007).

The proposed State of Hawai'i, Department of Transportation (HDOT) project will receive coordination and funding from the FHWA and is therefore a federal undertaking as defined in 36 CFR 800.16(y); the FHWA determined the proposed project is subject to compliance with Section 106 of the NHPA. Pursuant to the Programmatic Delegation of Authority (May 2016), the FHWA delegated Section 106 consultation to HDOT. The project also is subject to historic preservation review under Hawai'i Revised Statutes (HRS) §6E-8.

According to previous correspondence received, the project will demolish the existing 38-foot-long, 26-foot-wide Waiaka Bridge, including its center pier. A new bridge will be constructed in the same general location and will be 60 feet long and vary in width from 70 to 90 feet wide, with bridge abutments flanking the existing stream. A temporary bypass road and bridge will be constructed to maintain Kawaihae Road traffic during construction. Upon completion of construction, the temporary bypass road and bridge will be removed, and the area will be restored to previous existing conditions and returned to the landowner.

The project is located in South Kohala, at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. Waiaka Bridge is located at milepost 58.88 along Kawaihae Road (State Route 19). The FHWA reduced the Area of Potential Effects (APE) from previously revised 6.6 acres to a final APE of 4.7 acres in a letter dated

May 13, 2024, however, in the most recent letter received from the FHWA the final APE has been defined as the original 6.6 acres.

The FHWA identified four cultural resources within the 6.6-acre APE. The FHWA has determined that two of the cultural resources are historic properties eligible for listing in the National Register of Historic Places (NRHP): the Waiaka Bridge and a pre-contact to early historic period agricultural terrace complex assigned State Inventory of Historic Places (SIHP) Site 50-10-06-22632. The two other cultural resources identified are the former location of the 1865 Waiaka Catholic Church and the 1955 Keanuimano Stream Gauge.

1. The Waiaka Bridge was constructed in 1932 by Charles H. Will as the first bridge to be funded by federal money on Hawai'i. The bridge is considered eligible for listing in the NRHP under Criterion C. The FHWA has determined the proposed undertaking will have an adverse effect on the Waiaka Bridge. The SHPO agrees and will coordinate with the FHWA and HDOT to develop the MOA to address the adverse effects.
2. SIHP Site 50-10-06-22632 was determined eligible for listing in the NRHP under Criteria A, C, and D. The FHWA maintains that this site will not be impacted or adversely affected by the proposed undertaking since it is not in an area where any construction activities are proposed. The FHWA commits to the placement of orange construction fencing prior to the start of ground disturbing activities for the undertaking, to mark the southern edge of the area proposed for road improvement be placed and to keep machinery from leaving the construction area and inadvertently impacting any features of Site 22632. **The SHPD requests** a commitment in the Memorandum of Agreement to 1) mark the construction plans and paperwork that will be used in the field with a 15 foot circumference around the boundary of SIHP 50-10-06-22632 with instructions that the area is to be avoided and 2) The orange construction fencing shall be at least 15 feet from the boundaries of SIHP 50-10-06-22632 and HDOT/FHWA shall document the proposed placement of orange construction fencing with photographs taken prior to the start of work and submit those photographs to SHPD HICRIS number 2021PR00849 with a notification that the project has started.
3. The FHWA also identified the former location of the 1865 Waiaka Catholic Church. According to FHWA, the 1865 Waiaka Catholic Church, built by Father Damien and dedicated to St. John the Evangelist, is depicted on a map prepared in 1887 (Hawai'i Registered Map No. 637) as being located in the vicinity of the final 6.6-acre APE on the north side of Kawaihae Road, perhaps within the Hawai'i Preparatory Academy (HPA) campus (TMK: (3) 6-5-001:033). Consultation conducted as part of the current undertaking indicates that unmarked burials were also present near the former location of the 1865 Catholic Church. The church burned down in 1900 and was rebuilt in 1916, and eventually relocated to a new location near the intersection of Kawaihae Road and Lindsey Road. The FHWA has determined the 1865 Waiaka Catholic Church is not eligible for the NRHP since the location of the former structure is unknown and the church lacks all aspects of integrity. While the SHPO agrees the absent church structure is not eligible for listing in the NTHP, **the SHPO has concerns** that while the church structure is not present, there may an archaeological site and unmarked burials or a cemetery at its location and within the APE for which there has been no identification efforts such as archaeological testing. Therefore, the SHPO requests whether the undertaking involves ground disturbance in the in and around the vicinity of the grounds where the 1865 Waiaka Catholic Church may have once stood. If there is ground disturbance proposed in this area, **the SHPO requests** archaeological testing and a findings report before the start of the proposed undertaking or, at minimum, archaeological monitoring under a SHPD accepted archaeological monitoring plan (AMP) be carried out during the project in the area(s) where the church may have once stood.
4. Lastly, the FHWA identified the 1955 Keanuimano Stream Gauge is located in Keanuimano Stream and was established in 1955 as one of approximately 100 stations installed between 1950 and 1964 by the United States Geological Services (USGS). The site was evaluated within the historical context of USGS Stream Gaging in Hawai'i, with a period of significance of 1909-1964. According to the report prepared by ASM affiliates in support of the subject undertaking, the USGS installed a stream gauge just above the Wai'aka Bridge in Keanu'i'omanō Stream in 1955 during its post-war expansion of gauging stations, and that gauge is in operation today (Barna; 36). The site was previously evaluated to be significant under Hawaii Revised Statutes (HRS) Chapter 6E under Criterion d for information yielded relative to historic land use, however ASM finds the site is not significant under HRS Chapter 6E and is not eligible for listing in the NRHP. The FHWA has determined that SIHP 50-10-06-23313 (Keanu'i'omanō Stream Gage Station

foundation) is not significant under any criterion, and therefore is not eligible for inclusion in the NRHP.
The SHPO concurs.

One additional historic property is within the APE, the Mamalahoa Historic District for which the Waiaka Bridge is a contributing feature. The FHWA identified this historic property in previous correspondence, but no assessment of how the undertaking will, or will not, impact the Historic District has been provided.

The FHWA determined the proposed undertaking will result in an *adverse effect*. **The SHPO opines** the proposed project will have an effect on the Waiaka Bridge, the Mamalahoa Highway Historic District, and could impact an archaeological site should remnants of the 1865 Waiaka Catholic Church and its cemetery be present. Additional information is needed as follows to reach concurrence on the effect determination for the undertaking:

1. Waiaka Bridge is a contributing feature to the Mamalahoa Highway Historic District. The SHPO requests the FHWA assess the impacts this undertaking will have on the Mamalahoa Highway Historic District and if determined there will be an adverse effect on the District, the Memorandum of Agreement shall include sufficient mitigation for the impacts to this historic property.
2. The SHPD maintains its request for a letter from the County of Hawaii Cultural Resource Commission summarizing their recommendations and comments following the site visit with the HDOT project team.
3. The SHPD maintains its request for Construction Plans. Please provide a set that includes the boundary of the SIHP number 50-10-06-22632 marked off with a boundary of 15 feet around the site boundaries and instructions to avoid the area.
4. SHPD previously requested excavation of archaeological test units to verify the presence or absence of subsurface archaeological historic properties. The FHWA responded by saying, "Archaeological monitoring will be proposed as part of the Chapter 6E compliance for the proposed project". The SHPO notes, these are separate regulatory processes, and should archaeological monitoring be warranted for this undertaking, to comply with the Section 106 process, the commitment will need to be made under Section 106.

Please submit all forthcoming information and correspondence related to the subject project to SHPD via HICRIS under Project No. 2021PR00849 using the Project Supplement option.

The HDOT and the FHWA are the offices of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Mary Kodama, Acting Architecture Branch Chief at Mary.Kodama@hawaii.gov, for matters regarding architectural resources. Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at Stephanie.Hacker@hawaii.gov or at (808) 692-8046 for matters regarding archaeological resources or this letter.

Aloha,



Dawn N. S. Chang, Esq.
DLNR Chairperson
State Historic Preservation Officer

cc: Matthew Walker, FHWA (Matthew.Walker1@dot.gov)
Meesa Otani, FHWA (Meesa.Otani@dot.gov)
Andrew J. Hirano, HDOT (Andrew.J.Hirano@hawaii.gov)
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Trisha Watson, Honua Consulting (Watson@honuaconsulting.gov)
Kevin Sullivan, County of Hawaii (Kevin.Sullivan@hawaiicounty.gov)
Darin Chinen, WSP USA Inc. (Darin.Chinen@wsp.com)



U.S. Department
of Transportation
**Federal Highway
Administration**

Hawaii Federal-Aid Division

January 29, 2025

300 Ala Moana Blvd, Rm 3-229
Box 50206
Honolulu, Hawaii 96850
Phone: (808) 541-2700
FHWA-Hawaii.Intake@dot.gov

In Reply Refer To:
HDA-HI

Dawn N. S. Chang, Esq.
Chairperson and State Historic Preservation Officer
Department of Land and Natural Resources
601 Kamokila Boulevard, Suite 555
Kapolei, HI 96707

Subject: National Historic Preservation Act Section 106 Effect Determination
Kawaihae Road, Replacement of Waiaka Bridge and Realignment of Approaches
Waimea, Lalamilo and Keanuimano Ahupuaa, Kohala District, Island of Hawaii
Federal-aid Project No. BR-NH-019-1(045)
Tax Map Key(s): (3) 6-5-001:015 por., 033 por.; 6-6-001:011; 6-6-004:999 (Kawaihae
Road Right-of-Way); 6-6-009:999 (Kohala Mountain Road Right-of-Way)

Dear Ms. Chang:

Thank you for your letter dated June 17, 2024 (Project No. 2021PR00849, Doc. No. 2407SL03) in response to the Federal Highway Administration's (FHWA) letter dated May 13, 2024 regarding the Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches project. The State Historic Preservation Officer (SHPO) did not concur with FHWA's determination of adverse effect for the project and requested additional information. SHPO's requests are listed below followed by FHWA's response:

1. A reasonable and good faith effort to identify subsurface archaeological historic properties within the APE including the excavation of archaeological test units to verify the presence or absence of subsurface archaeological historic properties. The HDOT, FHWA, and their archaeological firm should consult with the SHPO and their Section 106 consulting parties regarding an appropriate testing strategy prior to initiation of archaeological testing.
 - Archaeological monitoring will be proposed as part of the Chapter 6E compliance for the proposed project.
2. A letter from the FHWA evaluating the eligibility of SIHP Site 50-10-06-22313 (Keanuimano Stream Gage Station Foundation) for listing in the NRHP and, if eligible, an assessment of adverse effects pursuant to 36 CFR 800.5.
 - Evaluation of the stream gage station is included in this revised effect determination letter.

3. A letter from the HDOT initiating the HRS §6E-7 and HRS §6E-8 historic preservation review processes. Pursuant to HAR § 13-275-5, HDOT shall first consult the SHPO to determine if the area proposed for the project needs to undergo an inventory survey to determine if historic properties are present. Please note, the SHPO may conclude an AIS needs to be done to identify any subsurface historic properties that may be present within the project area and to gather enough information to evaluate the properties' significance.
 - HDOT will initiate Chapter 6E process for the proposed project.
4. A letter from the County of Hawaii CRC summarizing their recommendations and comments following the site visit with the HDOT project team.
 - HDOT will request that CRC provide a summary letter following upcoming site visit with HDOT project team.
5. A copy of the construction plans and any associated permit applications for the project.
 - Current construction plans will be uploaded to HICRIS. Permit applications will be uploaded to HICRIS as they become available.
6. A copy of the final AIS report titled *Archaeological Inventory Survey, Waiaka Bridge Replacement and Realignment of Approaches, Lands of Uiliimilo, Keoniki, Kauniho and Waiaka I, South Kohala District, Island of Hawai'i TMK: {3} 6-5-01:Por. 033, 6-6-01:Por. 077, 6-6-01:Por. 001* (Haun et al. 2002).
 - This final 2002 AIS will be uploaded to HICRIS.
7. The APE be restored to its original designation measuring 7.3 acres. The information provided in Barna et al. (April 2023) indicates the Section 106 consulting parties have identified several historic properties that may be indirectly affected by the current project. By reducing the APE to exclude these historic properties, the FHWA cannot adequately perform an assessment of adverse effects on these historic properties pursuant to 36 CFR 800.5.
 - HDOT is maintaining the final 6.6-acre APE previously accepted in SHPO's response letter to HDOT, dated March 7, 2022. This final 6.6-acre APE was used during the Section 106 consultation process.

Identified Historic Properties within the APE and Effects of the Undertaking

Based on our research, analysis, site observation, and consultations, FHWA has identified four (4) historic properties in the final 6.6-acre APE, as shown in Table 1 below. Please refer to the enclosed final 6.6-acre APE map. The Undertaking would result in the demolition and replacement of one of the historic properties, Waiaka Bridge.

Table 1. NRHP Eligibility

SIHP Site No.	Property	Temporal Affiliation	NRHP Eligibility
N/A	Waiaka Catholic Church	1865	-
50-10-06-22632	Agricultural Terrace Complex	Precontact to early Historic Period	A, C, D
50-10-06-23313	Keanuimomana Stream Gauge	1955	-
50-10-06-29221	Waiaka Bridge	1932	C

Waiaka Catholic Church

The 1865 Waiaka Catholic Church, built by Father Damien and dedicated to St. John the Evangelist, is depicted on a map prepared in 1887 (Hawai'i Registered Map No. 637) as being located in the vicinity of the final 6.6-acre APE on the north side of Kawaihae Road, perhaps within the Hawai'i Preparatory Academy (HPA) campus (TMK: (3) 6-5-001:033). Consultation conducted as part of the current Undertaking indicates that unmarked burials were also present near the former location of the 1865 Catholic Church. The church burned down in 1900 and was rebuilt in 1916, and eventually relocated to a new location near the intersection of Kawaihae Road and Lindsey Road.

Since the location of that original structure is currently unknown (but is thought to be close to the final 6.6-acre APE), the church, as a potential historic property, does not possess any integrity of location, design, setting, materials, workmanship, feeling, or association, and due to the complete lack of integrity is not eligible for listing. As such, FHWA has determined that the 1865 Waiaka Catholic Church is not eligible for inclusion in the NRHP.

Site 50-10-06-22632 - Agricultural Terrace Complex

Site 22632 has features that were recorded immediately adjacent to the final 6.6-acre APE. The site was previously assessed as significant under Criterion A because it is associated with the broad pattern of traditional and early historic agricultural intensification in Hawaii; under Criterion C as a well-preserved example of an agricultural field complex; and under Criterion D for the information it has yielded, and could potentially still yield, important for understanding late prehistoric to historic land use in the Waimea area.

FHWA has determined that Site 22632 is significant under Criterion A, C, and D, and that it is eligible for inclusion in the NRHP. FHWA maintains that the site will not be impacted or adversely affected by the proposed Undertaking, however, since it is not in an area where any construction activities are proposed. Prior to the start of ground disturbing activities for the Undertaking, BMPs will be put in place to protect the site, including the placement of orange construction fencing marking the southern edge of the area proposed for road improvement, which will keep machinery from leaving the construction area and inadvertently impacting any features of Site 22632.

Site 23313 - Keanuimano Stream gaging station

The Keanuimano Stream gaging station, located in Keanuimano Stream, was established in 1955 as one of around 100 stations installed between 1950 and 1964 by the USGS. The site was evaluated within the historical context of USGS Stream Gaging in Hawai'i, with a period of significance of 1909-1964, and it was determined that:

- The Keanuimano Stream gaging station was established late in the period of significance. A search of historic newspapers and other sources did not identify any specific events in which the Keanuimano Stream gaging station played an important role (not significant under Criterion A).
- No person or persons of historic importance could be directly associated with the gage (not significant under Criterion B).
- It is of a simple, utilitarian, and non-descript design that cannot be said to embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (not significant under Criterion C).
- It has not yielded information that can be said to be important in prehistory or history, nor does the site appear to be likely to yield such information through further architectural or archaeological research (not significant Criterion D).

FHWA has determined that Site 23313 is not significant under any criterion, and therefore is not eligible for inclusion in the NRHP.

Site 29221 – Waiaka Bridge

Waiaka Bridge was constructed in 1932 by Charles H. Will as the first bridge to be funded by federal money on Hawaii Island. The bridge is considered eligible for listing in the National Register of Historic Places (NRHP) under Criterion C due the following.

- Good example of 1930's reinforced concrete and masonry bridge in its original location.
- Typical characteristics of 1930's period bridge in its use of materials, method of construction, craftsmanship and design.
- Bridge retains all aspects of integrity, with minor diminishment of its integrity of design due to the attachment of water lines to the exterior of the bridge.

FHWA has determined that Site 29221 retains sufficient integrity to convey its significance, and therefore is considered eligible for inclusion in the NRHP under Criterion C with a local level of significance and a period significance of 1932-1941 as defined in the "Bridge Construction and the Federal Aid Program (1925-1941)" historical context.

Basis of Determination

Based on the foregoing, the FHWA has determined that the Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches Project will have an adverse effect on a historic property pursuant to 36 CFR 800.5, due to the demolition of the NRHP eligible Waiaka Bridge. The FHWA requests the SHPO's concurrence with the adverse effect determination. If

the SHPO objects to the adverse effect determination, please inform us within 30 days of receipt of this letter. Enclosed is a draft Memorandum of Agreement for SHPO review.

If you have any questions, please feel free to contact Meesa Otani, Environmental Engineer, at (808) 541-2316 or by email at meesa.otani@dot.gov. Thank you for your assistance.

Sincerely yours,



Digitally signed by

MEESA T. OTANI

Date: 2025.01.29

07:44:12 -10'00'

for Richelle M. Takara, P.E.
Division Administrator

Enclosure

cc: Andrew Hirano, HDOT, HWY-DS
Lawrence Laus, HDOT, HWY-DE

JOSH GREEN, M.D.
GOVERNOR | KE KĀ'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KĀ'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAII'
DEPARTMENT OF LAND AND NATURAL RESOURCES
KA 'OIHANA KUMUWAIWAI 'ĀINA

STATE HISTORIC PRESERVATION DIVISION
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DAWN N.S. CHANG
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MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES
ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

June 17, 2024

Richelle M. Takara, Division Administrator
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Edwin H. Sniffen, Director
State of Hawai'i, Department of Transportation
601 Kamokila Boulevard
Kapolei, Hawai'i 96707
c/o Andrew Hirano
Email: andrew.j.hirano@hawaii.gov

IN REPLY REFER TO:
Project No.: 2021PR00849
Doc. No.: 2407SL03
Archaeology, Architecture

Dear Richelle M. Takara and Edwin H. Sniffen:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –
U.S. Department of Transportation Federal Highway Administration
Kawaihae Road, Replacement of Waiaka Stream Bridge and
Realignment of Approaches Waimea
Ref. No. HDA-HI, Federal Aid Project No. BR-NH-019-1(045)
Request for Concurrence with a Project Effect Determination
Lālānilo, Keanu'i'ōmanō Ahupua'a, Kohala District, Island of Hawai'i
TMK: (3) 6-5-001:015 por. and 033 por.; and (3) 6-6-001:011 and 999 (Kawaihae Road and
Kohala Mountain Road Rights-of-Ways (ROWs))**

This letter provides the State Historic Preservation Officer's (SHPO's) review of the U.S. Department of Transportation, Federal Highway Administration's (FHWA's) request for concurrence with a project effect determination for the State of Hawai'i, Department of Transportation's (HDOT's) Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches Waimea project. The SHPO received the current submission on May 14, 2024, which included a letter from the FHWA dated May 13, 2024 (Ref. No. HDA-HI) requesting the SHPO's concurrence with a project effect determination of *adverse effect* for the subject project along with the following Enclosures titled:

- Area of Potential Effects (APE) Map
- Final Environmental Assessment (Final EA) Figures - Build Alternative and Proposed Bridge Elevation
- Section 106 Mailing List
- Site Photos

- Historic Properties Report in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the Waiaka Bridge Replacement and Roadway Realignment Project
- Section 106 Initiation Letter, Request for Contact Information, and [APE] Letter (July 21, 2021)
- SHPO Response to Section 106 Initiation Letter (August 18, 2021)
- HDOT request for information letter to SHPO (February 3, 2022)
- NHO Consultation Invitation letter template (February 9, 2022)
- SHPD Section 106 Review, Continued Consultation letter (March 7, 2022)
- Section 106 Consulting Parties Mailing List

The HDOT proposes the Kawaihae Road, Replacement of Waiaka Bridge and Realignment of Approaches Waimea project (Project) within a 4.7-acre APE near Mile Post 58.88. The project will receive funding from the FHWA and is a federal undertaking as defined in 36 CFR 800.16(y) subject to compliance with Section 106 of the NHPA. The project is also subject to historic preservation review under Hawaii Revised Statutes (HRS) §6E-8; however, the HDOT has not yet initiated the HRS §6E-8 historic preservation review process with the State Historic Preservation Division (SHPD).

The FHWA indicates the Project includes demolition of the existing Wai‘aka Stream Bridge and construction of a new bridge in the same general location. The demolition work will include the removal of the 38 by 26-foot bridge including the center pier. The replacement bridge will be 60 feet long and vary in width from 70 to 90 feet wide, with bridge abutments flanking the Wai‘aka Stream. Additionally, the project will include the construction of a temporary bypass road to maintain Kawaihae Road traffic during construction. Upon completion of construction, the temporary bypass road and bridge will be removed, and the area will be restored to previously existing conditions.

On July 21, 2021, the SHPO received a letter from the HDOT initiating the NHPA Section 106 process, requesting concurrence with the APE, and requesting information regarding potential consulting parties (Ref. No. HWY-DS 2.4574). In the letter dated July 21, 2021, the HDOT described the APE as measuring 7.3 acres including portions of the Kawaihae Road and Kohala Mountain Road ROWs. In response, the SHPO referred the HDOT to the Native Hawaiian Organization Notification List provided by the U.S. Department of the Interior and maintained by the Office of Native Hawaiian Relations and recommended expanding consultation to interested parties such as civic clubs and historic preservation interest groups such as Historic Hawai‘i Foundation and the National Trust for Historic Preservation (HICRIS Project No. 2021PR00849, Doc. No. 2108SH06). Additionally, the SHPO had no objections to the HDOT’s APE and noted the presence of two previously identified historic properties occurring 200 meters northeast of the APE including State Inventory of Historic Places (SIHP) Site 50-10-06-019649 (Wai‘aka habitation site) and SIHP Site 50-10-06-19649 (Wai‘aka habitation and burial complex).

On February 7, 2023, the SHPO received a subsequent letter from the HDOT dated February 3, 2022 (Ref. No. HWY-DS 2.7423) in which the HDOT indicated the APE had been reduced from 7.3 acres to 6.6 acres and requested the SHPO’s comments on the revised APE. The HDOT also again requested information regarding possible consulting parties and previously identified historic properties occurring within the now reduced APE. In response, the SHPO had no objections to the HDOT’s revised APE, noting that it has been minimized to avoid culturally sensitive areas (HICRIS Project No. 2021PR00849, Doc. No. 2203SH05). Additionally, the SHPO again recommended the HDOT expand consultation to interested parties such as civic clubs and historic preservation interest groups including Historic Hawai‘i Foundation and the National Trust for Historic Preservation. The SHPO also indicated the Wa‘iaka Stream Bridge (Bridge Number 001002500500053, SHIP Site 50-10-06-29221) was previously identified within the APE and has been evaluated as eligible for listing in the National Register of Historic Places (NRHP) under Criterion C in the Hawai‘i State Historic Bridge Inventory and Evaluation report (MKE and Fung 2013). Additionally, the SHPD determined the bridge was eligible for the NRHP under Criterion C “as a good example of a modest reinforced concrete slab bridge” and the “bridge was the first federal aid bridge on Hawaii Island” (October 6, 2011; Log No. 2011.2731, Doc. No. 1108MA05). The SHPO requested additional information regarding the location of the bridge within the APE and the current project’s effect on it.

On May 14, 2024, the SHPO received the current letter submission from the FHWA continuing the NHPA Section 106 process. In the letter dated May 13, 2024 (Ref. No. HDA-HI), the FHWA indicates that they have again reduced the APE, this time from 6.6 acres to 4.7 acres and are requesting comments from the SHPO. Additionally, the FHWA letter summarizes the HDOT’s consultation and historic property identification efforts. The FHWA indicates the HDOT has identified four consulting parties including the Hawaii Preparatory Academy (HPA), Big Buck Trust via Carlsmith Ball LLP, Michael and Vivienne Aronowitz, and the Hawaii County Cultural Resources Commission

(CRC). Additionally, the FHWA confirmed that the Wai‘aka Stream Bridge occurs within the revised APE, reiterating the previous evaluation of the bridge as eligible to the NRHP under Criterion C (MKE and Fung 2013). The FHWA describes the bridge as retaining all seven aspects of integrity and as a good example of a 1930s reinforced concrete and masonry bridge in its original location with a local level of significance and a period significance of 1932-1941.

Amongst the enclosures included in the May 14, 2024 submission is a report produced by ASM Affiliates (ASM) titled *Historic Properties Report in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the Waiaka Bridge Replacement and Roadway Realignment Project* (Barna et al., April 2023). The report includes summaries of historic land-use practices and previous archaeological investigations that have occurred in the vicinity of the APE, the HDOT’s Section 106 consultation efforts, and ASM’s recommendations regarding the NHPA Section 106 and HRS §6E-8 historic preservation processes.

Barna et al. (April 2023) indicate that Haun and Associates (archaeological firm) conducted an archaeological inventory survey (AIS) in support of the NHPA Section 106 process and HRS §6E-8 historic preservation review process for a previous project titled *Waiaka Bridge Replacement and Realignment of Approaches* project. The previous project had a 9.8-acre HRS §6E project area/Federal APE which included a portion of the current APE. The SHPD reviewed and accepted the AIS report (Haun et al. 2002) in a letter dated May 15, 2012 (SHPD Log No. 2012.1353, Doc. No. 1205MV04). Haun et al. (2002) identified four significant historic properties: SIHP Site 50-10-06-11632 (agricultural complex, SIHP Site 50-10-06-22312 (ditch), and SIHP Site 50-10-06-22313 (Keanu‘i‘omanō Stream Gage Station foundation); and SIHP Site 50-10-06-29221 (Wai‘aka Stream Bridge). The SHPD concurred with the evaluations and proposed mitigation commitments in the form of data recovery for SIHP Sites 50-10-06-11632 (agricultural complex) and 50-10-06-22312 (ditch), no further work for SIHP Site 50-10-06-22313 (Keanu‘i‘omanō Stream Gage Station foundation), HABS documentation for SIHP Site 50-10-06-29221 (Wai‘aka Stream Bridge), and onsite archaeological monitoring during all ground disturbing activities associated with the project (SHPD Log No. 2012.1353, Doc. No. 1205MV04).

Subsequently, the SHPD reviewed an environmental assessment (EA) report submitted in support of the previous Waiaka Bridge Replacement and Realignment of Approaches project. In a letter dated October 6, 2011, the SHPD indicated the Wai‘aka Stream Bridge is eligible to the NRHP under Criterion C and determined the project would have an *adverse effect* on it (Log No. 2011.2731, Doc. No. 1108MA05). Additionally, MKE and Fung (2013) evaluated the Wai‘aka Stream Bridge as eligible for listing in the NRHP under Criterion C in the Hawai‘i State Historic Bridge Inventory and Evaluation report prepared for the HDOT. According to Barna et al. (April 2023), the previous Waiaka Bridge Replacement and Realignment of Approaches project never occurred.

Barna et al. (April 2023) indicates ASM verified the location of two previously identified historic properties within the current APE during two field inspections that occurred in 2020. These include SIHP Site 50-10-06-29221 (Wai‘aka Stream Bridge) and SIHP Site 50-10-06-22313 (Keanu‘i‘omanō Stream Gage Station foundation). ASM returned to the APE to record additional photographs in 2021. Barna et al. (April 2023) supported the previous evaluation of SIHP Site 50-10-06-29221 (Wai‘aka Stream Bridge) as eligible for the NRHP under Criterion C, however they newly evaluate SIHP Site 50-10-06-22313 (Keanu‘i‘omanō Stream Gage Station foundation) as not eligible for the NRHP under any of the criteria. They further indicate that the current the Project will have an *adverse effect* on the Wai‘aka Stream Bridge pursuant to 36 CFR 800.5 and recommends the development and implementation of a Memorandum of Agreement (MOA) to mitigate the adverse effect. Pursuant to Hawaii Administrative Rules (HAR) §13-275-5, ASM also recommends an effect determination of “Effect, with proposed mitigation commitments,” with mitigation in the form of HAER architectural recordation of the bridge and precautionary (i.e., for identification purposes) archaeological monitoring due to the archaeological sensitivity of the APE. **However, as indicated above,** the HDOT has not initiated the HRS §6E-8 historic preservation review process with the SHPD at this time.

The County of Hawai‘i CRC held a public hearing which included the current Project on September 13, 2023, and issued a letter with their comments and recommendations. In the letter dated September 22, 2023, the CRC indicates a Permitted Interaction Group (PIG; i.e., subcommittee) will be formed for the purpose of conducting a site visit with the HDOT project team. It was agreed that a site visit would be scheduled once initial surveying, and markings are completed on-site at a date and time to be determined. **The FHWA** has not provided information regarding the CRC’s site visit or their subsequent recommendations and comments. However, the County of Hawai‘i, Planning Department, Cultural Resources Commission, in a letter dated September 22, 2023 (File No. PL-CRC-2023-000007) sent to the HDOT (Aaron Spielman [CRC Chair] to Andrew J. Hirano [HDOT Project Manager]), stated that “In accordance with

Hawaii County Code Section 2-44 and the Rules of Practice and Procedure for the Cultural Resources Commission, the following comments and recommendations are hereby transmitted for consideration”:

- The Cultural Resources Commission underscored the importance of and recommends having a cultural and archaeological monitor on site during field work and construction. The CRC makes the request of the SHPO to assign such a monitor as part of mitigative commitments.
- While the Wai‘aka bridge is not being rehabilitated in accordance with Secretary of Interior Standards, the Cultural Resource Commission finds that the proposed reconstruction of the railing design as a treatment is sympathetic to the original bridge’s railing design. The CRC also confirmed Wai‘aka is the appropriate name of the bridge.
- In addition to the proposed mitigative treatments (i.e., recovery & recordation), the Cultural Resources Commission recommended that interpretative signage be considered as a mitigative treatment within the APE. Interpretative signage content may include Hawaiian etymology, historical, cultural understanding of the Wai‘aka stream and connected water courses, the ecosystems and biocultural resources they support, the landscape(s) that a pedestrian or passerby are visiting or viewing as they traverse the bridge, or other culturally or historically appropriate content as may be received from consulting or concurring parties, Native Hawaiian Organizations (NHO) and/or Hawaiian descendants, or other individuals and organizations involved in the Section 106 process.
- The Cultural Resources Commission recommends that the internal area of the roundabout (approximately 1,520 square feet) be considered for landscaping treatment that includes native groundcover and at least one native specimen tree. The approximately 1,520 square foot area could provide root zone for several different non-invasive tree species with diameters at breast height (DBH) up to 12-14 inches.

Based on the information provided in Barna et al. (April 2023), the FHWA requests the SHPO’s concurrence with a project effect determination of *adverse effect*, pursuant to 36 CFR 800.5 and expects to include the following mitigation measures in an MOA to avoid, minimize, and mitigate potential impacts to archaeological, cultural, and historic resources:

- Architectural recordation in the form of a Historic American Engineering Record (HAER) documentation of the bridge would be prepared. This would include documentation of the extant Waiaka Bridge, to be undertaken by a Secretary of the Interior (SOI)-qualified Architectural Historian, at a Level III HAER recordation, which includes a sketch plan, photographs, and a short form historical report. SHPO or HDOT, on behalf of FHWA, would coordinate with National Park Service (NPS) regarding the recordation.
- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If non-burial historic properties are discovered or unanticipated effects on historic properties are found, the HDOT shall comply with [HAR] Chapter 13-280 “Rules Governing General Procedures for Inadvertent Discoveries of Historic Properties During a Project Covered by the Historic Preservation Review Process.”
- If human remains are discovered, work in the vicinity of the find shall cease, the area shall be secured, the Police and the [SHPD] shall be notified, and treatment shall proceed in conformance with HAR Chapter 13-300 Subchapter 4 “Procedures for Proper Treatment of Burial Sites and Human Skeletal Remains.”
- HDOT will include in the Specifications (sic) that the Contractor (sic) shall prevent the disturbance or taking of any historic property or resource to the extent possible by instituting these mitigation measures.

At this time, the **SHPO has insufficient information to concur with FHWA’s effect determination of *adverse effect* for the subject project.** The SHPO agrees with the FHWA’s NRHP eligibility evaluation of SIHP Site 50-10-06-29221 (Waiaka Stream Bridge), however the letter received from the FHWA on May 13, 2024, does not include an evaluation of eligibility for SIHP Site 50-10-06-22313 (Keanu‘i‘omanō Stream Gage Station Foundation) which has been previously identified within the current APE. Additionally, the SHPO has concerns that the APE has been continually revised to avoid the evaluation of historic properties identified through the consultation process. The

FHWA indicates that private properties south of the intersection were recently deemed “unnecessary for the Undertaking and have been removed from the APE.”

Please note the APE means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking. **The SHPO objects** to the current reduction in the APE. Although the project may not be planned to directly occur within the private properties south of the intersection, there is still potential for indirect impacts to historic properties in this location.

Based on comments received from consulting parties during the Section 106 process, Barna et al. (April 2023) indicates the APE and surrounding lands are archaeologically sensitive, noting the former St. John the Evangelist Catholic church site as well as an unmarked burial site occur just outside of the revised APE. However, no subsurface testing has occurred within the APE to verify the presence or absence of subsurface archaeological historic properties.

The SHPO requests the following:

1. A reasonable and good faith effort to identify subsurface archaeological historic properties within the APE including the excavation of archaeological test units to verify the presence or absence of subsurface archaeological historic properties. The HDOT, FHWA, and their archaeological firm should consult with the SHPO and their Section 106 consulting parties regarding an appropriate testing strategy prior to initiation of archaeological testing.
2. A letter from the FHWA evaluating the eligibility of SIHP Site 50-10-06-22313 (Keanu‘i‘omanō Stream Gage Station Foundation) for listing in the NRHP and, if eligible, an assessment of adverse effects pursuant to 36 CFR 800.5.
3. A letter from the HDOT initiating the HRS §6E-7 and HRS §6E-8 historic preservation review processes. Pursuant to HAR §13-275-5, HDOT shall first consult the SHPD to determine if the area proposed for the project needs to undergo an inventory survey to determine if historic properties are present. Please note, the SHPD may conclude an AIS needs to be done to identify any subsurface historic properties that may be present within the project area and to gather enough information to evaluate the properties’ significance.
4. A letter from the County of Hawai‘i CRC summarizing their recommendations and comments following the site visit with the HDOT project team.
5. A copy of the construction plans and any associated permit applications for the project.
6. A copy of the final AIS report titled *Archaeological Inventory Survey, Waiaka Bridge Replacement and Realignment of Approaches, Lands of Lālāmilo, Keoniki, Kauniho and Waiaka 1, South Kohala District, Island of Hawai‘i TMK: [3] 6-5-01:Por. 033, 6-6-01:Por. 077, 6-6-04:Por. 001* (Haun et al. 2002).
7. The APE be restored to its original designation measuring 7.3 acres. The information provided in Barna et al. (April 2023) indicates the Section 106 consulting parties have identified several historic properties that may be indirectly affected by the current project. By reducing the APE to exclude these historic properties, the FHWA cannot adequately perform an assessment of adverse effects on these historic properties pursuant to 36 CFR 800.5.

Please submit the requested information and documents to HICRIS Project No. 2021PR00849 using the project supplement option.

The HDOT and FHWA are the offices of record for this undertaking. Please maintain a copy of this letter with the project environmental review record.

Please contact Mary Kodama, Historic Architect, at Mary.Kodama@hawaii.gov, for any matters regarding architectural resources or Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov, for any matters regarding archaeological resources or this letter.

Richelle M. Takara and Edwin H. Sniffen

July 17, 2024

Page 6

Aloha,



Dawn N. S. Chang, Esq.

DLNR Chairperson

State Historic Preservation Officer

cc: Lawrence Laus, HDOT, lawrence.m.laus@hawaii.gov
 Henry Kennedy, HDOT, henry.kennedy@hawaii.gov
 Holly Yuen, HDOT, holly.yuen@hawaii.gov
 Meesa Otani, FHWA, meesa.otani@dot.gov
 Trisha K. Watson, Honua Consulting, watson@honuaconsulting.com
 Matt Clark, ASM, mclark@asmaffiliates.com
 Darin Chinen, WSP USA Inc., darin.chinen@wsp.com
 Kevin Sullivan, Planner V, AICP, kevin.sullivan@hawaiicounty.gov
 Elizabeth Merritt, NTHP, emerritt@savingplaces.org
 Kiersten Faulkner, HFF, kiersent@historichawaii.org



U.S. Department
of Transportation
**Federal Highway
Administration**

Hawaii Federal-Aid Division

May 13, 2024

300 Ala Moana Blvd, Rm 3-306
Box 50206
Honolulu, Hawaii 96850
Phone: (808) 541-2700
FHWA-Hawaii.Intake@dot.gov

In Reply Refer To:
HDA-HI

Ms. Dawn N. S. Chang
Chairperson and State Historic Preservation Officer
Department of Land and Natural Resources
601 Kamokila Boulevard, Suite 555
Kapolei, HI 96707

Subject: National Historic Preservation Act Section 106 Effect Determination
Kawaihae Road, Replacement of Waiaka Bridge and Realignment of Approaches
Waimea, Lalamilo and Keanuimano Ahupuaa, Kohala District, Island of Hawaii
Federal-Aid Project No. BR-NH-019-1(045)
HICRIS No.: 2021PR00849
Tax Map Key(s): (3) 6-5-001:015 por., 033 por.; 6-6-001:011; 6-6-004:999
(Kawaihae Road Right-of-Way); 6-6-009:999 (Kohala Mountain Road Right-of-Way)

Dear Ms. Chang:

In accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (2006), the Federal Highway Administration (FHWA) requests the State Historic Preservation Officer's (SHPO) concurrence on the effect determination for the proposed bridge replacement project. The FHWA is rendering an adverse effect determination for the subject project.

Federal Involvement

Section 106 of NHPA requires federal agencies to consider the effects on historic properties of projects they carry out, assist, permit, license, fund, or approve. FHWA intends to fund the proposed Hawaii Department of Transportation (HDOT) project.

Area of Potential Effects (APE)

The project is located in South Kohala, at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea, Hawaii Island. Waiaka Bridge is located at milepost 58.88 along Kawaihae Road (State Route 19).

HDOT is notifying the State Historic Preservation Division (SHPD) that it is reducing the APE from previously revised 6.6 acres to a final APE of 4.7 acres. Private properties south of the intersection, which were in the previously revised 6.6 acres, were recently deemed unnecessary for the Undertaking and have been removed from the APE. The final APE of 4.7 acres includes project work comprising the bridge footprint, existing and proposed roadway, bridge approaches,

foot access/vegetation clearing areas, and designated construction staging areas, as shown in the enclosed updated APE map. Please notify us if there are any objections.

Description of the Undertaking

The project will demolish the existing 38-foot-long, 26-foot-wide Waiaka Bridge, including its center pier. The new bridge constructed in the same general location will be 60 feet long and vary in width from 70 to 90 feet wide, with bridge abutments flanking the existing stream.

A temporary bypass road and bridge will be constructed to maintain Kawaihae Road traffic during construction. Upon completion of construction, the temporary bypass road and bridge will be removed, and the area will be restored to previous existing conditions and returned to the landowner.

Description of Steps Taken to Identify Historic Properties

The SHPD, Native Hawaiian Organizations, and consulting parties were contacted to identify historic properties. HDOT also conducted a review of previous archaeological, architectural, historical, and cultural studies and fieldwork. A summary of the consultation steps taken are provided below.

On August 18, 2021 (Doc No.: 2108SH06), SHPO in response to HDOT's July 21, 2022 letter, noted that there are two potential historic properties approximately 200 meters northeast of TMK (3) 6-5-001:015. These are: 1) a Hawaiian habitation termed Waiaka (SIHP No. 50-10-06-19648) and 2) Hawaiian habitation and burial complex (SIHP No. 50-10-06-19649). In a letter dated March 7, 2022, SHPD reconfirmed that both historic properties identified above are approximately 200 meters northeast from the TMK (3) 6-5-001:015. HDOT confirms that none of the historic properties mentioned above are within the final 4.7-acre APE. Additionally, SHPD identified Waiaka Stream Bridge constructed in 1932 as eligible for listing in the National Register of Historic Places under Criterion C.

In February and March 2022, Section 106 consultation invitation letters were sent to organizations and individuals listed in the enclosed Section 106 Mailing List. The consultation invitation letter requested comments to the revised 6.6-acre APE and any information on historical and cultural sites within that APE.

HDOT received eleven responses resulting from the Section 106 consultation invitation letters. None of the eleven responses identified historical or cultural sites within the current APE. A summary and copies of the responses are provided in attached enclosure documents. The four respondents requesting Section 106 consulting party status are listed below:

- 1) Hawaii Preparatory Academy (HPA)
- 2) Big Buck Trust, via Carlsmith Ball LLP
- 3) Michael and Vivienne Aronowitz
- 4) Hawaii County Cultural Resources Commission (CRC)

A Section 106 notice/advertisement of consultation was also published in the Hawaii Tribune-Herald and West Hawaii Today newspapers on June 26, 2023. The notice/advertisement requested Native Hawaiian organizations (NHO) and Native Hawaiian descendants with ancestral, lineal, or cultural ties to, cultural or historic properties knowledge of and concerns for,

and cultural or religious attachment to the proposed project area to share information of known historic properties. Other individuals and organizations with a demonstrated legal, economic, or historic preservation interest in the Undertaking were also asked to provide information on known historical and cultural sites in the APE. No public comments were received at the end of the 30-day comment period.

An abridged summary of received consultation comments, with the disposition of these comments, is provided as an attachment. Copies of written Section 106 correspondences are also enclosed. Note that some of the comments referenced the revised 6.6-acre APE, rather than the final 4.7-acre APE.

Identified Historic Properties within the APE and Effects of the Undertaking

Based on our research, analysis, site observation, and consultations, FHWA has identified one (1) historic property in the final 4.7-acre APE, Waiaka Bridge, as shown in Table 1 below. Please refer to the enclosed APE map. The Undertaking would result in the demolition and replacement of Waiaka Bridge.

Table 1. NRHP Eligibility

SIHP Site No.	Property	Temporal Affiliation	NRHP Eligibility
50-10-06-29221	Waiaka Bridge	1932	C

Site 29221 – Waiaka Bridge

Waiaka Bridge was constructed in 1932 by Charles H. Will as the first bridge to be funded by federal money on Hawaii Island. The bridge is considered eligible for listing in the National Register of Historic Places (NRHP) under Criterion C due the following.

- Good example of 1930's reinforced concrete and masonry bridge in its original location.
- Typical characteristics of 1930's period bridge in its use of materials, method of construction, craftsmanship and design.
- Bridge retains all aspects of integrity, with minor diminishment of its integrity of design due to the attachment of water lines to the exterior of the bridge.

FHWA has determined that Site 29221 retains sufficient integrity to convey its significance, and therefore is considered eligible for inclusion in the NRHP under Criterion C with a local level of significance and a period significance of 1932-1941 as defined in the "Bridge Construction and the Federal Aid Program (1925-1941)" historical context.

Basis of Determination, 36 CFR 800.5

Based on the foregoing, the FHWA has determined that the Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches Project will have an adverse effect on a historic property in the proposed Mamalahoa Highway Historic District pursuant to 36 CFR 800.5, due to the demolition of the NRHP eligible Waiaka Bridge. The FHWA requests the

SHPO's concurrence with this determination. If the SHPO objects to this effect determination, please inform us within 30 days of receipt of this letter. Upon receipt of your concurrence, FHWA will prepare a Section 106 Memorandum of Agreement (MOA) for the undertaking.

Avoidance, Minimization, and Mitigation Measures

While developing the proposed Undertaking, measures to avoid, minimize, and mitigate the effects of the Undertaking were incorporated wherever feasible. In particular, because of project refinements, HDOT avoided impacts to historic properties identified during the Section 106 consultation process by reducing the APE from the original 7.3 acres to 4.7 acres.

FHWA expects to include the following mitigation measures in the MOA to avoid, minimize, and mitigate potential impacts to archaeological, cultural, and historic resources:

- Architectural recordation in the form of a Historic American Engineering Record (HAER) documentation of the bridge would be prepared. This would include documentation of the extant Waiaka Bridge, to be undertaken by a Secretary of the Interior (SOI)-qualified Architectural Historian, at a Level III HAER recordation, which includes a sketch plan, photographs, and a short form historical report. SHPO or HDOT, on behalf of FHWA, would coordinate with National Park Service (NPS) regarding the recordation.
- If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- If non-burial historic properties are discovered or unanticipated effects on historic properties found, the HDOT shall comply with Hawaii Administrative Rules (HAR) Chapter 13-280 "Rules Governing General Procedures for Inadvertent Discoveries of Historic Properties During a Project Covered by the Historic Preservation Review Process."
- If human remains are discovered, work in the vicinity of the find shall cease, the area shall be secured, the Police and the State Historic Preservation Division (SHPD) shall be notified, and treatment shall proceed in conformance with HAR Chapter 13-300 Subchapter 4 "Procedures for Proper Treatment of Burial Sites and Human Skeletal Remains."
- HDOT will include in the Specifications that the Contractor shall prevent the disturbance or taking of any historic property or resource to the extent possible by instituting these mitigation measures.

Request for Concurrence on Effect Determination

We look forward to developing a Section 106 MOA in consultation with your office to resolve the adverse effect caused on Waiaka Stream Bridge by the undertaking.

If you have any questions, please feel free to contact Matt Walker, Transportation Specialist, at (808) 541-2339 or by email at matthew.walker1@dot.gov. Thank you for your assistance.

Sincerely yours,



Digitally signed by
MATTHEW IEUAN WALKER
Date: 2024.05.13 08:48:36
-10'00'

for Richelle M. Takara, P.E.
Division Administrator

Enclosures

Final APE Map
Final Environmental Assessment Figures
Section 106 Mailing List
Historic Properties Report
Previous HDOT and SHPD correspondence
Section 106 Consultation Letter and Responses
Section 106 Consulting Parties Mailing List

cc:

Andrew Hirano, HDOT (Andrew.J.Hirano@hawaii.gov)
Hawaii Preparatory Academy (fwawner@hpa.edu)
Steven S.C. Lim, Carlsmith Ball LLP (slim@carlsmith.com), for Harvey Bookstein, Big Buck Trust
Michael and Vivienne Aronowitz (aronowitz.c@gmail.com and aronowitz@gmail.com)
Hawaii County Cultural Resources Commission (Kevin.Sullivan@hawaiicounty.gov)

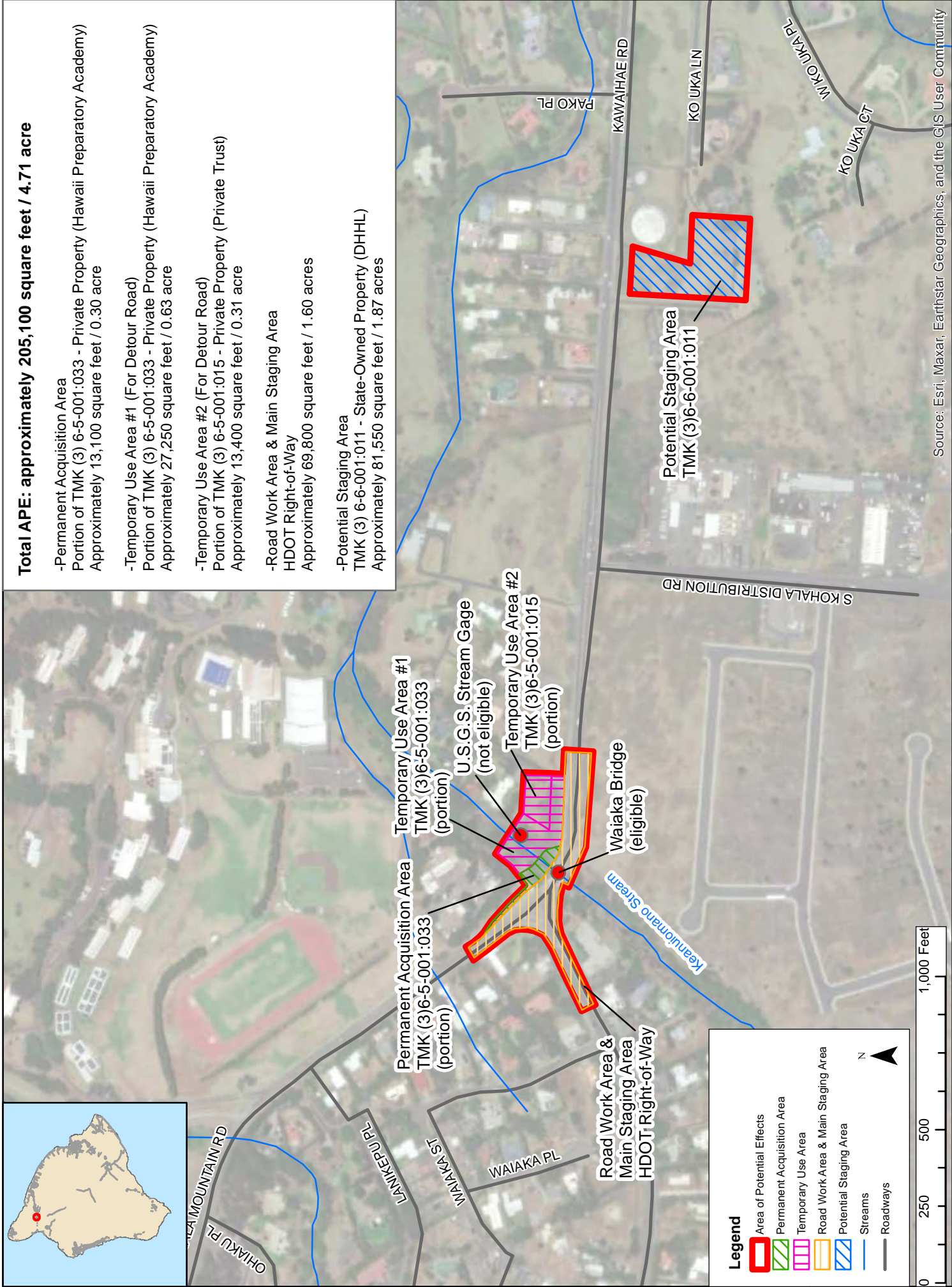
Kawaihae Road,
Replacement of Waiaka Stream Bridge
and
Realignment of Approaches

Ref No. HWY-DS 2.4574
Federal Aid Project No. 19D-01-19

Section 106 Enclosures

- Area of Potential Effect (APE) Map
- Final Environmental Assessment (Final EA) Figures - Build Alternative and Proposed Bridge Elevation
- Section 106 Mailing List
- Site Photos
- Historic Properties Report in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the Waiaka Bridge Replacement and Roadway Realignment Project
- Section 106 Initiation Letter, Request for Contact Information and Area of Potential Effect (APE) Letter (July 21, 2021)
- SHPO Response to Section 106 Initiation Letter (August 18, 2021)
- HDOT request for information letter to SHPO (February 3, 2022)
- NHO Consultation Invitation letter template (February 9, 2022)
- SHPD Section 106 Review, Continued Consultation letter (March 7, 2022)
- Section 106 Consulting Parties Mailing List

Area of Potential Effect (APE) Map



Kawaihae Road - Waiakea Bridge Replacement and Realignment of Approaches
Area of Potential Effects (APE)

Final Environmental Assessment (Final EA) Figures

Build Alternative and Proposed Bridge Elevation

Figure 1-3: Build Alternative (Replacement Bridge and Roundabout)

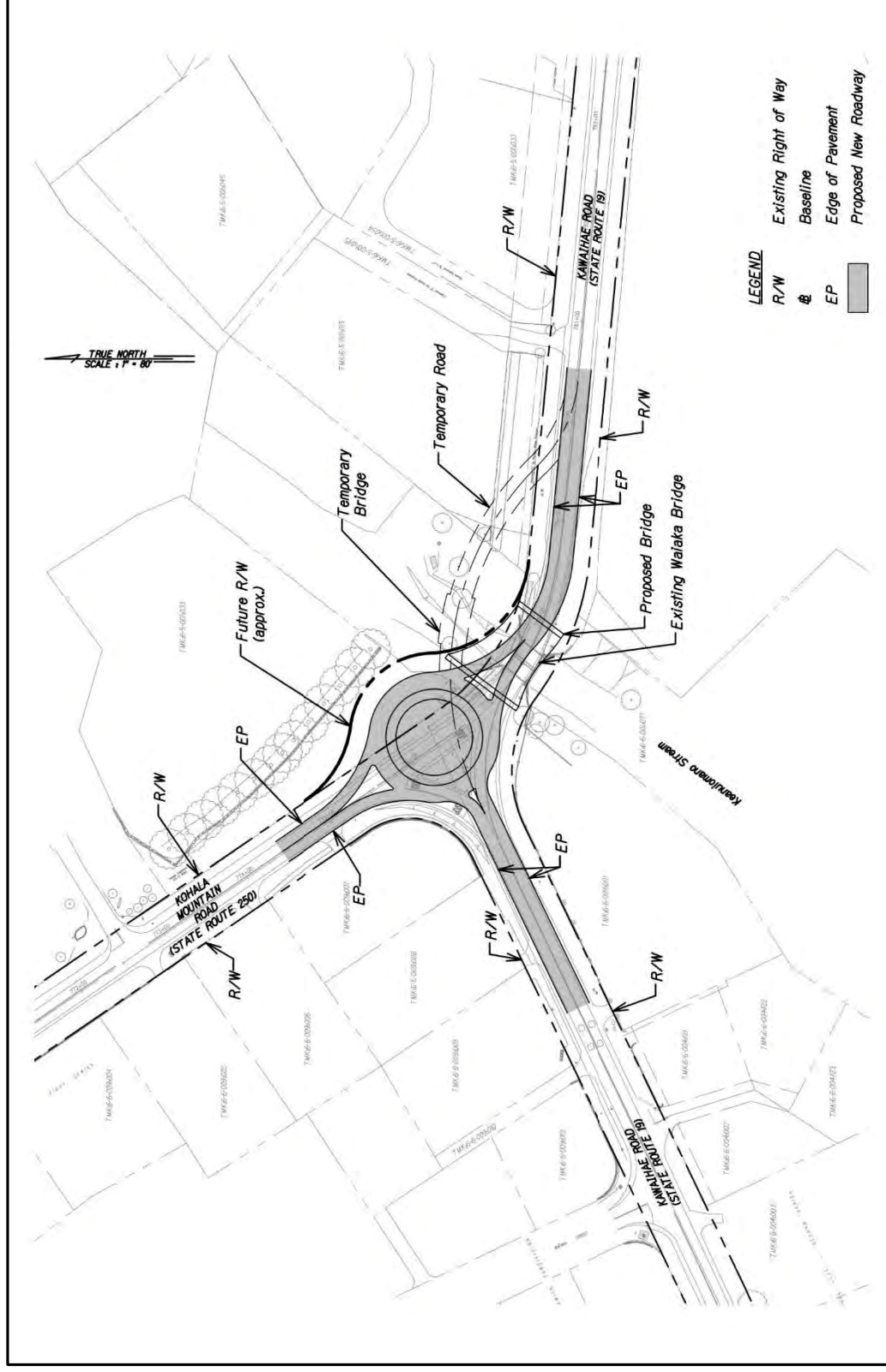
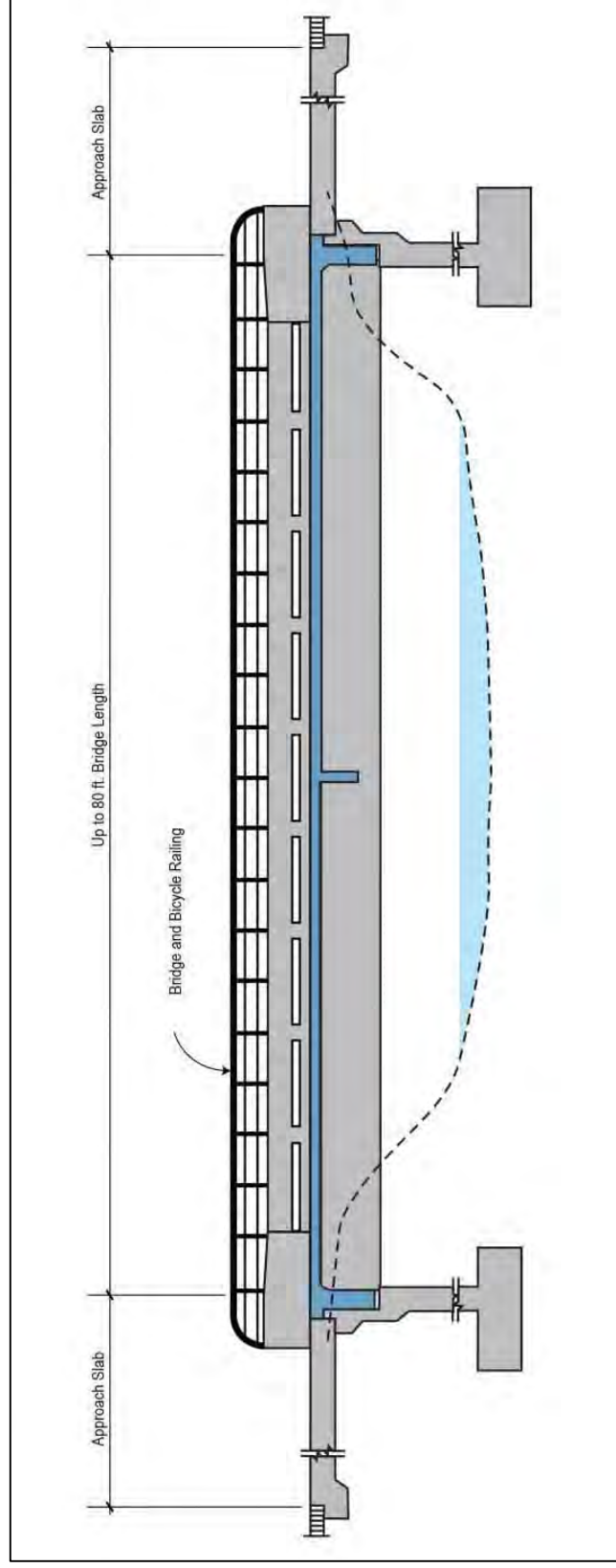


Figure 1-4: Proposed Bridge Elevation



Section 106 Mailing List

Section 106 Mailing list for Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches

Agency / Organization Name	Mr/Ms	First Name	Last Name	Title
NHOs				
Aha Wahine	Ms.	Linda	Kaleo Paik	
Anna Ranch Heritage Center				
Association of Hawaiian Civic Clubs	Mr.	Hailama	Farden	President
Association of Hawaiians for Homestead Lands	Ms.	Blossom	Feiteira	President
Au Puni O Hawai'i	Mr.	Samson L.	Brown	President
Council for Native Hawaiian Advancement	Mr.	Joseph	Kuhio Lewis	Chief Executive Officer
E Mau Na Ala Hele				
George K. Cypher Ohana	Ms.	Mahealani	Cypher	Descendent
Hawaii Island Burial Council	Ms.	Nalei	Pate-Kahakalau	Chair
Hawaii Preparatory Academy	Mr.	Fred	Wawner	Interim Head of School
Hawaiian Civic Club of Hilo	Ms.	Antoinette K.	Mallow	Pelekikena
Hawaiian Community Assets, Inc.	Mr.	Jeff	Gilbreath	Executive Director
Historic Hawaii Foundation	Ms.	Kiersten	Faulkner	Executive Director
Hui Ho'oniho	Mr.	Edward Halealoha	Ayau	Executive Director
Hui Huliiau Inc.	Mr.	Adrian	Nakea Silva	Chairman
Hui Kako'o Aina Ho'opulapula	Ms.	Blossom	Feiteira	President
Imua Hawaii	Ms.	Dreanalee	Kalili	Treasurer
Ka Haka Ula O Keelikolani, University of Hawaii Hilo, College of Hawaiian Language	Mr.	Larry	Kimura	
KAHEA - The Hawaiian Alliance				
Kamehameha Schools	Ms.	Piilani	Hanohano	Government Relations Coordinator
Kanu o ka Aina Learning Ohana	Ms.	Taffi	Wise	Executive Director
Kingdom of Hawai'i	Mr.	Dennis	Ragsdale	Advocate General
Kohala Watershed Partnership	Mr.	Jacob	Merkel	Coordinator
Ko'olau Foundation	Ms.	Mahealani	Cypher	Secretary
Kua'aina Ulu 'Auamo	Mr.	Charlie	Young	Hawaii Council Member
Na Koa Ikaika Ka Lahui Hawaii	Ms.	Mililani B.	Trask	Convenor
Na Ku'auhau 'o Kahiwakaneikopolei	Ms.	H.	Kanoekalani Chee	Vice President
Na Kupuna Moku O Keawe	Mr.	Hanalei	Fergerstrom	Spokesperson
Nanakuli Housing Corporation	Ms.	Paige	Kapiolani Barber	
National Trust for Historic Preservation				
Native Hawaiian Economic Alliance	Mr.	Kaniela	Sharp	Director
Paniolo Preservation Society				
Papa Ola Lokahi	Dr.	Sheri-Ann	Daniels	Executive Director
Piihonua Hawaiian Homestead Community Association	Mr.	Ronald	Kodani	President
Partners in Development Foundation	Mr.	Jan E.	Hanohano Dill	President and COB
Royal Hawaiian Academy of Traditional Arts	Mr.	L. Laakea	Suganuma	President
South Kohala Hawaiian Civic Club				
South Kohala Traffic Safety Committee	Ms.	Knowles	Zaheva	Secretary
Sovereign Councils of the Hawaiian Homelands Assembly	Ms.	Robin Puanani	Danner	Chairperson
Sovereign Council of the Hawaiian Homestead Associations	Ms.	Robin Puanani	Danner	Chairperson
The I Mua Group	Mr.	Melvin	Soong	President
The Makua Group	Mr.	Eugene	O'Connell	Project Coordinator
University of Hawaii at Manoa	Dr.	Lilikala	Kameeleihiwa	Professor
Waimea Community Association				
Waimea Hawaiian Civic Club				
	Dr.	William C. and Patricia	Bergin	
	Mr.	Leningrad	Elarionoff	
	Dr.	Lilikala	Kameeleihiwa	
	Ms.	Kuulei	Keakealani	
	Ms.	Nicole	Lui	
	Dr.	Momi	Naughton	
	Ms.	Barbara	Robertson	
State and County Agencies				
State of Hawaii, Department of Land and Natural Resources, State Historic Preservation Division	Dr.	Alan	Downer	Administrator
DLNR Aha Moku Advisory Committee	Ms.	Leimana	DaMate	Executive Director
State of Hawaii, Department of Hawaiian Home Lands	Mr.	William J.	Aila	Interim Chair
State of Hawaii, Office of Hawaiian Affairs	Dr.	Sylvia	Hussey	CEO
Hawaii State Capitol; State Legislature, House District 7	Honorable State Representative	David	Tarnas	Chair, Water and Land
County Council, District 9	Honorable Council Member	Herbert "Tim"	Richards III	
County of Hawaii Planning Department	Mr.	Michael	Yee	Planning Director

Section 106 Mailing list for Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches

Agency / Organization Name	Mr/Ms	First Name	Last Name	Title
Hawaii County Cultural Resources Commission	Mr.	Kamuela	Plunkett	
Private Property Owners and Community Members				
	Ms.	Laurie	Ainslie	
	Dr.	Michael & Vivienne	Aronowitz	
	Mr. & Mrs.	John and Marion	Barton	
Big Buck Trust, C/O Harriet Bookstein				
	Ms.	Carol	Buck	
	Mr.	Fred	Cachola	
Campbell Family Trust	Dr.	Charles	Campbell	
	Mr.	Chuck	Clarke	
	Ms.	Gillian	Culff	
	Mr. & Ms.	David and Aimee	Doi	
	Mr.	Ross	Fulmer	
	Mr.	David	Gomes	
	Mr. & Mrs.	Mike	Hannah	
	Mr.	T.J.	Kalaniopio	
	Mr.	Steve	Kittell	
	Mr.	Wayne	Kuwaye	
	Mr.	Clemson	Lam	
	Mr.	Thomas	Mar	
	Ms.	Michelle	Medeiros	
	Ms.	Joyce	O'Connor	
		Peter, Linda, Andrew, Lauren	Paisley	
Waiaka Neighborhood Watch	Ms.	Eliza	Pond	
	Mr.	William	Pratt	
	Ms.	Barrie	Rose	
	Mr.	J. William	Sanborn	
	Mr.	Aaron	Stene	
	Ms.	Fran	Tabor	
	Mr.	Sherman	Warner	
	Ms.	Kathryn	Wiese	
	Ms.	Margaret	Wille	
	Mr.	Sinclair	White	
Waimea Gardens				

Site Photos

Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches
Waimea, Lalamilo, and Keanuiomano Ahupuaa, Kohala District, Island of Hawaii
Federal-Aid Project No. BR-NH-019-1(045)
HICRIS No.: 2021PR00849
Site Photos of Waiaka Bridge
Taken August 10, 2018, unless otherwise noted.



Waiaka Bridge, upstream side of the bridge, view to the west.
(Photo 6235)



North side / upstream side of Waiaka Bridge.

(Photo credit: ASM Affiliates. "Historic Properties Assessment in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the Waiaka Bridge Replacement and Roadway Realignment Project" July 2022.)



Waiaka Bridge, Southwest Abutment with Date Stamp 1932.

(Photo 6279)



Waiaka Bridge, upstream side of the bridge, view to the east.
(Photo 6483)



South side / downstream side of Waiaka Bridge.
(Photo 6508)

Historic Properties Report in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the
Waiaka Bridge Replacement and Roadway Realignment Project

Historic Properties Report in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the Wai‘aka Bridge Replacement and Roadway Realignment Project

TMK: (3) 6-5-001:015 and 033 por.; 6-6-001:011; 6-6-001:011; 6-6-004:999 (Kawaihae Road Right-of-Way); 6-6-009:999 (Kohala Mountain Road Right-of-Way)

Kauniho, Lālāmilo, and Wai‘aka 1st and 2nd ahupua‘a
South Kohala District
Island of Hawai‘i

DRAFT VERSION



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Historic Properties Report in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the Wai‘aka Bridge Replacement and Roadway Realignment Project

TMK: (3) 6-5-001:015 and 033 por.; 6-6-001:011; 6-6-001:011; 6-6-004:999 (Kawaihae Road Right-of-Way); 6-6-009:999 (Kohala Mountain Road Right-of-Way)

Kauniho, Lālāmilo, and Wai‘aka 1st and 2nd *ahupua‘a*

South Kohala District

Island of Hawai‘i

1

2

EXECUTIVE SUMMARY

At the request of WSP USA, Inc., on behalf of the State of Hawai‘i Department of Transportation (HDOT), ASM Affiliates (ASM) has prepared this historic properties report for the proposed Wai‘aka Bridge Replacement and Roadway Realignment project. The purpose of this report is to aid HDOT in their efforts to identify historic properties in compliance with Section 106 of the National Historic Preservation Act (NHPA) and Hawai‘i Revised Statutes (HRS) Chapter 6E-8 for the proposed project. The project, which is located along Kawaihae Road and Kohala Mountain Road in the District of South Kohala, Island of Hawai‘i, involves replacing the existing Wai‘aka Bridge (Bridge No. 001002500500053) with a wider and longer bridge that would safely accommodate two travel lanes, one in each direction, a shoulder/bike lane, and a raised sidewalk. In addition, the roadway approaches would be realigned to create a smooth transition to the replacement bridge. The Kawaihae Road and Kohala Mountain Road intersection would also be reconfigured to a roundabout.

The project has been determined to be an Undertaking subject to Section 106 of the NHPA of 1966 as amended (2006) and its implementing regulations (36 CFR 800) due to the use of funding from the United States Department of Transportation Federal Highway Administration. The Area of Potential Effects (APE) comprises 4.71 acres and contains a portion of Kawaihae Road, portions of surrounding parcels where equipment and materials storage will take place, and portions of surrounding parcels that will be used temporarily during the project.

Because the project would be conducted by the HDOT as a State Agency, it is also subject to review under Hawai‘i Revised Statutes Chapter 6E-8. The HRS Chapter 6E-8 Project Area is coterminous with the Section 106 APE.

The current APE/Project Area was included in an archaeological survey conducted by Haun and Associates in 2002, which was revised in 2012 during a second attempt to replace the bridge. That study (Haun et al. 2002) identified two historic properties within the current APE: SIHP 50-10-06-23313 was identified as a concrete foundation located in Wai‘aka Stream. SIHP 50-10-06-29221 is the Wai‘aka Bridge. Wai‘aka Bridge was previously documented by Secretary of the Interior’s Standards Qualified architectural historians during the *State Historic Bridge Inventory and Evaluation* (MKE and Fung 2013) and was evaluated to be eligible for listing in the National Register of Historic Places under Criterion C as a good example of a 1930s concrete bridge.

Consultation for the Undertaking included the publication of public notices, distribution of consultation letters to Native Hawaiian Organizations and other consulting and interested parties, and interviews with individual stakeholders in the APE. Consultation responses included concerns about the former location of the Wai‘aka Catholic Church (constructed in 1870) and associated graves on the Hawai‘i Preparatory Academy campus near the current APE.

Fieldwork for the current study was conducted on August 26, 2020, by Johnny Dudoit, B.A., and Benjamin Barna, Ph. D. (Principal Investigator), with follow-up field visits on October 14, 2020, by Dr. Barna, and on August 4, 2021, by Brooke Kauoa under supervision of Dr. Barna. A total of nine person-hours were expended during the fieldwork.

Two previously identified potential historic properties were identified within the APE. No previously unidentified properties were found. SIHP 50-10-06-23313, originally identified as a concrete “foundation,” is the Keanu‘i‘omanō Stream Gage (USGS 16756500). SIHP 50-10-06-29221 is the Wai‘aka Bridge.

SIHP 50-10-06-23313, now understood to be the USGS Keanu‘i‘omanō Stream gaging station, is recommended not eligible for the NRHP and not significant under HRS Chapter 6E-8. SIHP 50-10-06-29221, the Wai‘aka Bridge, was previously determined to be eligible for the NRHP under Criterion C and HRS Chapter 6E significant under Criteria c and d. Based on the observations made during the current study, the bridge continues to be recommended eligible for the NRHP eligible under Criterion C and HRS Chapter 6E significant under Criteria c and d.

The Undertaking would result in the demolition of the Wai‘aka Bridge (Site 29221), thus the recommended Section 106 determination of effect for the Undertaking is “Adverse effect” under 36 CFR 800.5. The recommended HRS Chapter 6E determination is “Effect, with proposed mitigation commitments” under HAR §13-275-7. It is recommended that HDOT consult further to resolve the adverse effect pursuant to 36 CFR 800.6. Recommended mitigation measures include architectural recordation (HAER Level I or II) of Site 29221. Archaeological monitoring is recommended during ground-disturbing activities associated with the project.

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1. INTRODUCTION

At the request of WSP USA, Inc. on behalf of the State of Hawai‘i, Department of Transportation (HDOT; referred to hereafter as “the Agency”), ASM Affiliates (ASM) has prepared this historic properties report for the proposed Wai‘aka Bridge Replacement and Roadway Realignment project. The purpose of the current study is to aid the Agency in their efforts to identify, evaluate, and determine project effects to historic properties in compliance with Section 106 of the National Historic Preservation Act (NHPA) and Hawai‘i Revised Statutes (HRS) Chapter 6E-8. The project, which is located along Kawaihae Road and the Kohala Mountain Road in the South Kohala District, Island of Hawai‘i (Figures 1 and 2), involves replacing the existing Wai‘aka Bridge (Bridge No. 001002500500053). In addition, the roadway approaches would be realigned to create a smooth transition to the replacement bridge. The Kawaihae Road and Kohala Mountain Road intersection would also be reconfigured to a roundabout.

The Agency has been awarded funds by the United States Department of Transportation Federal Highway Administration (FHWA) for this project. As such, the project has been determined to be an Undertaking subject to Section 106 of the NHPA of 1966, as amended (2006), and its implementing regulations (36 CFR 800). As a project to be conducted by the HDOT as a State Agency, the project is also subject to review under HRS Chapter 6E-8. The scope of the Section 106 Undertaking and the HRS Chapter 6E-8 project are identical and for ease of reading, the proposed project is referred to as “the Undertaking” in the remainder of this report except where language specific to HRS Chapter 6E-8 is required. The Section 106 Area of Potential Effects (APE) and the HRS Chapter 6E-8 Project Area are coterminous and are referred to as “the APE” except where language specific to HRS Chapter 6E-8 is required. A detailed description of the Undertaking and the APE is provided in the following section.

The current study was conducted in partial compliance with 36 CFR 800 and in compliance with Hawai‘i Administrative Rules (HAR) §13-275. This report is divided into six chapters. Chapter 1 includes a description of the Undertaking and the APE. Chapter 2 provides the results of a literature review for the APE, including a culture-historical context followed by a summary of relevant archaeological, cultural, and prior consultation conducted within the APE and surrounding area. Chapter 3 summarizes archaeological expectations for APE. Chapter 4 presents a description of the archaeological fieldwork methods and results. Chapter 5 presents recommended National Register of Historic Places and HRS Chapter 6E significance evaluations. Chapter 6 discusses the recommended determination of effect under both applicable statutes. Chapter 7 presents recommended mitigation measures for the project.

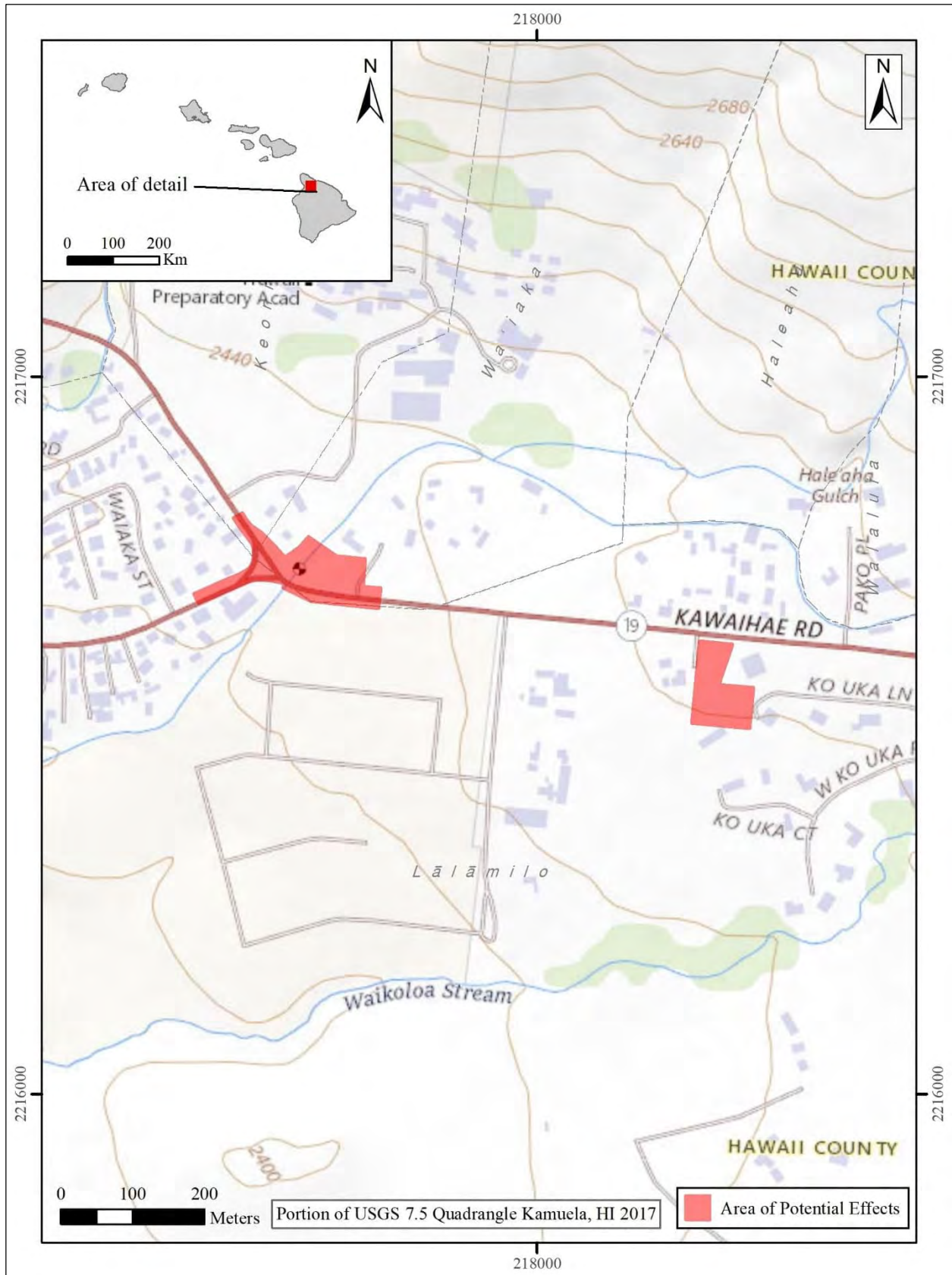


Figure 1. Area of Potential Effects.



Figure 2. Satellite image showing the Area of Potential Effects.

DESCRIPTION OF THE UNDERTAKING

The Undertaking will consist of replacing the existing Wai'aka Bridge (Figure 3), constructed in 1932, with an approximately 53-foot wide by approximately 80-foot-long replacement bridge to accommodate two travel lanes, one in each direction, a shoulder/bike lane, and raised sidewalk. Additionally, the three approaches (ranging in distance from roughly 415-600 feet; see Figure 2) leading to the Wai'aka Bridge will be realigned to create a smooth transition to the replacement bridge. The Kawaihae Road (State Route 19) and Kohala Mountain Road (State Route 250) intersection (see Figure 2) would be reconfigured to include a traffic signal or a roundabout. The APE (further defined below) is intended to accommodate the construction of either alternative. The project limits will extend to the west, east, and north for a sufficient distance to achieve a smooth transition. The objectives of the Undertaking are to replace the aging Wai'aka Bridge, improve sight distances and intersection operations, and improving hydraulic conditions for Wai'aka Stream beneath the Wai'aka Bridge.

The primary objective of the Undertaking is to replace the Wai'aka Bridge with one that will conform to the guidelines set forth by the American Association of State Highways and Transportation Officials' (AASHTO) *A Policy on Geometric Design for Highways and Streets*. The AASHTO guidelines were adopted by the Agency for the planning and engineering of highway projects in Hawai'i. The bridge design will follow current State planning and design guidelines for bridges encompassing lane widths, shoulders, pedestrian access, and railing heights. Additionally, the planning and engineering will need to conform to the *Hawaii Statewide Uniform Design Manual for Streets and Highways* (1980) and the guidelines related to the Americans with Disabilities (ADA) Act.



Figure 3. Wai'aka Bridge, view to the southwest.

AREA OF POTENTIAL EFFECTS

The APE (Figure 4) comprises 205,100 square feet (4.1 acres) located at the junction of Kawaihae Road and Kohala Mountain Road, roughly 2 miles west of Waimea Town and 10 miles east of Kawaihae Harbor. It contains portions of the parcels and road right-of-way listed in Table 1 and shown in Figure 4. About 1.60 acres of the APE contain existing roads (Figure 5) and unpaved road shoulders (Figure 6). A portion of Wai'aka Stream¹ (Figure 7) is located within the APE. The APE also includes portions of two privately-owned parcels on the north side of Kawaihae Road. A 0.30-acre portion of one of these parcels, TMK: (3) 6-5-001:033 (Figure 8), would be permanently acquired by HDOT. An additional 0.63-acre portion of that parcel and a 0.31-acre portion of TMK (3) 6-5-001:015 (Figure 9) would be used for a temporary detour road during construction. To the east of Wai'aka Bridge, a 1.87-acre parcel (Figure 10) potentially would be used as a staging area. The APE includes portions of four *ahupua'a*: Kauniho, Wai'aka 1st, Wai'aka 2nd, and Lālāmilo, all of which are located within the District of South Kohala, Island of Hawai'i.

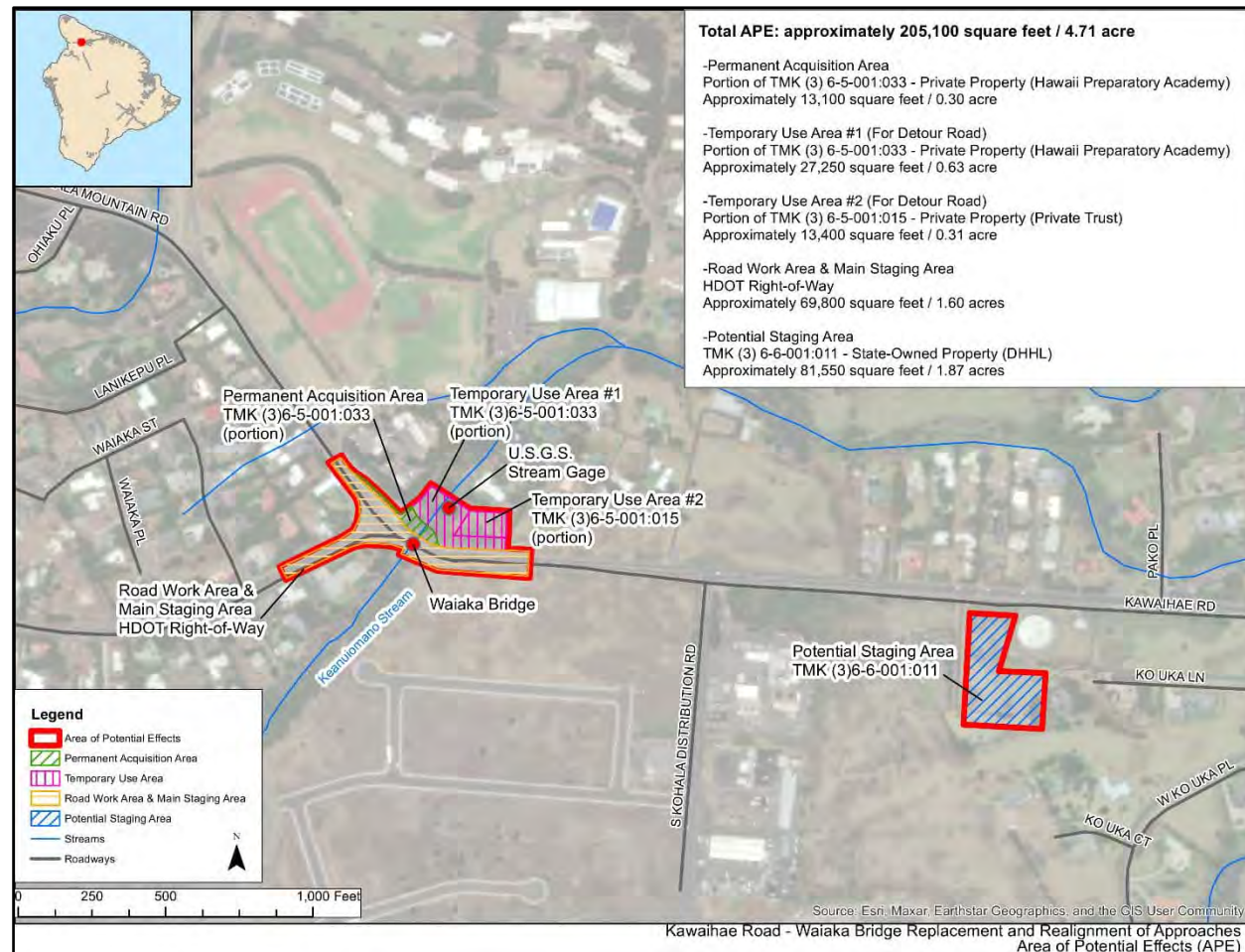


Figure 4. Area of Potential Effects shown along with staging and temporary use areas.

Table 1. Tax Map Key parcels containing the APE.

Tax Map Key	Acres	Current Owner	Project use
(3) 6-5-001:015	0.31	Steven D. Kittel Trust	Temporary Use (Detour Road)
(3) 6-5-001:033	0.30	Hawaii Preparatory Academy	Permanent acquisition
(3) 6-5-001:033	0.63	Hawaii Preparatory Academy	Temporary Use (Detour Road)
(3) 6-6-001:011	1.87	Department of Hawaiian Home Lands	Potential Staging Area
n/a	1.60	HDOT Right-of-Way	Road Work Area and Main Staging Area

¹ The stream's name changes as it flows *makai* through different land divisions from east to west: Kohākōhau, Waiauaia, Wai'aka, Keanu'i'omanō, and Wai'ula'ula (Kuulei Keakealani, pers. comm. August 30, 2021).



Figure 5. Intersection of Kawaihae Road and Kohala Mountain Road, view to the west.



Figure 6. Right of way on south side of Kawaihae road, view to the east.



Figure 7. Wai'aka Stream looking downstream toward Wai'aka Bridge, view to the southwest.



Figure 8. Temporary use area on the north side of Kohala Mountain Road, view to the northwest.



Figure 9. Temporary use area on north side of Kawaihae Road, view to the west.



Figure 10. Staging area, view to the southwest.

The APE is located at elevations ranging from 732 meters (2,401 feet) to 741 meters (2,431 feet) above sea level along the southwestern slope of the Kohala Mountains (see Figure 1), approximately 13.2 kilometers (8.24 miles) from the South Kohala coast. Terrain in the APE slopes very gently to the southwest. Surface geology in the APE is mapped in Figure 11 as “Qhm” described as Hamakua Volcanics dating between 64,000-300,000 years ago (Sherrod et al. 2007). Two soil units (Figure 12) have been mapped in the APE (Soil Survey Staff 2020). In the portion of the APE located east of Wai‘aka Stream, soils are mapped as Waimea medial very fine sandy loam, 0 to 6 percent slope (mapped in Figure 12 as “383”). In the portion located west of Wai‘aka Stream, soils are mapped as rock outcrop-Kamakoa complex with a 6 to 20 percent slope (mapped in Figure 12 as “379”). The climate in the APE is generally cool and dry. Mean annual temperatures range between 62 and 71 degrees Fahrenheit (Giambelluca et al. 2014). The mean annual rainfall within the APE is 41 inches (1,054 millimeters) with most of the precipitation occurring between the months of December through April (Giambelluca et al. 2014). A portion of portion of Wai‘aka Stream (Figure 7) passes through the APE. This stream is the dominant hydrological feature in the APE vicinity. According to Ms. Ku‘ulei Keakealani (pers. comm. August 21, 2022), as the water flows *makai* the stream’s name changes according to the land division it is in. From its *po‘owai* (headwaters) located in the Kohala Mountains, it is called Kohākōhau, Waiauaia, Wai‘aka, Keanu‘i‘omanō, and finally Wai‘ula‘ula before it drains into the ocean. The stream extends through the APE from the northeast, passing beneath Wai‘aka Bridge (see Figure 7). The streambed is *pāhoehoe* bedrock, and banks are cut through the surrounding soil to *pāhoehoe* in several places. Vegetation in the APE includes areas of grassy roadside swales with sands of ironwood and introduced brushy vegetation near the banks of Keanu‘i‘omanō Stream. The potential staging area is vegetated with a mix of introduced grasses and other forage dominated by kikuyu grass (*Pennisetum clandestinum*).

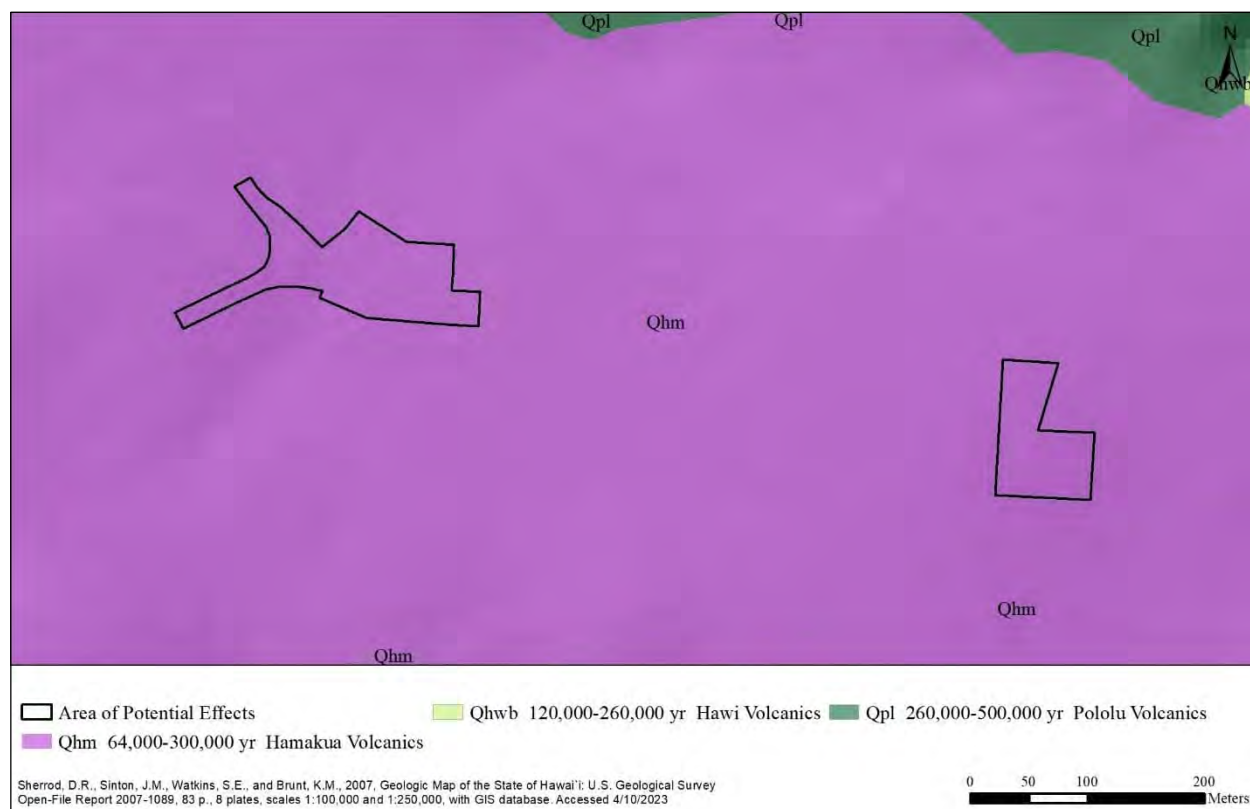


Figure 11. Geology in the Area of Potential Effects.

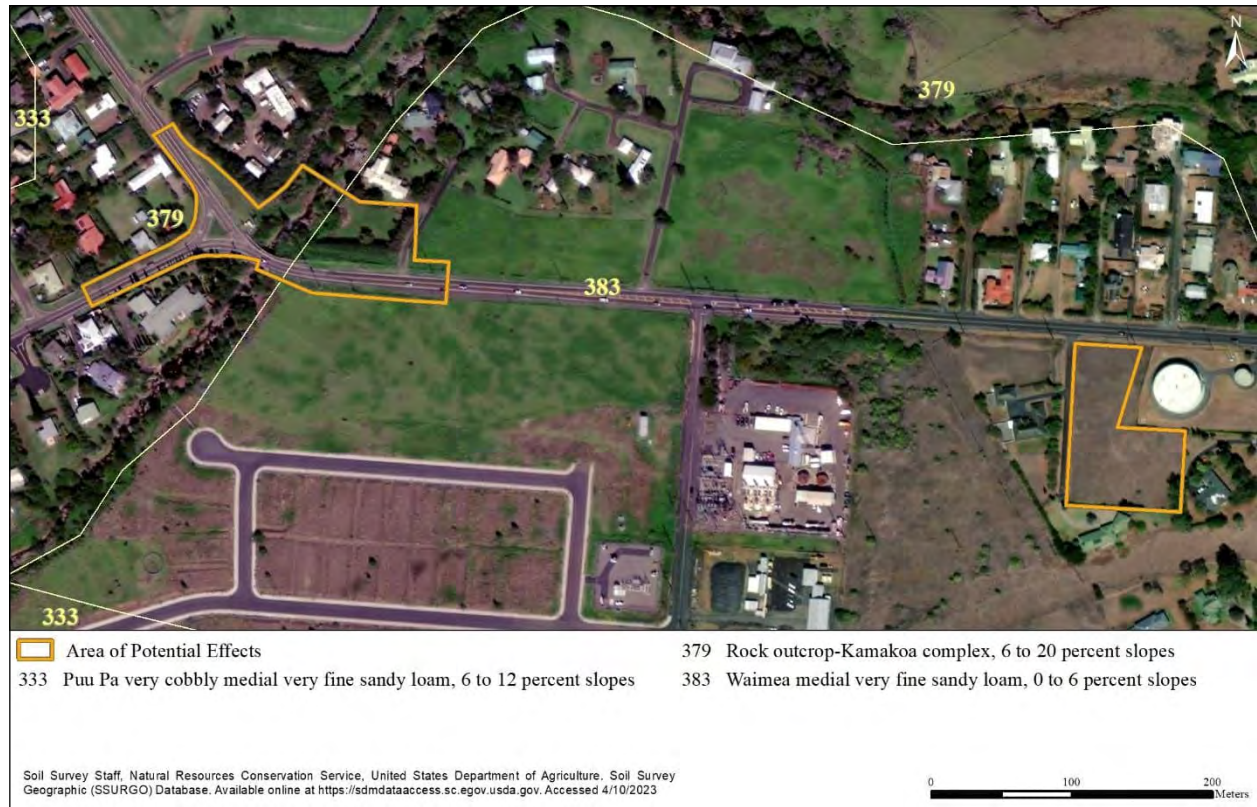


Figure 12. Soils in the Area of Potential Effects.

2. LITERATURE REVIEW

To generate a set of expectations regarding the nature of historic properties that might be encountered within the current APE, and to establish a context in which to assess the significance of any such resources, a general culture-historical context for the South Kohala region is presented that includes specific information regarding the documented history of Kauniho, Lālāmilo, Wai‘aka 1st and 2nd Ahupua‘a and the APE. This is followed by a presentation of relevant prior archaeological studies conducted in the APE.

CULTURE-HISTORICAL BACKGROUND

The bridge and the staging area of the APE are both situated within the northwestern portion of Lālāmilo Ahupua‘a. The bridge APE also falls in the southern portion of the *ahupua‘a* (land division spanning from the mountain to the sea) of Kauniho, Wai‘aka 1st, and Wai‘aka 2nd. In the *moku* (district) of Kohala, the long ridge of the Kohala Mountains extends perpendicular to the predominant northeasterly trade winds, creating an orographic rainfall pattern that separates the district into two distinct environmental zones, a wetter windward zone on the eastern side distinguished by its lush green valleys, and a drier leeward zone on the western side. Traditional poetical expressions for this district also identify other geographical divisions of the district. Once such saying derived from an ancient chant titled *Kū e ho‘opi‘o ka lā* states:

‘o Kohala-iki, ‘o Kohala-nui	lesser Kohala, greater Kohala
‘o Kohala-loko, ‘o Kohala-waho...	inner Kohala, outer Kohala...
(Pukui and Korn 1973:188)	(Pukui and Korn 1973:190)

Although Lesser-, Greater-, Inner-, and Outer Kohala cannot be found on historical maps, Maly (1999:25) explains that “the lands from Kawaihae to ‘Anaeho‘omalū are within the region called Kohala waho (outer Kohala) or Kohala makani ‘Āpa‘apa‘a (Kohala of the ‘Āpa‘apa‘a wind)”. Another Hawaiian proverb recorded by Pukui (1983:196) specifies the extent of the Kohala District, “*Kohala, mai Honoke‘ā a Keahuolono*,” which she translated as “Kohala, from Honoke‘ā [a valley in the northeast of the district] to Keahuolono [an altar constructed on the district’s southern boundary near ‘Anaeho‘omalū].” Handy et al. (1991) provide the following description of Kohala:

The district of Kohala is the northernmost land area of the island of Hawaii. ‘Upolu Point, the northwesterly projection, fronts boldly out into the Alanuihaha [*sic*] Channel towards the southeastern coast of Maui, and is the nearest point of communication between the two islands. To the south, along Hawaii’s western coast, lies Kona; to the east the rough coast of Hamakua District unprotected from the northerly winds and sea. Kohala was the chiefdom of Kamehameha the Great, and from this feudal seat he gradually extended his power to embrace the whole of the island, eventually gaining suzerainty of all the Hawaiian Islands. (Handy et al. 1991:528)

The rugged central area of the district is formed by the mountainous remains (elevation 5,505 feet) of the Kohala dome, the oldest of the island’s volcanoes, now long regarded as extinct. The high table land between Mt. Kohala and the vast northern slopes of Mauna Kea, known as Waimea, has one of the finest and most salubrious mountain climates in the Hawaiian Islands, and also offers excellent grazing for cattle. In post-European times it became the seat of the Parker Ranch, one of the largest ranches in the world. (Handy et al. 1991:528)

Like the other districts, Kohala contains multiple land divisions, one of which includes the subject ahupua‘a of Lālāmilo, whose name Pukui et al (1974:128) translates literally to mean the “*milo* tree branch.” Maly (1999:27) offers a different etymology based on information which he gathered from the *mo‘olelo* (account) *Ka‘ao Ho‘oniua Pu‘uwai no Ka-Miki*:

The region of Lālāmilo was named for the chief Lālāmilo. Lālāmilo was the grandson of Kakanaka, an expert *lawai‘a hi‘ahi* (deep sea tuna lure fisherman) and Piliamo‘o, a powerful priestess and ‘*ōlohe*. Kakanaka and Piliamo‘o were the parents of Nē‘ula (a fishing goddess), and she married Pu‘u-hīna‘i a chief of the inlands. Nē‘ula and Pu‘u-hīna‘i were the parents of Lālāmilo.

While Lālāmilo is currently referred to as an *ahupua‘a*, traditionally it was one of several ‘*ili* that made up the *kalana* of Waimea. Pukui et al. (1974:226) translate the place name to mean “Reddish Water.” As a *kalana*, Waimea was treated as a subdistrict of the greater *moku* of Kohala and contained several other lands divisions (Maly and Maly 2002). The lands subject to the *kalana* of Waimea were those that form the southern limits of the present-day South Kohala District including the lands of ‘Ouli, Wai‘aka, Lālāmilo, Puakō, Kalāhuipua‘a (Lāhuipua‘a), ‘Anaeho‘omalū,

Kanakanaka, Ala'ōhi'a, Paulama, Pu'ukalani (Pukalani), Pu'ukapu, and Waikōloa. Additionally, Puakō, the coastal portion of Lālāmilo, was also identified as an *'ili* of Waimea. In ancient times, Lālāmilo was referred to as Waikōloa Iki (literally, little Waikōloa), while Waikōloa Ahupua'a proper was known as Waikōloa Nui (literally, great Waikōloa) (Maly 1999). Bernice Judd, a former librarian at the Hawaiian Mission Children's Society, describes the extent of the *kalana* of Waimea:

In the early days Waimea meant all the plateau between the Kohala Mountains and Mauna Kea, inland from Kawaihae. This area is from eight to ten miles long and from three to five miles wide. There was no running water on Mauna Kea, so the inhabitants lived at the base of the Kohala Mountains, where three streams touched the plain on their way towards the sea. . . The middle stream, which was famous for wild ducks, was named Waikoloa, or Duckwater. This and the most westerly stream, called Kahakohau, went towards Kawaihae, but neither reached the sea, except in times of flood. (Judd 1932:14)

While the traditional name of this region is Waimea, the name Kamuela (Samuel) has been used since the United States post office in Waimea was renamed in 1901 (The Hawaiian Star 1901). Although originally named after the town, it shared this name with the Waimea post office on Kaua'i. The post office's practice was to avoid duplicate names within a state or territory to avoid confusion. However, as the office's cashier Kenake said at the time, "Letters come here marked 'Waimea, Hawaii.' Under the old system this would be understood, but now it produces untold trouble on account of the fact that mainland people cannot conceive of two offices of the same name in a Territory" (The Hawaiian Star 1901). The new name, Kamuela, is said to have referred to the postmaster Samuel Spencer or the famed rancher Samuel Parker (Pukui et al. 1974). For whomever this area is named after, most of the references describing the Precontact history and the celebrated cultural landscape refer to this area as Waimea.

Celebrated Cultural Landscape

Nestled between the plateau of two shield volcanoes (Kohala Mountains and Mauna Kea), Lālāmilo Ahupua'a along with the greater South Kohala region boasts stunning views of its wind-swept landscape dotted with rolling and jutting *pu'u* (hills). As noted by Plunkett (2018:76), "More than just aesthetically pleasing, the *pu'u* of Waimea[,] as landscape fabric, functions culturally as definers of place." Three such *pu'u* located at the base of the Kohala Mountains are visible from the APE. These area *Pu'u 'Owā'owaka*, *Pu'u Kī*, and *Hōkū'ula*. *Hōkū'ula* is noted as the battle site between Lonoikamakahiki and Kamalālāwalu, and the name given to the *kānoa* ('*awa* mixing bowl) of Laninuiku'iamamaoloa (Wilkinson et al. 2012). The *kānoa* of *Hōkū'ula* is also said to belong to Lono and is associated with rituals connected to the agricultural god (Wilkinson et al. 2012). Souza et al. (2003:7) explain:

The association of the bowl, or *kānoa* of the god Lono (a provider of abundant crops and rain-laden clouds) with *Hōkū'ula* may refer to the agricultural lands of the region; i.e., (1) the bowl or container could symbolize a land of agricultural abundance; (b) the sprinkling of waters from the bowl could refer to the waters of the streams that flow from the uplands and spread across the plains; and (c) the importance of the rituals of Lono in agricultural endeavors, particularly in the areas of Kohala where large field systems have been archaeologically documented.

While these *pu'u* are a culturally-celebrated natural feature of Waimea, so too are the winds. The variety of winds found in Kohala are numerous and several Hawaiian proverbs recorded by Pukui (1983) capture their names and characteristics. Of the famous *'āpa'apa'a* winds, she records:

Ka makani 'āpa'apa'a o Kohala.

The *'āpa'apa'a* wind of Kohala.

Kohala was famed in song a story for the *'āpa'apa'a* wind of that district. (Pukui 1983:157)

Kahilipulu Kohala na ka makani.

Kohala is swept, mulch and all, by the wind.

Kohala is a windy place. (Pukui 1983:143)

'ope'ope Kohala i ka makani.

Kohala is buffeted by the wind. (Pukui 1983:277)

Other winds in Kohala, such as the one that sent clouds racing across the sky, were seen as omens that foretold impending trouble.

Makani luna ka lele 'ino mai lā ke ao.

There is wind from the upland, for the clouds are set a-flying.

Signs of trouble are seen. This saying originated shortly after the completion of Pu'ukoholā heiau by Kamehameha I. He sent Keaweahuulu to Ka'ū to invite Keōuakū'ahu'ula to Kawaihae for a peace conference between them. Against the advice of his own high priest, Keōuakū'ahu'ula went, taking his best warriors along with him. When outside Māhukona, he saw canoes come out of Kawaihae and realized that treachery awaited him. It was then that he uttered the words of this saying. His navigator pleaded with him to go back, but he refused. Arriving in Kawaihae, Keōuakū'ahu'ula stepped off the canoe while uttering a chant in honor of Kamehameha. One of the latter's war leaders stepped up from behind and killed him. All of his followers were slaughtered except for Kuakahela, who hid a later found his way home, where he wailed the sad story. (Pukui 1983:228)

The many rains of Waimea are another important natural feature celebrated in traditional Hawaiian text. The rain named *'Āpu'upu'u*—also as *Kīpū*, *Kīpu'u*, and *Kīpu'upu'u*—is a cold wind-driven rain that creates bumps on the skin (Akana and Gonzalez 2015), and the name may include a play on the word *pu'u* (hill) to refer to the hilly land of the Waimea area (Akana and Gonzalez 2015). Pukui (1983) adds that when the *ali'i* Kamehameha of Kohala organized his army of spear fighters and runners from Waimea, they referred to themselves as the *Kīpu'upu'u* after the cold rain of their homeland. Pukui (1983:188) documented the following poetical expression for the *Kīpu'upu'u* rain "*Ke Kīpu'upu'u ho 'anu 'ili o Waimea*," literally translated as "The *Kīpu'upu'u* rain of Waimea that chills the skin of people." Doyle's (1953:44) description of the *kīpu'upu'u* relates it to a certain wind, "This is the piercing wind that suddenly meets the traveler who makes his upward way from the heat of Kawaihae; and as he nears Waimea he comes upon a region once held sacred."

Another rain, the *'E'elekoa*—also known as *Mālana*, *Mālanalana*, and *Mālana'e'elekoa*—is associated with storms. According to Akana and Gonzalez (2015), the *'E'elekoa* is also a wind name of Waimea. The *Koko'ula* and *Leikoko'ula* rain of Waimea which accompanies a red-hued rainbow is said to be associated with royalty. Sweeping down from the cliffs of Kapaliloa is the *Paliloa* rain and the *Pe'epākaiaulu* is a fierce rain squall that arises suddenly giving the area residents little time to take shelter, thus forcing them to *pe'e* (hide) to prevent from getting soaked. Other rain names for this area include the *Ākōlea*, *Kīnehelehua*, *Kula'ikanaka*, and the *Leiha'akolo* rain (Akana and Gonzalez 2015). The account of Kāmiki also identifies the *Nāulu* rain which sweeps across the land between Kawaihae and Pu'u Wa'awa'a (Maly 1999).

Select *Mo'olelo* for the Lālāmilo-Waimea Area

The history of ancient Hawai'i was transmitted orally from one generation to the next, but after the arrival of the first missionaries in 1820, one of the major transformations to Hawaiian culture was the creation of a written Hawaiian language. Although oral traditions were still maintained, many natives and foreigners began inscribing generations' worth of knowledge onto paper. As such, these writings provide us with invaluable insight into Hawai'i's past as they describe elements of Hawaiian culture such as historical figures, beliefs, traditions, *wahi pana* (legendary places), *inoa āina* (place names), and *mo'olelo* (legendary accounts, stories, and myths), *mele* and *oli* (songs and chants), and *'ōlelo no'eau* (proverbs and sayings); all of which contribute to an in-depth understanding of the people, their culture, and their relationship to place. One of the hallmarks of traditional legendary accounts is their ability to transcend place and time, all while bringing cohesion to landscapes that have been subjected to artificial divisions and boundaries. Summaries of two accounts with connections to Lālāmilo and the APE are presented below.

Ka'ao Ho'oniua Pu'uwai No Ka-Miki (The Heart Stirring Story of Ka-Miki),

One account that refers explicitly to Lālāmilo is told in the narrative *Ka'ao Ho'oniua Pu'uwai No Ka-Miki* (The Heart Stirring Story of Ka-Miki), which originally appeared in the Hawaiian language newspaper *Ka Hōkū O Hawai'i* between 1914 and 1917. This *mo'olelo* was likely authored during the late 1800s through the early 1900s by noted Hawaiian scholars John Wise and J.W.H.I Kihe. Maly, who translated their story noted:

While "Ka-Miki" is not an ancient account, the authors used a mixture of local stories, tales, and family traditions in association with place names to tie together fragments of site specific history that had been handed down over the generations...While the personification of all the identified

individuals and their associated place names may not be entirely “ancient,” the site documentation within the “story of Ka-Miki” is of both cultural and historical value. (Maly 1999:23-24)

The story tells of two supernatural brothers, Ka-Miki and Maka‘iole, who were skilled ‘ōlohe, and their travels around Hawai‘i Island by way of the ancient trails and paths (*ala loa* and *ala hele*), seeking competition with other ‘ōlohe. The two brothers were born to Pōhaku-o-Kāne (male) and Kapa‘ihilani (female), who were the *ali‘i* of the lands of Kohanaiki and Kaloko, North Kona. Upon the mysterious and premature birth of Ka-miki, he was placed in the cave of Pōnahanaha and given up for death. He was eventually saved and raised by his ancestress, Ka-uluhe-nui-hihi-kolo-i-uka, a manifestation of the goddess Haumea, at Kalama‘ula, an area located on Hualālai. Ka-miki was later joined by his elder brother Maka‘iole where their ancestress Ka-uluhe-nui trained her grandsons into ‘ōlohe, or experts skilled in fighting, wrestling, debating, riddle solving, and running, and taught them how to use their supernatural powers. Portions of the story that explicitly refer to Lālāmilo, the surrounding lands, and their natural features including *pu‘u* (hills) and the coastline are discussed below.

As previously noted, the Ka-Miki story states that the land of Lālāmilo was named in honor of the chief by the same name. Lālāmilo’s grandfather was Kanakanaka, an expert ‘*ahi* fisherman and his grandmother was Piliamo‘o, a powerful priestess and ‘ōlohe. To this pair was born Nē‘ula, a fishing goddess who later married Pu‘u-hīna‘i, chief of the uplands. From this union was born Lālāmilo. Maly continues thusly:

Kanakanaka was an expert *lawai‘a hī-‘ahi* (deep sea tuna lure fisherman), and his sister was the windgoddess Waikōloa. Lālāmilo also gained fame as an expert ‘ōlohe and fisherman. Through his wife Puakō, Lālāmilo came to possess the supernatural *leho* (cowrie octopus lure) which had been an ‘*ōnohi* (cherished) possession of Ha‘alua, a goddess with an octopus form...How this octopus lure came to rest on the reefs fronting this land remains a mystery. (Maly 1999:27)

The *leho* was so powerful that if it was only shown to the *he‘e* (octopus), they would climb upon the canoe and be caught. Lālāmilo carefully guarded this lure and even slept with it. When Lālāmilo did leave the lure, he stored it in the *hōkeo aho hī-‘ahi* (tuna lure and *olonā* line storage gourd) of his grandfather Kanakanaka, and this was hidden, tied to the ridge pole of his house. (Maly 1999:27)

The story of how Lālāmilo came into possession of this magical lure is further described. The day after Lālāmilo wed Puakō, the young maiden from Puna who had an insatiable appetite for *he‘e* (octopus), she traveled to the shore at Waimā to gather fish and seaweeds. The tide was low, and she walked about the reef flats where she came upon a large *he‘e* (octopus) spread about the reef. She speared it and struggled to carry it ashore. Nē‘ula, her mother-in-law saw her carrying the enormous *he‘e* and asked who had given it to her, to which Puakō replied that she had indeed caught the large *he‘e*. With a sense of suspicion, Nē‘ula replied that as a native of this place, she had never seen such an octopus in this area. As the two women were talking, Lālāmilo approached them and saw Puakō holding a large octopus. Assuming that another man had given the octopus to his wife, Lālāmilo asked where she got the octopus from, and she proceeded to relate the events to him. Accusing his wife of lying, Lālāmilo struck Puakō with a hard blow causing her skin to darken. Nē‘ula interjected and suggested that the couple go look about the reef to see for themselves the place where Puakō had retrieved the large *he‘e*.

As Lālāmilo walked intently about the reef, he investigated the site where Puakō had found the massive *he‘e*, to which he discovered a small hole with something red hidden within. Peering into the hole, he saw a beautiful *leho* (cowrie) tucked within, which had attracted the *he‘e*. Without hesitation, Lālāmilo broke the reef and retrieved the *leho* and it is said that after he had taken this *leho*, no more *he‘e* appeared on the reef flats of this area. Lālāmilo took the *leho* home, cleaned it, and prepared himself a lure, which he kept a close watch over. He kept the lure in a container and when he went out to the *he‘e* fishing grounds he would retrieve the lure from the container and hold it in his hand. Without delay, *he‘e* would climb into his canoe and within a short time, he would be able to retrieve several hundred with little effort. Lālāmilo, however, noticed that when his lure was covered in the container, the *he‘e* stopped climbing into the canoe. Amazed at his catch, Lālāmilo showed his wife Puakō and mother Nē‘ula, to which the latter recommended that he take the lure and an offering of *he‘e* to Piliamo‘o, his grandmother. When Piliamo‘o had seen what Lālāmilo had brought she explained to her grandson:

...that this was no ordinary cowrie lure, but a god, the ‘*ōnohi* (favorite or cherished one) of Ha‘alua the mysterious supernatural octopus being of the ocean depths. Ha‘alua and her family came from Kāne-hūnā-moku (The hidden land of Kāne) and settled at Makaīwa in the land of Kapa‘a, Kaua‘i. Ha‘alua was the wife of the wind and ocean god Halulu-ko‘ako‘a, and grandmother of ‘Iwa-nui-kīlou-moku (Great ‘Iwa the island catcher). (Maly 1999:30)

Piliamo‘o consecrated the *leho* and the *he‘e*, which it attracted and instructed Lālāmilo to always bring the first *he‘e* that he caught to her as an offering. Having learned that her grandson had this magical lure, Piliamo‘o instructed

Lālāmilo to extinguish anyone who inquired about the lure. Because of its mystical powers, rumors about the cowrie lure quickly spread throughout Hawai‘i and soon caught the ear of Pili-a-Ka‘aiea, the chief of Kona, who had a great love for octopus fishing. Pili-a-Ka‘aiea sent messengers to inquire about the lure and each was killed by Lālāmilo and Piliamo‘o. While engaged in a contest at Hinakahua, a playing field in Puapua‘a, North Kona, the young and adept Ka-Miki agreed to fetch the lure for Pili-a-Ka‘aiea with the hopes of becoming the foremost favorite of the Kona chief. One day, Lālāmilo decided to visit his father Pu‘u-hīna‘i, his sister Pu‘u-iwa‘iwa, and his grand-aunt Waikōloa, who was the guardian of Pu‘u-iwa‘iwa.

Lālāmilo arose and told his wife Puakō, and his mother Nē‘ula that he was going to the uplands to visit his father, sister, and the people who worked the upland plantations. Lālāmilo desired to eat the sugar cane and bananas, and drink the ‘awa which grew on the hill of Po‘opo‘o. Po‘opo‘o was also the name of a seer (*makāula*) who saw to the continued peaceful dwelling of the people. Lālāmilo placed the lure in Kanakanaka’s gourd and secured it near the ridge pole of his house. Lālāmilo then asked Puakō and Nē‘ula to go and look after the gourd in which the ‘ōnohi (eyeball or cherished possession) of Ha‘alua was kept. (Maly 1999:38)

Lālāmilo left his home and headed for the settlements and agricultural lands of Pu‘u-hīna‘i, however, as he got closer to his intended destination, his thoughts became consumed by his precious lure. Unable to curb his thoughts, Lālāmilo returned to the coast without paying a visit to his father and sister. In the meantime, while Lālāmilo was on his journey to the uplands, the adept Ka-Miki traveled to Lālāmilo’s home and met with a man from the area, Niheu. Ka-Miki inquired about the whereabouts of Lālāmilo only to find that he was not at home. Ka-Miki gazed into the home of Lālāmilo and confirmed that it was unoccupied, however, a gourd container caught his eye and Ka-Miki proceeded to fetch the container tucked away in the rafters of the house. Without incident, Ka-Miki lowered the gourd and departed with the magical lure.

Because of his premonition, Lālāmilo returned home to find that his prized *leho* had been stolen. Lālāmilo then went to visit his grandmother and upon seeing that her grandson had arrived empty-handed, she paid him no attention. The saddened Lālāmilo then called out in chant to his grandmother to inform her of the stolen lure. After hearing the cries of her grandson, Piliamo‘o commanded that Lālāmilo retrieve a white rooster, ‘awa from Po‘opo‘o; an ‘āhuluhulu fish; and a red *malo* (loincloth) before the setting of the sun. Lālāmilo quickly retrieved all of the prescribed items and returned to his grandmother’s home which overlooked the shore of Kauna‘oa.

Pili-a-mo‘o told Lālāmilo to release the pig and chicken, and both of them entered the canoe which Pili-a-mo‘o had prepared as the path on which Lālāmilo would travel to Kaua‘i-o-Kamāwaelualani, where he could find ‘Iwa at Makaīwa, Kapa‘a. (Maly 1999:31-32)

Pili-a-mo‘o called to Lālāmilo saying, “The gods have approved your offerings, and here is your path (canoe) to present the offerings to ‘Iwa, the mysterious cascal of the land which snares the sun, ‘Iwa the sacred ward of Halulu-ko‘ako‘a.” With the offerings set in the canoe, and the sail raised, Pili-a-mo‘o then prepared, an ‘awa ceremony.

The pig was at the mast, the ‘awa and fish were set on the platform, the rooster sat on the outrigger end, and the *malo* was placed at the stern of the canoe. After Pili-a-mo‘o and Lālāmilo drank ‘awa they slept and when half the night passed the rooster crowed. Pili-a-mo‘o arose and went out of the house where she saw the navigator’s star high above. Pili-a-mo‘o then called to Lālāmilo, :”Arise great shark of the sea, o offspring of Hulihia-ka-lani, o flippers of the turtle Kamilo-holu-o-Waiākea. Awaken for the light of the star Hīki‘i-maka-o-Unulau, the *Kualau* (shower bearing wind) blows and the traveler will touch Kaua‘i.” Lālāmilo arose, entered the canoe and prepared to sail to Kaua‘i. [August 2, 1917]. (Maly 1999:32)

Piliamo‘o then gave specific instructions to her grandson on how to find and how to use the various items to solicit the help of ‘Iwa, the rascal lad of Kaua‘i. Heeding the instruction of Piliamo‘o, Lālāmilo sailed to Kaua‘i and just as his grandmother had described, Lālāmilo found the young ‘Iwa. After an exchange, ‘Iwa consented to Lālāmilo’s request and the two men set sail for Kohala, passing along the north side of the Hawaiian Islands, before turning south along the Kohala coast and sailing to Pālau‘eka in Hōlualoa, Kona. Here they met with Ka‘aha‘aha and Kapakapaka, the two fishermen for the chief Pili-a-Ka‘aiea. After a brief exchange of words, ‘Iwa asked the fishermen “...what fish the chief was after today, and Kapakapaka said *he‘e*” (Maly 1999:34). Having learned of this, ‘Iwa set in motion a plan to retrieve the prized cowrie lure of Lālāmilo and described the nature of retrieving the largest octopus that dwelled in the deep sea to the two fishermen. While Kapakapaka did not believe ‘Iwa, Ka‘aha‘aha was more than willing to investigate the claims made by ‘Iwa.

Together, the four men sailed in the fishing canoe into the deep sea, passing the *‘ōpeli*, and *kāhala* fishing grounds. ‘Iwa took his prized cowrie lure, *Mulali-nui-makakai*, and tossed it overboard and called out in chant to his grandmother, *Ha‘alaea*, asking for her assistance. As ‘Iwa closed his chant, he felt a tug on his lure line. He quickly pulled the fishing line up and a large *he‘e* slipped into the canoe. Amazed at the sight of the large *he‘e*, ‘Iwa proceeded to kill it then turned to the two fishermen and told them this is not the biggest octopus. He again cast his lure into the deep sea but this time, the lure held fast in the ocean, as though it was stuck. At this time, the chief *Pili-a-Ka‘aiea* drew near the men in his large double-hauled canoe.

‘Iwa suggested that *Kapakapaka mā* asked *Pili* to use his lure at this site, so he could secure the largest octopus. *Pili*’s lure was set into the water and ‘Iwa called once again to *Ha‘alaea*...

A large *he‘e* rose and embraced *Pili*’s canoe, this *he‘e* was killed and *Pili* set the lure into the ocean again. This time the goddess *Ha‘alaea* rose in her octopus form and held tight to the canoe and lure. ‘Iwa dove into the ocean and swam along *Ha‘alaea*’s tentacles, he found the lure and secured it in the folds of his *malo*. ‘Iwa then tied the chiefs’ line to a coral outcropping and returned to the surface where he joined *Lālāmilo*. *Ha‘alaea* let go of *Pili*’s canoe, and ‘Iwa told *Lālāmilo* to paddle the canoe towards *Maui*. In a short time, they arrived along the shore of *Waimea* (also called *Kauna‘oa*), where they were greeted by *Pili-a-mo‘o*. (Maly 1999:35)

Pleased with the outcome of their journey, ‘Iwa, *Lālāmilo*, and *Piliamo‘o* feasted on food and *‘awa* and ‘Iwa returned to his home on *Kaua‘i*. As this portion of the story concludes, it is said that *Lālāmilo* divided his lure with his brother-in-law *Puala‘a* who arrived from the *Puna* District. It is said that because the divided lure resembled baked taro, the lure came to be known as *Kalo-kunu* (broiled taro). This is how *Lālāmilo* reclaimed his prized lure.

The Epic Tale of Hi‘iakaikapoliopole

The ancient saga details *Pele*’s migration to *Kīlauea* and quest for her lover, *Lohi‘auipo*, then details the travels of her younger sister, *Hi‘iakaikapoliopole*, to find him. The *mo‘olelo* was published daily in the Hawaiian language newspaper, *Ka Na‘i Aupuni*, which ran from 1905 to 1906 and was orated by *Ho‘oulumāhiehe*. A portion of the story discusses two places within the *Waimea* region: *Mahiki*, a mystical forest in the area; and *Wai‘aka*, where the forest of *Mahiki* seems to be located. *Mahiki* was likely located north of the current APE.

Hi‘iaka and her traveling companions stopped in the forest known as *Mahiki* located in the *Waimea* region, which was also the residence of *Mahiki*, a male demigod who had extraordinary powers and great strength (*Ho‘oulumāhiehe* 2006:107). When *Hi‘iaka* saw the being, she knew he was ready to battle her, and she had no desire to fight *Mahiki*, but he was determined to defeat her. *Hi‘iaka* said to *Wahine‘ōma‘o*, “Get behind me. Wherever I move, you move with me. I shall fight in my womanly fashion against the shameless one. He, the male, may inflict injury upon us, but you and I, the women, shall inflict such injury that he will end up laid out like the fishes of *Hīlia* that lie still in the water in easy reach” (*Ho‘oulumāhiehe* 2006:107).

As *Mahiki* darkened the forest and commanded a fierce rain upon the two women, *Hi‘iaka* asked her companion to “make your body forms into a shelter above us, so we are not blinded by the eye-piercing rain of *Mahiki* Forest” (*Ho‘oulumāhiehe* 2006:108). As *pala‘ā* (lace fern; *Sphenomeris chinensis* syn. *chusana*) and *‘ama‘u* (*Sadleria*) ferns sheltered the women as the icy *Kīpu‘upu‘u* rain pelted down. *Mahiki* was sure that the conditions he employed would affect the women advancing through the forest, to his dismay, that was not the case.

Mahiki furious with *Hi‘iaka* unleashed all of his plant forms to imprison her and her companions. As various plants began to coil around them, *Hi‘iaka* struck a blow and all foliage turned into ash instantly (ibid.). Still furious but now tinged with fear and worry, *Mahiki* stated, “And so it is. You may have escaped death from my plant forms, but you will never escape the throngs and legions of spirits here in *Mahiki*” (*Ho‘oulumāhiehe* 2006:109). *Mahiki* began to summon the spirits of the forest and area. *Wahine‘ōma‘o* felt the rush of the wind followed by the voices calling out the group and surrounding them. Suddenly *Mahiki* and his band of spirits pounced on *Hi‘iaka* and her cohort attacking them from all sides until she struck her “lightning skirt” causing a frenzy with the spirits who began to shriek and cry. As the spirits ceased and the chaos cleared, *Mahiki* found *Hi‘iaka* and her friends unfazed. *Ho‘oulumāhiehe* includes the following lyrics:

Mahiki is garlanded with rain and wind
The buffeting gusts of the *Kipu‘upu‘u* strut like billows
Waves adorned by *Kawelowelo*
Appreciated by *Kawiliwahine*, there
There we two shared the chilling cold

Enduring the Kīpu‘upu‘u rain
 Along with my fellow flotsam in the storm
 We warmed ourselves against the cold and wind
 A familiar wind from Waihaka
 Ornamenting the blossom of the ko‘oko‘olau
 The forest of Wai‘aka is radiant in its verdure, ah, there. (Ho‘oulumāhie 2006:109)

Later in the story, Wai‘aka is the setting of a fight between ‘Āinakō, the strongest fighter of Waimea, and Kauakahiapaoa, the fighting champion of Kaua‘i. When ‘Āinakō heard of his future opponent, he uttered this taunt:

This is Waimea
 Of the pummeling Kīpu‘upu‘u rain
 With ‘Āinako’s fiery fists
 Wai‘ale‘ale will be humbled. (Ho‘oulumāhie 2006:375)

Once the fight was set, the chiefess of Waimea suggested to Kauakahiapaoa that he should go to the men’s eating house. Refusing the invitation he stated, “I shall wait to eat until Waimea beholds the man-smiting moss of Manu‘akepa, and you, O Chiefess, see how truly fine Kaua‘i can be, with Wai‘ale‘ale’s peak breaking through on high, piercing the storm clouds” (Ho‘oulumāhie 2006:375).

As Kauakahiapaoa made his way to the wrestling grounds at Wai‘aka, the locals’ eyes were drawn to his features and physique, and they did not take notice of their own champion, ‘Āinakō. The two men observed each other and hurled boasts at each other until ‘Āinakō threw a punch so violent that a blast of air burned Kauakahiapaoa’s eyes. But ‘Āinako did not land his punch. Instead, Kauakahiapaoa struck the giant man’s hand sending him spinning in the air. As ‘Āinako lay and groaned in pain, Kauakahiapaoa lifted him and threw him *makai* of Wai‘aka. Where ‘Āinakō’s body fell is now called Pu‘u‘āinakō—the reason that place is named today (Ho‘oulumāhie 2006:377). Pu‘u‘āinakō is located where the three *ahupua‘a* of Kawaihae 2nd, ‘Ōuli, and Pu‘uwaiwai meet about 5 miles (8.2kilometers) west of the current APE.

Brief Account of Several *Heiau* in Waimea with Reference to Hōkū‘ula

In Emma Doyle’s (1953) book *Makua Laiana The Story of Lorenzo Lyons*, she provides a brief account describing some *heiau*, including their uses and origins that were located along the Kohala Mountains slopes in the area east of the current APE. Doyle did not know the name of these *heiau*, but includes them as the setting of a story that tells how the Akua Makuakua met the beautiful Wao and how they settled on Hōkū‘ula after their marriage:

Vivid were the rainbows of the Lanikepu hills, and red the rain, uakoko, that fell upon their slopes, for in the forest that was then their background was a *heiau*—a women’s *heiau*, the only one; and by these lovely tinted tokens the gods honored it, and signified their approval.

Founded, dedicated and consecrated by the very high chiefess Hoapilihae, it was attended exclusively by young virgins. There, in the sanctity of the cool highland forest, they performed the sacred ceremonies, learning also the science of healing so that they might eventually minister to others. And the names of the five rains of the *heiau* were given to the five children of Hoapilihae.

On a nearby ridge stood another *heiau*, builded there by the great Akua Makuakua who had come from far off Kahiki. He it was who, flying to a hillside to watch the rainbows, found there the beautiful goddess Wao, clad only in her long, silky hair. Love came swiftly and was mutual, and after glorious wedding festivities the couple went to live at Hokuula, the hill of the red planet.

But to bear each of her children Wao returned to the Waimea hills, thereby made sacred. On these occasions a tabu was proclaimed, the forbidden ground extending down across the plains to whatever place a stone happened to stop rolling when started above by her servants. Stones they were themselves, these retainers, all through the night hours, for so Wao transformed them until daylight, when they became human again. (Doyle 1953:44)

Hoapilihae was a wife of Keawenuia‘umi, the grandson of the *ali‘i nui* Līloa, and she herself was the daughter of Līloa’s *kahuna* (priest), Paemolemole (Clark and Kirch 1983). The earliest recorded chiefs of Waimea descended from the Ulu-Hema genealogical line that led to Līloa, whom Clark and Kirch (1983:23) describe as “the founder of the island dynasty.”

Chiefly Rule in South Kohala

During the late 16th century, Kohala and Kona were ruled together by an *ali'i* named Kūāiwa (Cordy 2000). The other four *moku* on Hawai'i Island were ruled by an independent chief: Kulukulu'ā in Hilo, Hua'ā in Puna, 'Īmaikalani in Ka'ū, and it is believed that Līloa ruled over Hāmākua (Cordy 2000). Kūāiwa appointed his son 'Ehuinukaimalino (also referred to as 'Ehu) to rule over Kona and a junior son, Hukulani, to rule Kohala. Kūāiwa had two other sons from a previous wife, Kahoukapu and Manea, and all of his sons became the heads of Hawai'i's aristocratic families (Fornander 1880). It was Līloa's son, 'Umi-a-līloa, however, who would come to rule the entire island.

In Kona, the 'Ehu line of chiefs grew to be somewhat powerful, but 'Ehu was ranked second to Līloa, the ruler of Hāmākua (Kelly 1983). According to Kamakau (1992), 'Ehu placed his son, Laea-nui-kau-manamana in Līloa's royal court and for some time they both resided in Waipi'o in the Hāmākua District, where Laea-nui assisted with the construction of the sacred stone slab named *Ka paepae kapu o Līloa*. When Līloa died, his eldest son Hākau was given the kingdom. Hākau mistreated his people, and Līloa's second son, 'Umi-a-līloa, seized the kingdom from his brother. The chiefs of Hilo, Puna, Ka'ū, and Kona, however, withheld their allegiance to 'Umi. One by one, 'Umi and his army conquered these *moku*. Kamakau (1992) notes that when 'Umi marched on Kona and Kohala, 'Ehu was of old age, and his lands were easily seized. 'Umi eventually moved his royal court to Kailua in Kona, and took the daughter of 'Ehu, Moku-a-hua-lei-akea as his wife. She bore 'Umi a daughter named 'Akahi-'ili-kapu.

'Umi's reign is one that is often celebrated as it marked a time of peace and increased productivity and a move towards craft specialization. According to Kamakau:

There was no kingdom like his. He took care of the old men, the old women, the fatherless, and the common people. Murder and thievery were prohibited. He was a religious chief, just in his rule...

During 'Umi-a-Līloa's reign, he selected workers and set them in various positions in the kingdom. He separated those of the chiefly class (*papa ali'i*), of the priestly class, of the readers of omens (*papa kilo*), those skilled in the affairs of the land (*po'e akamai o ka 'aina*), farmers, fishermen, canoe builders, warriors, and other skilled artisan (*po'e pale 'ike*) in the work they were best suited for; and each one applied himself to his own task. . . (1992:19)

Kamakau (1992) adds that 'Umi was a skilled fisherman, who often fished for *aku* (his favorite fish), *'ahi*, and *kālā* from beaches of Kalāhuipua'a to Makaula in South Kohala.

'Umi's reign lasted until around A.D. 1620. It has been suggested that the unification of the island resulted in a partial abandonment of portions of leeward Hawai'i for more favorable agricultural areas (Barrera 1971; Schilt and Sinoto 1980). Upon his death, 'Umi was succeeded by his son, Keawenui a 'Umi, who ruled over Kohala, Kona, and Ka'ū, and then his grandson, Lonoikamakahiki (Cordy 2000; Kamakau 1992). During this time, wars occurred regularly between intra-island and inter-island polities, and this period was one of continual conquest by the reigning *ali'i*. By the late 17th century, large areas of Hawai'i Island were controlled by a few powerful *ali'i 'ai moku* (district chiefs). There is island-wide evidence to suggest that growing conflicts between independent chiefdoms were resolved through warfare, culminating in a unified political structure at the district level.

The Reign of Lonoikamakahiki (ca. A.D. 1640) to Kalani'ōpu'u (late 1700s)

Lonoikamakahiki, the son of Keawenui a 'Umi, and the grandson of celebrated *ali'i nui* 'Umi a Līloa, was recognized as an accomplished and dexterous warrior. During his reign, a major battle was fought between Lonoikamakahiki and his insurgent older brother, Kanaloakua'ana. According to Fornander (1880) Kanaloakua'ana and his rebel forces fought and pursued each other across Kohala, including the Waimea Plain. The battle began at:

... Anaehoomalu ['Anaeho'omalū], near the boundaries of Kohala and Kona. The rebel chiefs were encamped seaward of this along the shore. The next day Lono marched down and met the rebels at a place called Wailea, not far from Wainanalii, where in those days a watercourse appears to have been flowing. Lono won the battle, and the rebel chiefs fled northward with their forces. At Kaunaoa [Kauna'oa], between Puako and Kawaihae, they made another stand, but were again routed by Lono, and retreated to Nakikiaianihau, where they fell in with reinforcements from Kohala and Hamakua. Two other engagements were fought at Puupa [Pu'upā; on the plain southwest of the APE] and Puukohola [Pu'ukoholā], near the Heiau of that name, in both of which Lono was victorious. His brother Kanaloakapulehu was taken prisoner, slain, and sacrificed at the Heiau, but Kanaloakuakawaiea escaped with the scattered remnant of the rebel forces. The rebels now fled into Kohala, and were hotly pursued by Lonoikamakahiki. Several skirmishes were fought during the pursuit; at Kaiopae, where Kanaloakuakawaiea was slain; at Kaiopihi, and finally at Puumanee [Pu'umane'o], on the high lands above Pololu [Pololū], where the last remnant of the rebel force

was conquered and slain, and the island returned to its allegiance to Lono and Kaikilani. (Fornander 1880:120-121)

Later in Lonoikamakahiki's reign, Kamalālāwalu, the *ali'i nui* of Maui invaded the island and led a series of attacks in South Kohala that culminated in the battle at Puoaoaka (Pu'u 'Owā'owaka) just northeast of the APE (Fornander 1916-1917). The fighting began at Wailea, moved north to Kauna'oa, and then to Puakō (the coastal section of Lālāmilo), where Lonoikamakahiki's brother, the high chief Kanaloakua'ana, was brutally tortured and slaughtered. Kamalālāwalu and his army then proceeded to the *pu'u* named Hōkū'ula just east of the current APE, to prepare for the next battle.

The battle at Pu'u 'Owā'owaka is described in detail by Fornander (1916-1917, 1959) and (Kamakau 1992). Once he reached Waimea, Kamalālāwalu positioned himself on Hōkū'ula, the hill that he was told would serve as a refuge for him and his men (Fornander 1959). He had been advised to meet Lonoikamakahiki's forces on the Waimea Plain by two members of his camp named Kauhapaewa and Kihapaewa. Unbeknownst to Kanaloakua'ana, these two men were secretly working for Lonoikamakahiki. The Maui chief assumed, having positioned his army on the Waimea Plain and stationed himself on Hōkū'ula to direct his forces, an easy victory, however:

Kamalalawalu, upon arrival thereon, found on reconnoitering that there were neither stones nor trees, but only dirt [on Hōkū'ula]. While they were engaged in a conversation with Kumaikēau together with Kumakaia, at that time messengers were sent to summon Lonoikamakahiki and Pupuakea. At Kealakekua, in Kona, was the place where Lonoikamakahiki lived. When the messenger appeared before him, he said to Lonoikamakahiki: "Kamalalawalu and Makakuikalani have come to give battle to you both... When Lonoikamakahiki heard these things, he questioned the messenger: "Where is the battle to take place?" The messenger replied: "There, at Waimea, on top of that hill, Hokuula, where Kamalalawalu and all Maui are stationed." (Fornander 1959:188)

Upon awakening the next morning, however, Kamalālāwalu was stunned to discover that a great constellation of men had amassed near the coast. What seemed like thousands of warriors from all of Hawai'i Island had gathered as far as the eye could see and were prepared to savagely wage war upon the intruder Maui chief. According to Fornander (1916-1917:344), "the Kau and Puna warriors were stationed from Holoholoku to Waikoloa. Those of Hilo and Hamakua were located from Mahiki to Puukanikanihia, while those of Kohala guarded from Momoualua to Waihaka." Realizing that he was vastly outnumbered, Kamalālāwalu attempted to reconcile differences but was denied, as the Hawai'i chief was enraged at how his ally Kanaloakua'ana had been slain. Lonoikamakahiki held the advantage with superior numbers, and knowledge of the battleground. The battle commenced:

After Kama-lala-walu's warriors reached the grassy plain, they looked seaward on the left and beheld the men of Kona advancing toward them. The lava bed of Kaniku and all the land up to Hu'ehu'e was covered with the men of Kona. Those of Kau and Puna were coming down from Mauna Kea, and those of Waimea and Kohala were on the level plain of Waimea. The men covered the whole of the grassy plain of Waimea like locusts. Kama-lala-walu with his warriors dared to fight. The battle of Puoaoaka was outside of the grassy plain of Waimea, but the men of Hawaii were afraid of being taken captive by Kama, so they led to the waterless plain lest Maui's warriors find water and hard, waterworn pebbles. The men of Hawaii feared that the Maui warriors would find water to drink and become stronger for the slinging of stones that would fall like raindrops from the sky. The stones would fall about with a force like lightening, breaking the bones into pieces and causing sudden death as if by bullets.

Maui almost won in the first battle because of Hawaii's lack of a strong champion. Maka-ku-i-ka-lani [representing Maui] was first on the field and defied any man on Hawaii to match strength with him. Maka-ku-i-ka-lani tore Hawaii's champion apart. When Puapua-kea arrived later by way of Mauna Kea, those of Hawaii rejoiced at having their champion. Maka-ku-i-ka-lani and Puapua-kea matched their strength in club fighting on the battle site before the two sides plunged into the fight. (Kamakau 1992:58-59)

Although well-matched, Puapuakea overpowered Makakiakalani, and the warriors of Maui were put to flight. After three days of fighting, Lonoikamakahiki emerged victorious and Kamalālāwalu and nearly all the invaders, except his son Kauhikama, were executed. Lonoikamakahiki died without an heir, and the next four rulers of Hawai'i were descendants of his older brother (Cordy 2000). Through their reigns, the Ī lineage of Hilo and the Mahi lineage of Kona grew in power. The resulting political friction culminated in the marriage of Keawe (the fourth of these chiefs) and Lonoma'aikanaka of the Ī line.

In about A.D. 1740, following the death of Keawe, Hawai'i was invaded by Alapa'inui, the son of a former Kona war chief of the Mahi lineage, who had been living on Maui since the death of his father (Kamakau 1992). Alapa'inui waged war against the chiefs of Kona and Kohala and was eventually victorious, proclaiming those lands as his own (he also later gained control of the Hilo and Ka'ū Districts). After gaining control of the Island, Alapa'innui is said to have lived in Waimea for a time:

Alapa'i dwelt in Hilo for a year and then went to live in Waipi'o. Shortly after, he and the chiefs moved to Waimea and others went by canoe to Kawaihae. From Waimea, he went to Lanimaomao, where he fell ill. (Kamakau 1992:77)

It was during this time of warfare that Kamehameha was born in the North Kohala District in the *ahupua'a* of Kokoiki, near Mo'okini Heiau (Kamakau 1992). There is some controversy about the year of his birth, but Kamakau (Kamakau 1992:67-68) places the birth event sometime between A.D. 1736 and 1758, and probably nearer to the later date. The birth event is said to have occurred on a stormy night of rain, thunder, and lightning signified the night before by a very bright, ominous star, thought by some to be Halley's Comet (this is also controversial). Kamehameha's ancestral homeland was in Halawa, North Kohala (Williams 1918).

Many of the chiefs who had been deprived of their lands by Alapa'inui battled against Keawe'ōpala, and he was soon defeated in South Kona by Kalani'ōpu'u, who then became the ruler of Hawai'i Island (Kamakau 1992). Kalani'ōpu'u's reign was marked by near-constant warfare as he invaded Maui and defended himself from rebellions by Maui and Hawai'i *ali'i* (Kamakau 1992). In A.D. 1775 Kalani'ōpu'u and his forces from Hāna, Maui, raided and destroyed the neighboring district of Kaupō, and then launched several more raids on Moloka'i, Lāna'i, Kaho'olawe, and parts of West Maui. It was at the battle of Kalaeoka'ilio that Kamehameha, a favorite of Kalani'ōpu'u, was first recognized as a great warrior and given the name of Pai'ea (hard-shelled crab) by the Maui chiefs and warriors (Kamakau 1992). During the battles between Kalani'ōpu'u and Kahekili (1777-1779), Ka'ahumanu and her parents left Maui to live on the island of Hawai'i (Kamakau 1992). Kalani'ōpu'u was fighting on Maui when the British explorer Captain James Cook first arrived in the islands.

The Arrival of Europeans, Missionaries, and the Reign of Kamehameha

The arrival of foreigners in the Hawaiian Islands marked the beginning of drastic changes in Hawai'i's culture and political-economy. Demographic trends during the early part of the nineteenth century indicate population reduction in some areas due to war and disease, yet an increase in others, with relatively little change in material culture. Some of the work of the *maka'āinana* shifted from subsistence agriculture to the production of foods and goods which could be traded with foreign ships. There was a continued trend toward craft and status specialization, intensification of agriculture, *ali'i* controlled aquaculture, the establishment of upland residential sites, and the enhancement of traditional oral history. The Kū cult, *luakini heiau*, and the *kapu* system were at their peaks, although western influences were already altering the cultural fabric of the Islands (Kent 1983; Kirch 1985). Foreigners very quickly introduced the concept of trade for profit, and by the time Kamehameha I had conquered O'ahu, Maui, and Moloka'i, in 1795, Hawai'i saw the beginnings of a market system economy (Kent 1983).

Captain James Cook and his crew onboard the ships the *H.M.S. Resolution* and *Discovery* first arrived in the Hawaiian Islands on January 18, 1778. Ten months later, on a return trip to Hawaiian waters, Kalani'ōpu'u, who was still at war with Kahekili, visited Cook on board the *Resolution* off the East coast of Maui. Kamehameha observed this meeting but chose not to participate (Jarves 1847). Although the expedition did not explore inland to Waimea while sailing up the Kohala coast, Lt. King recorded his observations of that part of the countryside:

Koaara [Kohala] extends from the Westernmost point to the Northern extremity of the island; the whole coast between them forming an extensive bay, called Toe-yah-yah [Kawaihae], which is bounded to the North by two very conspicuous hills. Toward the bottom of this bay there is foul, corally ground, extending upward of a mile from the shore, without which the soundings are regular, with good anchorage, in twenty fathoms. The country, as far as the eye could reach, seemed fruitful and well inhabited, the soil being in appearance of the same kind with the district of Kaoo [Ka'ū]; but no fresh water is to be got here. (King 1784:106)

After the death of Captain Cook and the departure of *H.M.S. Resolution* and *Discovery*, Kalani'ōpu'u moved to Kona, where he surfed and amused himself with the pleasures of dance (Kamakau 1992). While he was living in Kona, famine struck the district and Kalani'ōpu'u ordered that all the cultivated products of that district be seized. He set out on a circuit of the island. While in Kohala, Kalani'ōpu'u proclaimed that his son Kīwala'ō would be his successor, and he gave the guardianship of the war god Kūka'ilimoku to his nephew Kamehameha. However, Kamehameha and a few other chiefs were concerned about their land claims, which Kīwala'ō did not seem to honor (Fornander 1996;

Kamakau 1992). The *heiau* of Moa‘ula was erected in Waipi‘o at this time (ca. A.D. 1781), and after its dedication, Kalani‘ōpu‘u went to Hilo to quell a rebellion by a Puna chief named ‘Imakakolo‘a.

In 1790, John Young and Isaac Davis, sailors on board the ships *Eleanora* and *Fair American*, which were trading in Hawaiian waters, were detained by Kamehameha I and made his advisors. The story of their detention begins when the crew of the *Eleanora* massacred more than 100 natives at Olowalu, on the island of Maui, in retaliation for the theft of a skiff and the murder of a sailor. The *Eleanora* then sailed to Hawai‘i Island, where John Young went ashore and was detained by Kamehameha’s warriors. The other vessel, the *Fair American*, was captured off the Kona coast and its crew was killed except for one member, Isaac Davis. Guns, and a cannon later named “Lopaka,” were recovered from the *Fair American*, which Kamehameha kept as part of his fleet (Kamakau 1992). Kamehameha, with the aid of Young and Davis and their knowledge of the newly acquired foreign arms, then succeeded in conquering all the island kingdoms except Kaua‘i by 1796. It was only in 1810, after two unsuccessful invasion attempts, that Kamehameha received the Kaumuali‘i of Kaua‘i, unifying the Hawaiian Islands under one ruler (Kuykendall and Day 1976).

Soon after the arrival of foreigners, the landscape of Waimea also began to change dramatically. This began with deforestation caused by the harvesting of sandalwood, and then by the introduction of cattle (Rechtman and Prasad 2006). In 1792, Captain George Vancouver, who had sailed with Cook during his 1778-1779 voyages, arrived at Kealahou Bay with a small fleet of British ships, where he met with Kamehameha. Vancouver stayed only a few days on this first visit but returned again in 1793 and 1794 to take on supplies. Vancouver introduced cattle to the Island of Hawai‘i at Kealahou during these latter two visits, gifting seventeen heads of steer to Kamehameha I, who at the request of Vancouver, immediately made the cattle *kapu*, thus preventing them from being killed and allowing their numbers to increase (Barrère 1983; Kamakau 1992; Vancouver 1984). Some of the offspring of these animals escaped the initial attempts to contain them and spread throughout Kohala, Kona, and the saddle region. In agricultural areas, they wrought havoc on crops and were responsible for a flurry of wall building as people tried to keep the feral cattle out of their fields and homes (Barrère 1983; Henke 1929).

Hawai‘i’s culture and the economy continued to change drastically during Kamehameha’s rule as capitalism and industry established a firm foothold in the Islands. The sandalwood (*Santalum ellipticum*) trade, established by Euro-Americans in 1790, became a viable commercial enterprise by 1805 (Oliver 1961) and was flourishing by 1810. Kamehameha, who resided on the Island of O‘ahu at this time, did manage to maintain some control over the trade (Kent 1983; Kuykendall and Day 1976). Upon returning to Kailua-Kona in 1812, Kamehameha ordered men into the mountains of Kona to cut sandalwood and carry it to the coast, paying them in cloth, *tapa* material, food, and fish (Kamakau 1992). This new burden contributed to the breakdown of the traditional subsistence system. Farmers and fishermen were ordered to spend most of their time logging, resulting in food shortages and famine that led to a population decline. Kamakau (1992:204) indicates that “this rush of labor to the mountains brought about a scarcity of cultivated food ... The people were forced to eat herbs and tree ferns, thus the famine [was] called Hi-laulele, Hahapilau, Laulele, Pualele, ‘Ama‘u, or Hapu‘u, from the wild plants resorted to.” Once Kamehameha realized that his people were suffering, he “declared all the sandalwood the property of the government and ordered the people to devote only part of their time to its cutting and return to the cultivation of the land” (Kamakau 1992:202). In the uplands of Kailua, a vast plantation named Kuaheua was established where Kamehameha himself worked as a farmer. Kamehameha enacted the law that anyone who took one taro or one stalk of sugarcane must plant one cutting of the same in its place (Handy et al. 1991). While in Kailua-Kona, Kamehameha resided at Kamakahonu, from where he continued to rule the islands for another nine years. He and his high chiefs participated in foreign trade but also continued to enforce the *kapu* system.

When Kamehameha I died on May 8, 1819, the changes that had been affecting the Hawaiian culture since the arrival of Captain Cook in the Islands began to accelerate (Kamakau 1992). Following the death of a prominent chief, it was customary to remove all of the regular *kapu* that maintained social order and the separation of men and women and elite and commoner. Thus, following Kamehameha’s death, a period of ‘*ai noa* (free eating) was observed, along with the relaxation of other traditional *kapu*. It was for the new ruler and *kahuna* to re-establish *kapu* and restore social order, but at this point in history, traditional customs were altered (Kamakau 1992). Immediately upon the death of Kamehameha I, Liholiho (his son and to be successor) was sent away to Kawaihae to keep him safe from the impurities of Kamakahonu brought about from the death of Kamehameha. After the purification ceremonies, Liholiho returned to Kamakahonu, and rather than re-establish the *kapu*:

Liholiho on this first night of his arrival ate some of the tabu dog meat free only to the chiefesses; he entered the *lauhala* house free only to them; whatever he desired he reached out for; everything was supplied, even those things generally to be found only in a tabu house. The people saw the men drinking rum with the women *kahu* and smoking tobacco, and thought it was to mark the ending of the tabu of a chief. The chiefs saw with satisfaction the ending of the chief’s tabu and the freeing of

the eating tabu. The *kahu* said to the chief, “Make eating free over the whole kingdom from Hawaii to Oahu and let it be extended to Kauai!” and Liholiho consented. Then pork to be eaten free was taken to the country districts and given to commoners, both men and women, and free eating was introduced all over the group. Messengers were sent to Maui, Molokai, Oahu and all the way to Kauai, Ka-umu-ali‘i consented to the free eating and it was accepted on Kauai (Kamakau 1992:225).

When Liholiho, Kamehameha II, ate the *kapu* dog meat, entered the *lauhala* house, and did whatever he desired it was still during a time when he had not reinstituted the ‘*ai kapu* (eating taboo), but others appear to have thought otherwise. Kekuaokalani, caretaker of the war god Kūkā‘ilimoku, was dismayed by his cousin’s (Liholiho) actions and revolted against him, but was ultimately defeated in the battle of Kuamo‘o in the North Kona District (Kamakau 1992). With an indefinite period of free-eating and the lack of the reinstatement of other *kapu* extending from Hawai‘i to Kaua‘i, and the arrival of Christian missionaries shortly thereafter, Hawai‘i’s culture and their spiritual beliefs continued to be transformed. By December of 1819, Liholiho had sent edicts throughout the kingdom renouncing the ancient state religion, ordering the destruction of the *heiau* images, and ordering that the *heiau* structures be destroyed or abandoned and left to deteriorate. He did, however, allow the personal family religion, the ‘*aumakua* worship, to continue (Kamakau 1992; Oliver 1961). With the end of the *kapu* system, changes in the social and economic patterns began to affect the lives of the common people.

In October of 1819, seventeen Protestant missionaries had set sail from Boston to Hawai‘i. They arrived in Kailua-Kona on March 30, 1820, to a society whose spiritual system has just been overturned. Many of the *ali‘i*, who were already exposed to western material culture, welcomed the opportunity to become educated in a western-style and adopted their dress and religion. As missionaries began to introduce Christian concepts and beliefs they also set forth the process of rendering a once purely oral language into written form, and literacy was quickly taken up as a national endeavor (Nogelmeier 2010; Schütz 1994). Soon many *ali‘i* were rewarding these early missionaries with land and positions in the Hawaiian government. During this period, the demands of the *ali‘i* to cut sandalwood overburdened the commoners, who were weakening with the heavy production, exposure, and famine just to fill the coffers of the *ali‘i* who were no longer under any traditional constraints (Kuykendall and Day 1976; Oliver 1961). The lack of control of the sandalwood trade soon led to the first Hawaiian national debt, as promissory notes and levies were initiated by American traders and enforced by American warships (Oliver 1961). The Hawaiian economy was well on its way toward integration into global trade networks as its focus shifted from the sandalwood trade to a short-lived whaling industry, then to the more lucrative but environmentally destructive sugar industry.

Some of the earliest written descriptions of Kohala come from the accounts of the first Protestant Missionaries to visit the island. In 1823, the missionary William Ellis described Waimea as a fertile, well-watered land “capable of sustaining many thousands of inhabitants” (Ellis 1831:399). The population was concentrated in three villages, Keaali, Waikōloa, and Pu‘ukapu, each located where major streams reached the plain. Ellis noted that another missionary, Asa Thurston, had counted 220 houses in the area, and estimated the population at between eleven and twelve hundred. In the time since Kamehameha I’s death, the harvesting of sandalwood had once again been forced upon the *maka‘āinana*. During his travels along the coast of Kohala, Ellis noted that most of the villages were empty as the men of the region had been ordered to the mountains by the King to collect sandalwood. He wrote:

About eleven at night we reached Towaihae [Kawaihae], where we were kindly received by Mr. Young... Before daylight on the 22nd, we were roused by vast multitudes of people passing through the district from Waimea with sandal-wood, which had been cut in the adjacent mountains for Karaimoku, by the people of Waimea, and which the people of Kohala, as far as the north point, had been ordered to bring down to his storehouse on the beach, for the purpose of its being shipped to Oahu. There were between two and three thousand men, carrying each from one to six pieces of sandal-wood, according to their size and weight. It was generally tied on their backs by bands of ti leaves, passed over the shoulders and under the arms, and fastened across their breasts. (Ellis 1831:396-397)

Agricultural Practices of the Lālāmilo-Waimea Area

The wind-swept landscape dotted with rolling and jutting *pu‘u* found in the upper Lālāmilo-Waimea, described in the *mo‘olelo* summarized above, allowed for highly productive agricultural development during the Precontact and early Historic periods. As described by Kirch (1985:215), “Hawaiians were first and foremost cultivators of the land,” and over the generations, they adapted and intensified their agricultural production to levels unseen elsewhere in greater Oceania. Evidence of their adaptive agricultural endeavors is still visible today in Kohala. The uplands of the Waimea-Lālāmilo area, at elevations ranging from roughly 750 and 900 meters (2,460 to 2,950 feet) above sea level, fertile soil and adequate rainfall allowed for the extensive cultivation of sweet potatoes, taro, and other crops (Kirch 1985).

Early archaeological investigations conducted by Barrera and Kelly (1974) identified a dense concentration of sites in the uplands of Lālāmilo. Subsequent studies conducted by Bishop Museum staff (Clark 1981b, 1983) identified remnants of an agricultural field system in the Lālāmilo-Waimea area. These early investigations ultimately concluded, “that the present town of Waimea was at the center of a large and intensively cultivated field system, which was in operation by at least the seventeenth century...” (c.f. Kirch 1985:177).

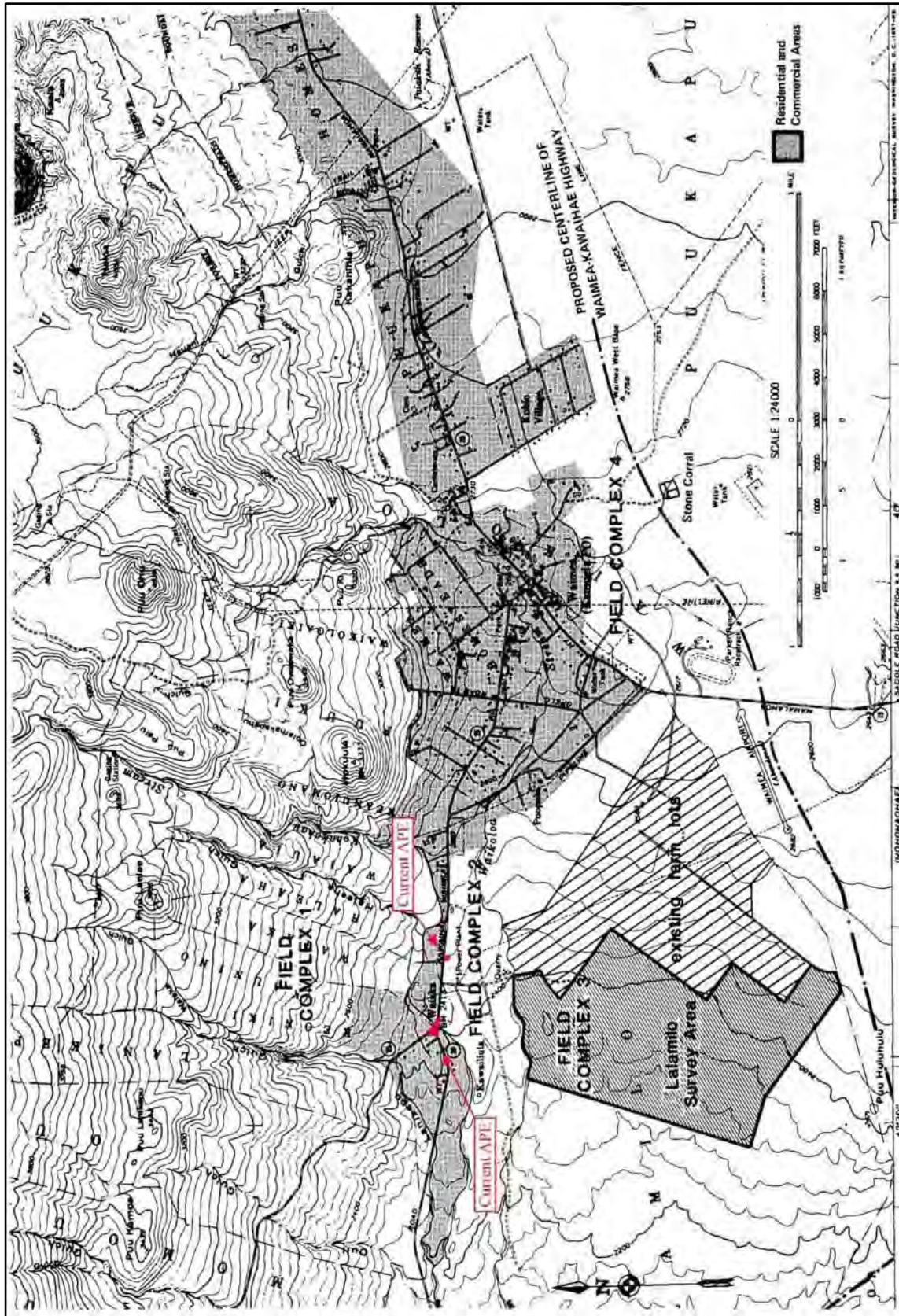
Concerning the Precontact use of the Waimea area, including the APE, Clark (1987) proposed a regional settlement pattern model that includes four elevational delineated environmental zones. The Coastal Zone extends up to about 150 feet elevation and was used for permanent and temporary habitation, coastal resource exploitation, and limited agriculture. The Intermediate Zone extends from the Coastal Zone to about 1,900 feet elevation. This zone was used primarily for seasonal agriculture with the associated short-term occupation, typically situated near intermittent drainages. The Kula Zone extends from the Intermediate Zone to about 2,700 feet elevation (and to 3,200 feet in certain areas). This was the primary agricultural and residential area, with extensive formal fields and clustered residential complexes. The Wilderness Zone extends above the Kula Zone to the mountaintops and was a locus for the collection of wild floral and faunal resources. The current APE, situated at elevations ranging from 732 meters (2,401 feet) to 741 meters (2,431 feet) is Clark’s (1987) Kula Zone.

Ultimately the increased upland population resulted in the creation of what archaeologists have dubbed the Waimea Field System found at elevations ranging from roughly 2,460 to 2,950 feet (750 and 900 meters) above sea level. The Waimea Field System is at least one of two major field agricultural field systems in the Kohala District. Each field system is vastly different in size and has its own distinguishing feature composition, however, unlike the expansive Kohala Field System, found along the leeward slopes of the Kohala Mountains, that relied almost exclusively on rainfall, the Waimea Agricultural System was also supported by small irrigation channels (‘*auwai*’) that may have intermittently carried water across the sloping landscape (Kirch 1985). Subsequent archaeological studies conducted on the Waimea Agricultural System throughout the 1990s and early 2000s yielded additional information about the agricultural system. Burtchard and Tomonari-Tuggles’ (2005:iii) study of the field system concluded that:

...short-term, temporary, agriculturally supported residence began on the upper Waimea Plain, possibly as early as the AD 1400s. The agricultural system, however, appears to have been substantially smaller than previously believed, and was limited to non-irrigated cultivation. Elongated earthen ridges are most plausibly remnant dunes that formed at the base of floral windbreaks sheltering fields. Limited irrigation may have begun in the late AD 1700s in support of military undertakings by Kamehameha at Kawaihae on the leeward Hawai‘i coast. Most of the extensive irrigation system on the upper Waimea Plain was developed in the 19th century in association with commercial agriculture. In more recent times, the project area was used for the cultivation of corn and hay, a World War II military camp, and pasture for livestock.

At these elevations in Clark’s (1987) Kula Zone, more fertile soil and increased rainfall allowed for the extensive cultivation of sweet potatoes and irrigated taro (Kirch 1985). Clark and Kirch (1983) identified four field complexes in the Waimea area (Figure 13), each containing an extensive network of fields fed by a system of irrigation ditches that drew water from the Waikōloa and Kahakohau streams. The APE is situated near Field Complex 2. Kirch (1985:231) surmises that the fields were perhaps intermittently irrigated with “simple furrows” that were used to “direct water across the sloping field surfaces.” Recent modelling of water flow in a portion of Field Complex 3 (located west of the current APE) by McIvor and Ladefoged (2018) suggests that intermittent irrigation there may have been used to grow a variety of crops. In addition to staple crops such as ‘*uala*’ (sweet potatoes) and ‘*kalo*’ (taro), crops cultivated within the upland field system included ‘*wauke*’, ‘*māmaki*’, plantains, ‘*mai’a*’ (bananas), ‘*kō*’ (sugarcane), ‘*niu*’ (coconuts), and ‘*hala*’ (pandanus) (Haun et al. 2003). According to Barrère (1983:27), “the cultivating places at Waimea were first expanded to supply the chiefs’ needs while sojourned there and at Kawaihae”.

In addition to sweet potatoes and taro, crops cultivated within the upland field system included ‘*wauke*’, ‘*māmaki*’, plantains, bananas, sugarcane, coconuts, and ‘*hala*’ (Haun et al. 2003). While most of the taro and sweet potato fields of South Kohala were located in the rainier uplands near the present-day town of Waimea (where there was also a sizeable permanent population). Handy et al. (1991:532) relate that “the coastal section of Waimea, now called South Kohala, has a number of small bays with sandy shores where fishermen used to live, and where they probably cultivated potatoes in small patches . . . Puako near the Kona border was a sizable fishing village at one time where there were undoubtedly many sweet potato patches.” The name of the village of Puakō, which literally translates as “sugarcane blossom” (Pukui et al. 1974:191), suggests that sugarcane was grown there. In fact, it was the A.D. 1880 discovery of wild sugarcane growing near the village of Puakō that would eventually lead to the establishment of the short-lived Puakō Sugar Plantation (Puakō Historical Society 2000).



Sugarcane (*Saccharum officinarum*) was a Polynesian introduction that served a variety of important uses. The *kō kea*, or white cane, was the most common and was usually planted near Hawaiian homes for medicinal purposes, and to counteract bad tastes (Handy et al. 1991). Sugarcane was a snack, condiment, famine food; fed to nursing babies, and helped to strengthen children's teeth by chewing on it (Handy et al. 1991). It was used to thatch houses when *pili* grass (*Heteropogon contortus*) or *lau hala* (*Pandanus odortissimus*) were not abundant (Malo 1903). Pukui (1983) records two proverbs that liken the toughness of sugarcane to the warriors of Kohala, one of which derives from the battle of Pu'u Owaokoa:

I 'ike 'ia no o Kohala i ka pae kō, a o ka pae kō ia kole ai ka waha.

One can recognize Kohala by her rows of sugar cane which can make the mouth raw when chewed. When one wanted to fight a Kohala warrior, he would have to be a very good warrior to succeed. Kohala men were vigorous, brave, and strong. (Pukui 1983:127)

He pā 'ā kō kea no Kohala, e kole ai ka waha ke 'ai.

A resistant white sugar cane of Kohala that injures the mouth when eaten.

A person that one does not tamper with. This was the retort of Pupukea, a Hawai'i chief, when the Maui chief Makakūikalani made fun of his small stature. Later used in praise of the warriors of Kohala, who were known for valor. (Pukui 1983:95)

Early European explorers who visited the Waimea area also described extensive agricultural fields, plantations, and a sizable population. In 1793, after landing at Kawaihae, Scottish surgeon and botanist Archibald Menzies, accompanied by two native guides traveled inland towards Waimea and recorded the following observation:

A little higher up, however, than I had time to penetrate. I saw in the verge of the woods several fine plantations, and my guides took great pains to inform me that the inland country was very fertile and numerously inhabited. Indeed, I could readily believe the truth of these assertions, from the number of people I met loaded with the produce of their plantations and bringing it down to the water side to market, for the consumption was now great, not only by the ship, but by the concourse of people which curiosity brought into the vicinity of the bay. (Menzies 1920:56)

Nearly thirty years after Menzies' visit, the early missionary, William Ellis penned his version of the journey taken by fellow missionaries Messrs. Bishop and Goodrich, both of whom passed through Waimea on their way to Kawaihae. Ellis reported that after leaving:

Kapulena, and, taking an inland direction, [Bishop and Goodrich] passed over a pleasant country, gently undulated with hill and dale. The soil was fertile, the vegetation flourishing, and there was considerable cultivation, through but few inhabitants.

About noon they reached the valley of Waimea, lying at the foot of Mouna-Kea [sic], on the northwest side. Here a number of villages appeared on each side of the path, surrounded with plantations, in which plantains, sugar-cane, and taro, were seen growing unusually large. (Ellis 1917:265)

Between the 1820s and 1860s, agricultural endeavors in Waimea began to shift to accommodate the growing market economy. In the late 1820s, Lau Ki and Aiko, two Chinese immigrants opened a sugar mill in the Līhu'e area in upper Lālāmilo and although their mill was not commercially successful, sugar production continued in the Waimea area (Barrera and Kelly 1974). Productive sugarcane cultivation in Lālāmilo required an extensive network of irrigation ditches that would transport water from the nearby Waikōloa and Lanimaomao streams to the fields. According to Burtchard and Tomonari-Tuggle (2005:26):

Despite poor irrigation qualities of the Waimea Plain sediments, the network extended 8 km (5 miles) west and south of Waimea town, providing drinking water, mill power, and supplemental field irrigation. Two irrigation canals, Akona's 'Auwai from Waikōloa Stream and Lanimaumau Ditch in Pukalani, appear to have been early constructs in the system. Lyons' 'Auwai, on the other hand, seems to have been built around 1850; this ditch, which also came from Waikōloa Stream, was named for its point of origin near Reverend Lyons' house at Pele Gulch. Akona's 'Auwai and Lyons' 'Auwai were specifically for the purpose of irrigating sugarcane and supplying the Līhu'e sugar mill. Lanimaumau Ditch irrigated cane fields that lay on higher ground above the Waikōloa ditches, including fields at Kamalo'o.

1 The Early Development of Cattle Ranching in Waimea

2 After being introduced to the Island of Hawai'i in 1793 and 1794 by Captain George Vancouver, cattle populations
3 quickly grew and spread throughout the Kohala, Kona, and the saddle region of the island. Ellis (1831:402) describes
4 a journey by one of his traveling companions to Mauna Kea and the feral cattle herds roaming the mountainside:

5 Although there are immense herds of them, they do not attempt to tame any; and the only advantage
6 they derive is by employing persons, principally foreigners, to shoot them, salt the meat in the
7 mountains, and bring it down to the shore for the purpose of provisioning the native vessels. But
8 this is attended with great labour and expense. They first carry all the salt to the mountains. When
9 they have killed the animals, the flesh is cut off their bones, salted immediately, and afterwards put
10 into small barrels, which are brought on men's shoulders ten to fifteen miles to the sea-shore.

11 In 1822, John P. Parker, originally of Newton, Massachusetts, was among the early foreigners granted permission
12 to hunt wild cattle for the Crown (Brennan 1974). The wild cattle were often captured in bullock pits dug seven to
13 eight feet long by four feet deep that were covered over with sticks and a thin layer of dirt; they were also hunted with
14 guns (Frost and Frost 1977; Wilkes 1845). By the 1830s, the unregulated population of livestock was cause for concern
15 and under the administration of Kamehameha III, *vaqueros* (cowboys of Mexican, Indian, and Spanish
16 descent) from Central and South America were brought to the islands to train Hawaiians in the handling of both horses
17 and wild cattle (Bergin 2004). It was out of these early interactions among the *vaqueros* and Hawaiians that the Hawai'i
18 *paniolo* (cowboy) culture developed.

19 In about 1830, Parker began to establish his own private cattle herd and the business that became Parker Ranch,
20 which would eventually grow into the largest cattle ranch on the island (Henke 1929). That same year, the governor
21 of Hawai'i Island, John Adams Kuakini, moved to the town of Waimea to oversee and improve the government cattle
22 industry. He ordered the construction of corrals and had a twelve-mile stretch of trail between Waimea and Kawaihae
23 widened (Escott 2008). In his annual report for 1834, Lorenzo Lyons (1834), the resident missionary in Kohala,
24 reported that a road between Waimea and Hāmākua had been completed. The 1835 missionary census lists 6,175
25 people living in Kohala and another 1,396 people, including 500 men, 510 women, and 386 children, living in Waimea
26 (Schmitt 1977). Despite the eventual prominence of ranching in Waimea, at the time Lorenzo Lyons (1837:1) reported
27 that "The beef establishment has lost some of its charms; & the attention of the people is more directed to the
28 cultivation of the soil - a great portion of Waimea is being surrounded by a stone wall - to form an extensive garden
29 from which all graminivorous animals are to be excluded & which is to be cultivated by the people for their own
30 benefit as well as that of the chiefs." Foreigners appear to have been somewhat transient during this period, as Lyons
31 notes:

32 There was a time when the foreign population numbered about 70 - & their children 30. But the
33 number has considerably diminished & it is always fluctuating - sometimes more & sometimes less.
34 They belong to 6 or 7 different nations & are variously employed - beefcatchers - sugar
35 manufacturers - shoemakers, merchants - tanners - lawyers - blacksmiths - -combmakers - masons
36 - doctors - saddlers - farmers & what not. (Lyons 1841:13-14)

37 By 1840, bullock hunting had drastically reduced the population of wild cattle on Hawai'i Island, so much so that
38 a five-year *kapu* was placed on hunting them solely for their hides and tallow (Bergin 2004). This led to further efforts
39 to tame, brand, fence, and herd privately-owned cattle (Wilkes 1845). For a while, agricultural products from Waimea
40 replenished the cargo ships at Kawaihae Harbor, and in the late 1840s many of the potatoes grown in the Waimea area
41 were shipped to California to help feed those involved in the gold rush (Haun et al. 2003), but the decline of the
42 whaling industry in Hawaiian waters during this time, combined with the *kapu* on killing wild cattle, ultimately led to
43 a period of economic hardship and population decline in the Waimea area (Escott 2008).

44 At about this time, a Honolulu merchant named William French constructed his residence, currently known as
45 the historic Spencer House, at Pu'uloa to the northeast the Lindsey Road-Māmalahoa Highway. French operated a
46 store in Kawaihae and another, a "thatched hut" at Pu'uloa where he "employed a saddle-maker and operated a
47 tannery" under the management of Parker, who "kept busy supervising this operation and collecting beef tallow, and
48 leather to supply the needs of French's growing business" (Wellmon 1973:50). Despite a lack of money in Waimea at
49 the time, the store did well for both French and Parker, as Wellmon (1973:50-51) explains:

50 There was no surplus of currency in Waimea at this time, and most of the business at the Puuloa
51 store consisted of bartering for goods and services. Long-term credit and buying on time was the
52 rule rather than the exception in these transactions. . . French supplied Parker with different goods

in exchange for his services and produce. Parker used these goods himself or exchanged them with those who worked for French and those who paid the store in money or goods.

Francis Allyn Olmsted (1841:230), an American author, journeyed to Waimea in 1840 and described French's storefront and the colorful *vaqueros* and bullock hunters who frequented the store:

About eight o'clock, we came up with a collection of thatched houses, towards the principal of one which we directed our steps, which was a store belonging to Mr. French of Honolulu. Here a novel scene presented itself to us. In front of the door, a bright fire was blazing in a cavity in the earthen floor, displaying in strong light the dark features of the natives congregated around it in their grotesque attitudes. Immediately back of these, a group of fine looking men, in a peculiar costume, were leaning against the counter of the store. Some of them were Spaniards from California, and they were all attired in the poncho, an oblong blanket of various brilliant colors, having a hole in the middle through which the head is thrust. The pantaloons are open from the knee downwards on the outside seam. A pair of boots armed with prodigiously long spurs completed their costume. They were bullock hunters, employed in capturing the wild bullocks that roam the mountains, and had just returned from an expedition of eight or ten days, in which they had been very successful.

As the decade wore on, however, the population of Kohala began to decline, and settlement patterns changed significantly. Leeward inhabitants relocated to the wetter windward slopes of North Kohala and the Waimea plain, abandoning their agriculturally marginal areas in favor of wetter sugarcane lands more productive farmland. According to Tomonari-Tuggle (1988), the remnant leeward population nucleated into a few small coastal communities and dispersed upland settlements. These settlements were no longer based on traditional subsistence patterns, largely because of the loss of access to the full range of necessary resources. Tomonari-Tuggle clarifies some of the reasons for this migration:

Outmigration and a demographic shift from rural areas to growing urban centers reflected the lure of a larger world and world view on previously isolated community. Foreigners, especially whalers and merchants, settled around good harbors and roadsteads. Ali'i and their followers gravitated towards these areas, which were the sources of Western material goods, novel status items which would otherwise be unavailable. Associated with the emergence of the market, cash-based economy, commoners followed in search of paying employment. (Tomonari-Tuggle 1988:33)

These population shifts were accompanied by an overall decline in the number of people living in Kohala. Contemporary observers and modern scholars (Burtchard and Tomonari-Tuggle 2005) offer several explanations, including the decline of the whaling industry, a *kapu* on killing wild cattle (Wilkes 1845), dissatisfaction with William Beckley's (also known as Wilama Bekele) appointment as *konohiki* (Doyle 1953), and disease (HSA 1848), and epidemics that raged through the islands in 1848 and 1849. The population reduction in Waimea as documented by missionaries was tremendous, as the Rev. Lorenzo Lyons expressed, "if the decrease of local people continues the same, how many years before they are all dead, without any left?" (Schmitt 1973:29). Similarly, an 1848 description of the Waimea population cited by McEldowney (1983:432) laments that "it can scarcely be said that there is any native population at all."

The 1848 *Māhele* 'Āina and Land Commission Awards

By the mid-19th century, the Hawaiian Kingdom was an established center of commerce and trade in the Pacific, and recognized internationally by the United States and other nations in the Pacific and Europe (Sai 2011). As Hawaiian political elites sought to modernize the burgeoning Kingdom, and as more Westerners settled in the Hawaiian Islands, major socioeconomic and political changes took place, including the formal adoption of a Hawaiian constitution by 1840, the change in governance from an absolute monarchy to a constitutional monarchy, and the shift towards a Euro-American model of private land ownership. This change in land governance was partially informed by ex-missionaries and Euro-American businessmen in the islands who were generally hesitant to enter business deals on leasehold lands that could be revoked from them at any time. *Mō'ī* (King) Kamehameha III, through deliberations with his high-ranking chiefs and political advisors, defined the ownership of all lands in the Kingdom (King n.d.). They decided that three classes of people each had one-third vested rights to the lands of Hawai'i: the *Mō'ī*, the *ali'i* and *konohiki*, and the native tenants known as *hoa'āina*. In 1846, King Kamehameha III formed the Board of Commissioners to Quiet Land Titles (more commonly known as the Land Commission) to adopt guiding principles and procedures for dividing the lands, grant land titles, and act as a court of record to investigate and ultimately award or reject all claims brought before them (Bailey in Commissioner of Public Lands 1929). All land claims, whether by chiefs for an entire *ahupua'a* or 'ili *kūpono* (nearly independent 'ili land division within an *ahupua'a*, that paid tribute to the

ruling chief and not to the chief of the *ahupua'a*), or by *hoa'āina* for their house lots and gardens, had to be filed with the Land Commission within two years of the effective date of the Act (February 14, 1846) to be considered. This deadline was extended several times for chiefs and *konohiki*, but not for native tenants (Soehren 2005).

The *Mō'i* and some 245 *ali'i* spent nearly two years trying unsuccessfully to divide all the lands of Hawai'i amongst themselves before the matter was discussed in the Privy Council on December 18, 1847 (King n.d.; Kuykendall 1938). Once the *Mō'i* and his *ali'i* accepted the principles of the Privy Council, the *Māhele 'āina* (Land Division) was completed in just forty days (on March 7, 1848). The names of all of the *ahupua'a* and *'ili kūpono* of the Hawaiian Islands, as well as the names of the chiefs who claimed them, were recorded in the *Buke Māhele* (*Māhele Book*) (Buke Māhele 1848). As this process unfolded, the *Mō'i*, Kauikeaouli, received roughly one-third of the lands of Hawai'i, realizing in the process the importance of setting aside public lands that could be sold to raise money for the government and also purchased for fee simple title by his subjects. Accordingly, the day after the division when the name of the last chief was recorded in the *Buke Māhele*, the *Mō'i* commuted about two-thirds of the lands awarded to him to the government (King n.d.). Unlike Kauikeaouli, the chiefs and *konohiki* were required to present their claims to the Land Commission to receive their Land Commission Awards (LCAw.). The chiefs who participated in the *Māhele* were also required to provide to the government commutations of a portion of their lands in order to receive a Royal Patent giving them title to their remaining lands. The lands surrendered to the government by the King and chiefs became known as "Government Land." The lands personally retained by the King became known as "Crown Land." Lastly, the lands received by the chiefs became known as "Konohiki Land" (Chinen 1958:vii; 1961:13). For all land designations, whether to the *Mō'i*, *konohiki*, or Government, the rights of the native tenants were expressly reserved. (Garovoy 2005). To expedite the work of the Land Commission, all lands awarded during the *Māhele* were identified by name only, with the understanding that the ancient boundaries would prevail until the lands could be formally surveyed.

During the *Māhele*, *hoa'āina* (native tenants) residing on lands that were divided up among the Crown, *Konohiki*, and Government could claim, and acquire title to parcels that they actively lived on or farmed. The parcels awarded to *hoa'āina* were and still are referred to as *kuleana*, using the Hawaiian term to describe the relationship of rights and responsibilities held among tenants, *konohiki*, and the land. The Board of Commissioners oversaw the program and administered the *kuleana* as Land Commission Awards (LCAw.). Claims for *kuleana* had to be submitted during a two-year period that expired on February 14, 1848, to be considered. All of the land claimants were required to provide proof of land use and occupation, which took the form of volumes of native registry and testimony. The claims and awards were numbered, and the LCAw. numbers, in conjunction with the volumes of documentation, remain in use today to identify the original owners and their use of the *kuleana* lands. The work of hearing, adjudicating, and surveying the claims required more than the two-year term, and the deadline was extended several times for the Land Commission to finish its work (Maly and Maly 2002). In the meantime, as the new owners of the lands on which the *kuleana* were located began selling parcels to foreigners, questions arose concerning the rights of the native tenants and their ability to access and collect the resources necessary for sustaining life. The "Enabling" or "*Kuleana Act*," passed by the King and Privy Council on December 21, 1849, clarified the native tenants' rights to the land and resources, and further defined the process by which they could apply for fee-simple interest in their *kuleana*. The work of the Land Commission was completed on March 31, 1855. A total of 13,514 *kuleana* were claimed by native tenants throughout the islands, of which 9,337 were awarded (Maly and Maly 2002).

The Disposition of Lands in Waimea and Lālāmilo at the time of the Māhele 'Āina

The disposition and distribution of the lands of Waimea was a complicated issue and was a matter of much testimony and debate among Commissioners, *kama'āina* informants, and land petitioners. Waimea was a discrete land unit but considered by some to not be an *ahupua'a*; rather it was considered to be a *kalana* or *'okana*, a unit larger than an *ahupua'a*. To further complicate the issue, some of the land units within Waimea were considered *ahupua'a* and others *'ili kūpono*. As a result of the *Māhele* testimony and decisions rendered by the Boundary Commission, many smaller *ahupua'a* names were dropped and the relatively independent *'ili kūpono* were given *ahupua'a* status, and except for a portion of the Waikōloa *Ahupua'a* (which was awarded as *konohiki* land), much of the Waimea area was retained as Crown Lands. Almost all of the smaller *'ili 'āina* located on the southern slope of Kohala Mountain became Government Land, with two exceptions. The lands of Wai'aka 1st and 2nd, located northwest of the APE, were awarded to M. Kamaikui (LCAw. 8516-B:1) and G. Lahilahi (LCAw. 8520-B:2), respectively. The two *'ili* of Pauahi and Lanikepu were given to Lunalilo, who relinquished them to the Government. The rest of the land, including the large *ahupua'a* of Lālāmilo, in which the current APE is located, also became government land. Which of the *ali'i* relinquished these lands were not recorded in the *Buke Māhele* (Soehren 2005).

Over 140 claims for Land Commission Awards (LCAw.) were made by native tenants within the Waimea area (Office of Hawaiian Affairs 2018; Waihona Aina 2020). Awards in Waimea, however, are described in the Land Commission records as being located in Waimea, with each *‘ili* specified. Thus, for example, “Wai‘aka” does not appear in these records as an *ahupua‘a*, but rather as an *‘ili* of Waimea. Table 2 lists awards located near the current APE, and their locations relative to the current APE are shown in Figure 14. Three *kuleana* parcels were claimed in Wai‘aka, and only two of these claims were awarded. Iese Aa was awarded a 0.14-acre houselot in Wai‘aka 2, and Kuahine was awarded a 2.4-acre houselot in Wai‘aka 1. Claim 4148 by Kupa for a houselot was not awarded. In Lālāmilo, thirteen *kuleana* parcels were awarded to the south, east, and west of the current APE. Of the Lālāmilo awards, four were located at the coast at Puakō, and nine were located in the uplands near the current APE (Haun et al. 2003). Nearly all of these claims were for house lots or cultivated sections, and as Haun et al. (2003) note, the average size of awards excluding small house lots was about 23 acres. In addition to the awards in Wai‘aka, a few awards were given in Lālāmilo south of the current APE. These included four large (>20 acres) parcels used primarily for agriculture.

Table 2. LCAw. in the vicinity of the current APE.

<i>LCAw. No.</i>	<i>Name</i>	<i>Acres</i>	<i>Ahupua‘a</i>	<i>‘Ili</i>	<i>Description</i>
976:1	William Beckley	29.59	Lālāmilo	Waikani	House lot and farm
3760	Iese Aa	0.14	Wai‘aka 2		2 houses
3762:1	Auwae	26.00	Lālāmilo	Keanuiomano	Taro farm
3828	I. A. Palea and wife	48.00	Lālāmilo	Waikōloa	House lot, partially enclosed
3832	Poolipi	1.6	Lālāmilo	Kauniho	Lot for cultivation, house
4127	Kuahine	2.4	Wai‘aka 1		1 house
4181	Kupa	1.3	Wai‘aka		House lot, not awarded
4195	Kanehailua	35.20	Lālāmilo	Kaluaana	1 house, 45 gardens
8516B:1	Kamaikui	24.0	Wai‘aka 1	-	<i>Konohiki</i> award
8520B:1	Lahilahi, G.	-	Wai‘aka 2		<i>Konohiki</i> award



30 Historic Properties Report Study Wai‘aka Bridge and Roadway Project, South Kohala, Hawai‘i

Government Land Grant Program and the Expansion of Ranching in Waimea

In conjunction with the *Kuleana Act*, the King authorized the issuance of Land Grants to applicants for tracts of Government land that were allocated during the *Māhele ‘Āina*. These Land Grants were generally larger than those awarded by the Land Commission. The Act resolved that portions of Government Lands should be set aside and sold as grants ranging in size from one to fifty acres at a cost of fifty cents per acre. The stated goal of the program was to enable native tenants, many of whom were insufficiently awarded or not awarded land through the *Kuleana Act* to purchase lands of their own. Despite the stated goal of the land grant program, this provided the mechanism that allowed many foreigners to acquire large tracts of Government lands. Land Grant 662, covering 93 1/5 acres, including a portion of the current APE located to the east of the bridge, was sold to Kamaikui in 1851. The Land Grant was awarded to Kamaikui in 1851 and encompasses 93.20-acres in “Waiakanui” or Wai‘aka 1st. A relatively large land grant (Grant 1157), totaling 258 acres at Lihu‘e to the southeast of the current APE, was sold to George Macey and James Louzada in 1853. A 71-acre parcel (Grant 2129) located south of the current APE was purchased by George K. Lindsey in 1856.

During the middle to late 1800s, Western businessmen established a number of diverse industries on these newly available lands. Letters written at the time of the *Māhele* indicate that by 1848 George Davis Hū‘eu had already established a cattle corral, a goat corral, and house lots on lands adjacent to his roughly 95,000-acre Waikōloa award (Maly and Maly 2002). By 1848, John Palmer Parker, founder of the Parker Ranch, had received two acres of land at Mānā where he built a family house and the first ranch buildings (Bergin 2004). In 1850 Parker purchased 640 acres surrounding his Mānā lands, and in 1851 he purchased another 1,000 acres. The next year, Kamehameha III granted Parker a lease on the lands of Waikōloa (presumably Lālāmilo and neighboring lands to the north and east), some of which would eventually be deeded to the ranch by outright purchase. By the middle of the decade, Parker had turned most of the day-to-day operations of Parker Ranch over to his son, John Palmer Parker II. When John Palmer Parker, died on August 20, 1868, the ranch controlled about 47,000 acres of land in the region (Bergin 2004). These lands were divided evenly between John Parker II and his adopted son and nephew, Sam Parker Sr.

The decades following the *Māhele ‘āina* of 1848 were characterized by a growing detraction from traditional subsistence activities as the population along the Kohala coast continued to decline and the inland agricultural fields were largely abandoned as they succumbed to the ravages of free-ranging cattle or were bought up and converted to pastures. During this period the remnant leeward population of Kohala nucleated into a few small coastal settlements or into dispersed upland habitations where they began building *kuleana* walls to enclose houses, gardens, and animal pens (Tomonari-Tuggle 1988). Walls were built not only to protect their homes and gardens from cattle and other free-ranging animals but also to mark property boundaries as dictated by the new land tenure system that emphasized private land ownership. The economy also transitioned, becoming cash-based, and taxes were collected. Foreigners controlled much of the land and most of the businesses, and the native population was largely dependent on these foreigners for food and money (Haun et al. 2003). The written history from the late 19th to the early 20th century largely reflects news of new settlers, religious endeavors, and commercial pursuits in the region (McEldowney 1983). Among the religious endeavors was the establishment of a Catholic church in the vicinity of the current APE by Father Damien in 1868, after he had a revelation to build a church in Wai‘aka (Momi Naughton, personal communication, 14 February 2022). The church was dedicated to St. John the Evangelist. The approximate location of this church (labeled “Cath. Ch.”) is depicted on a map prepared in 1887 (Figure 15). The cartography of this map makes it notoriously difficult to match with aerial imagery and later maps; however, a best-fit overlay of the map using Keanu‘i‘omanō Stream, a prominent rock wall, and other landmarks that are still existing (e.g., James Fay’s stone corral) was used to determine an approximate location of the church site. This overlay places the church within or near the current APE on the north side of Kawaihae Road on the Hawai‘i Preparatory Academy campus. The church burned down in 1900 and was rebuilt in 1916, and eventually relocated near the intersection of Kawaihae Road and Lindsey Road.

Parker Ranch continued to expand its operations in the Waimea area throughout the 1870s and 80s, eventually acquiring the lease to roughly 95,000 acres of Waikōloa that had formerly belonged to the Waimea Agricultural and Grazing Company. By the mid-1880s Sam Parker’s poor business dealings had led to a rapidly degenerating financial situation for Parker Ranch, and in 1887 the entire ranching operation was entrusted to Charles R. Bishop and Co. for a fee of \$200,000 (Bergin 2004). With the move to trusteeship, new managers were brought in to oversee the day-to-day operations at the ranch.



Figure 15. Approximate location of the 1865 Catholic Church depicted on a portion of Registered Map 673 and overlaid on recent aerial imagery with the APE shaded red (Maxar-DigitalGlobe 2020; Wall and Lyons 1887).

By the early 1900s, the Parker Ranch headquarters were located near what is now the corner of Lindsey Road and Māmalahoa Highway, in the same building as the old store, post office, and restaurant (Maly and Maly 2005). The ethnic makeup of Waimea at this time was primarily of Hawaiian and part-Hawaiian, Japanese, Portuguese, Chinese, and a small number of *haole* (Euro-American descent); and most of the residents were employed by Parker Ranch or were independent farmers (Paniolo House Committee Friends of the Future 2005). At this time, Parker Ranch was under the direction of Alfred W. Carter, who had been chosen as the guardian and trustee for Thelma Parker, John Parker III's daughter, upon his death at the age of nineteen. By this time, Parker Ranch was operating on several large leased parcels, but the fee simple holdings amounted to only 34,000 acres (Bergin 2004). Early on in his tenure as ranch manager, Carter concentrated on acquiring and converting more of the ranch's lands from lease to fee. In 1903, with only a short period left on its lease, Carter acquired nine-tenths interest in the Waikōloa lands from Ms. Lucy Peabody for \$112,000, securing important grazing lands for the ranch (Bergin 2004). Soon thereafter, Carter purchased the adjacent lands of 'Ōuli, adding another 4,000 acres to the ranch's holdings that bridged the former property lines *makai* of Waimea Town. He also acquired the Pu'uloa Sheep and Stock Company, encompassing over 3,700 acres and including the Ke'āmuku Sheep station in Waikōloa, which he converted to cattle ranching over the next decade. In 1906, on behalf of Thelma Parker, Carter bought out Sam Parker's half-interest in Parker Ranch for a sum of \$600,000. Other important purchases made by Carter during the first dozen or so years of his trusteeship included Humu'ula, Ka'ohe, Waipunalei, and Kahuku Ranch (Bergin 2004).

During the early twentieth century, other portions of Government land near the current APE were sold through the land grant program. Of particular interest for the current project is Grant 8577. This parcel is now part of the HPA campus, adjacent to the current APE just west of Keanu'i'ōmanō Stream. The parcel was leased with preference right to purchase to David K. Kamalau in 1922 (C.S.F. 3806), who purchased the land as Grant 8577. The metes and bounds description in the survey note that the entire parcel was surrounded by a stone wall separating it from the surrounding Government land. The map prepared to accompany this survey (Figure 15) shows this wall as a wavy line following the parcel boundary. The map also depicts a building near the southern corner of the parcel.

Figures 16, 17, 18, and 19 show the evolution of the intersection of Kohala Mountain Road and Kawaihae Road through the 20th century. The current intersection is the result of road improvement projects completed in the 1930s and 1960s, with maintenance activities since then creating the existing pavement and shoulder configuration.

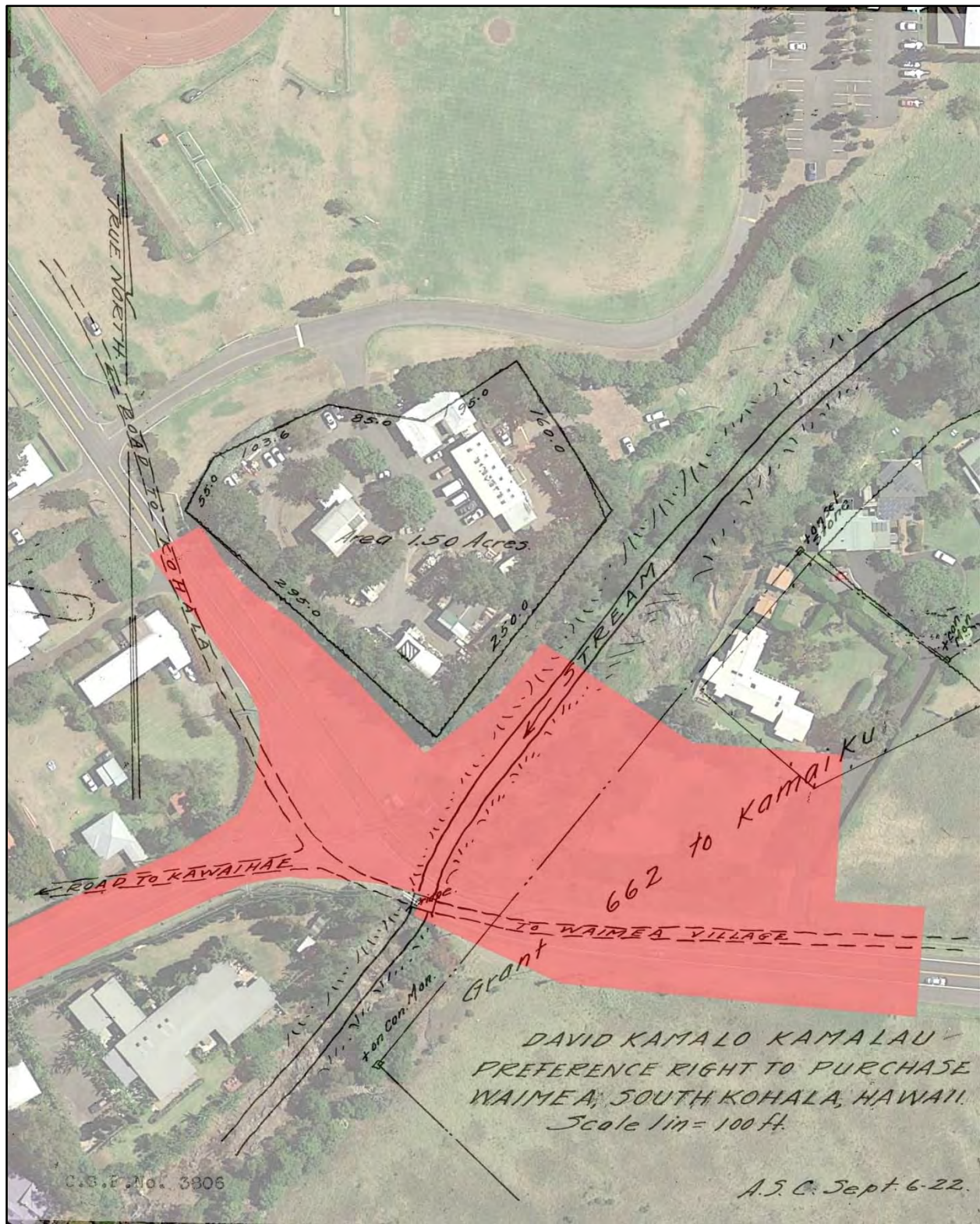


Figure 16. Map accompanying CSF 3806 (Chaney 1922) with the APE shaded red, overlaid on recent aerial imagery (GoogleEarth 2019).



Figure 17. Portion of Registered Map 2930 (Murray 1932) with the APE shaded red, overlaid on recent aerial imagery (GoogleEarth 2019).

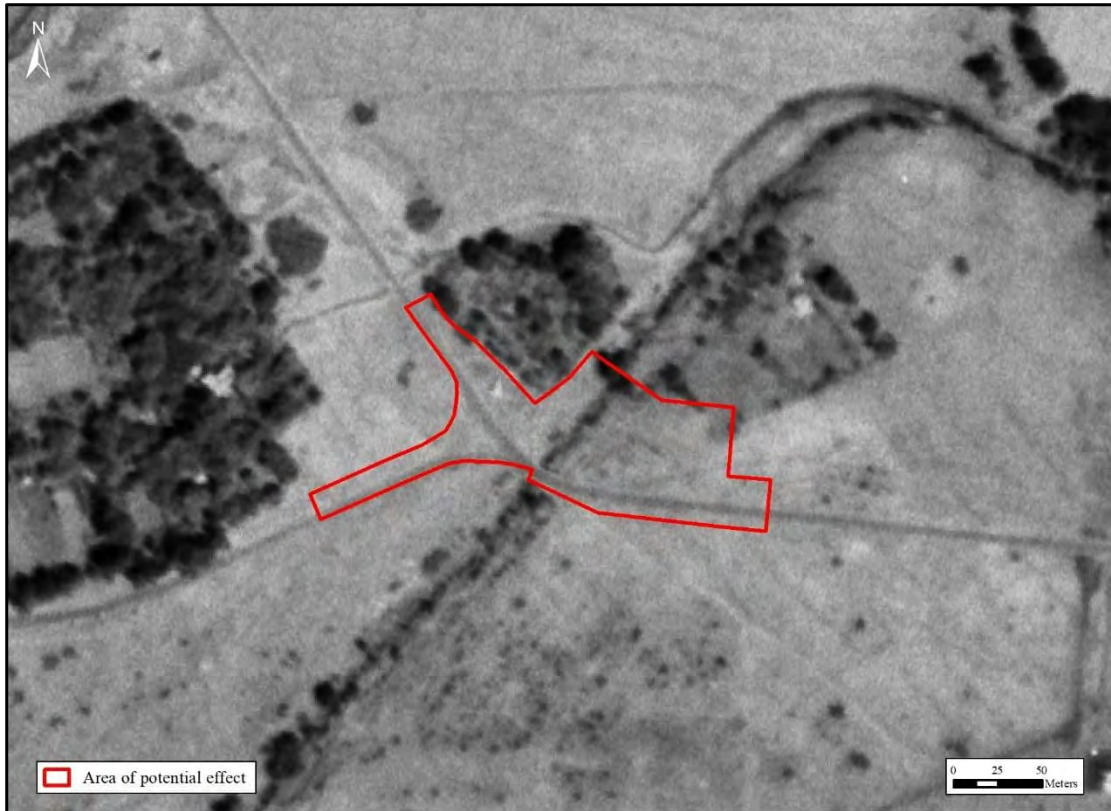


Figure 18. Portion of USGS aerial photograph (USGS 1954) showing the Wai'aka intersection.

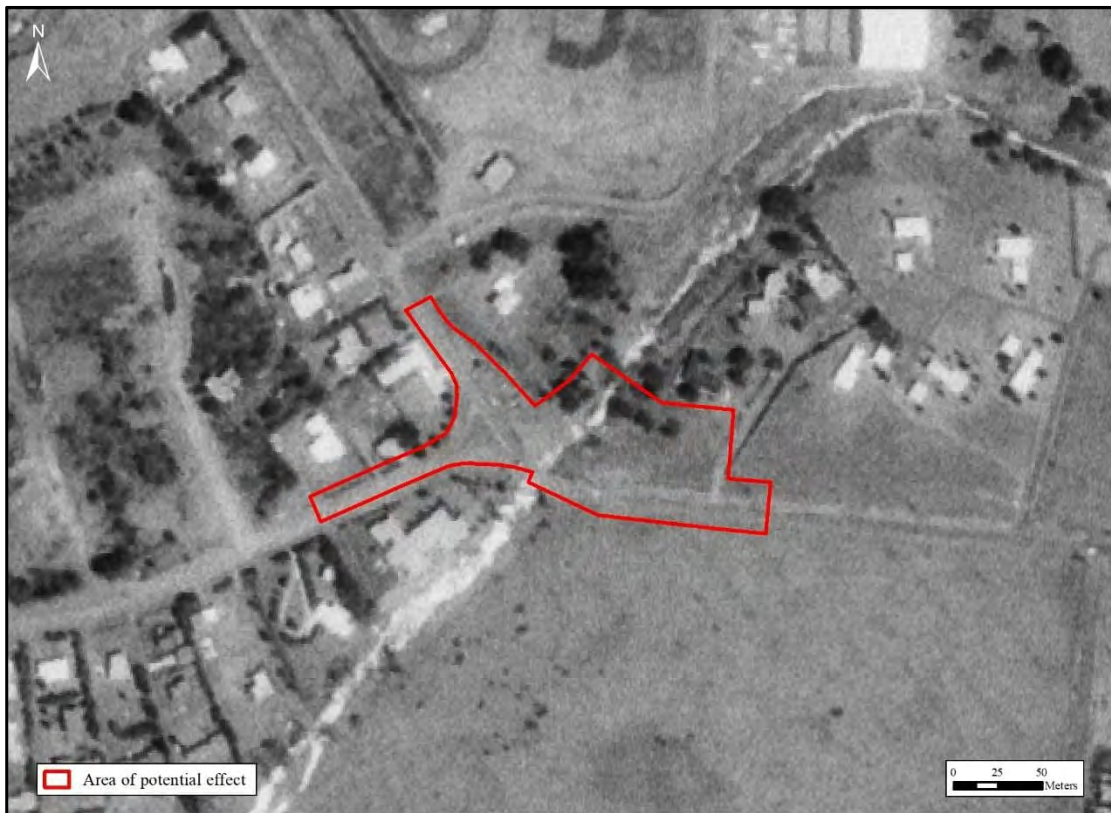


Figure 19. Portion of USGS aerial photograph (USGS 1977) showing the Wai'aka intersection.

A Brief History of USGS Stream Gaging in Hawai‘i

The measurement of stream flows by the United States Geological Survey (USGS) began in 1888 as result of the efforts of John Wesley Powell, the second director of the USGS, to “reclaim” arid lands in the American West through irrigation (Frazier and Heckler 1972). The Hawai‘i office of the USGS began collecting surface-water data in 1909 (Matsuoka et al. 1985). The first stations established were operated primarily to evaluate the potential of streams for supplying water to the sugar industry. From the initial 12 gages installed in 1909, the program rapidly expanded to 87 gaging stations in 1914, and then to 143 by 1940. Between 1941 and 1950 the number of gaging stations was reduced slightly, but after 1950 more gages were added, and by 1964 the USGS was operating 240 daily flow surface-water gaging stations within the Hawai‘i District (which included the islands of Guam, American Sāmoa, and Okinawa). Within the current APE, the USGS installed a stream gage just above the Wai‘aka Bridge in Keanu‘i‘omanō Stream in 1955 during its post-war expansion of gaging stations, and that gage is in operation today (USGS 2021).

PREVIOUS ARCHAEOLOGICAL STUDIES

The APE is situated within a portion of what has been designated Field Complex 2 of the Waimea Agricultural System (Figure 13). The agricultural system was identified based on the analysis of aerial photographs conducted in 1981 in advance of fieldwork for the Mudlane-Waimea-Kawaihae Road Corridor survey conducted by the B. P. Bishop Museum (Clark and Kirch 1983). The Waimea Agricultural System, and the large system of agricultural fields in Lālāmilo to the southwest of the current APE have been investigated by several studies, beginning with work for the Mudlane-Waimea-Kawaihae Road Corridor and then as part of other compliance-based studies (Barrera and Kelly 1974; Barrera 1993; Ching 1979; Clark 1981a, 1981b; Clark and Kirch 1983; Clark 1987; Clark et al. 1990; Hammatt and Shideler 1989; Haun et al. 2003; Rechtman 2000). As described by Clark (1983:293), the Waimea Agricultural System:

...comprises the remains of an extensive series of agricultural features, throughout which are scattered multiple residential structures. The system forms a large arc to the W and S of the present-day village of Waimea. Beginning on the S flank of Kohala Mountain, a short distance below Pu‘u La‘ela‘e, this system extends down the slope and onto the Waimea plain W of town. It then bends to the E, fading out just S of Waimea and W of Kuhio Village. For descriptive convenience, the system was subdivided into four field complexes, each with its own characteristic attributes.

Field Complex 2 was described as the area:

... bounded on the N by Keanu‘i‘omanō and Kohākōhau Streams, and on the S by Waikoloa Stream. It is characterized by a set of agricultural fields that are demarcated by low terrace retaining faces or ridges of soil and/or stone. The long axes of the fields are oriented NW by SE, or perpendicular to the prevailing winds. Associated with the fields is a set of *‘auwai*, the main channels of which divert from the Kohākōhau Stream and angle to the SE, eventually draining into the Waikoloa Stream. Other agricultural and residential features are scattered throughout the area. (Clark 1983:293)

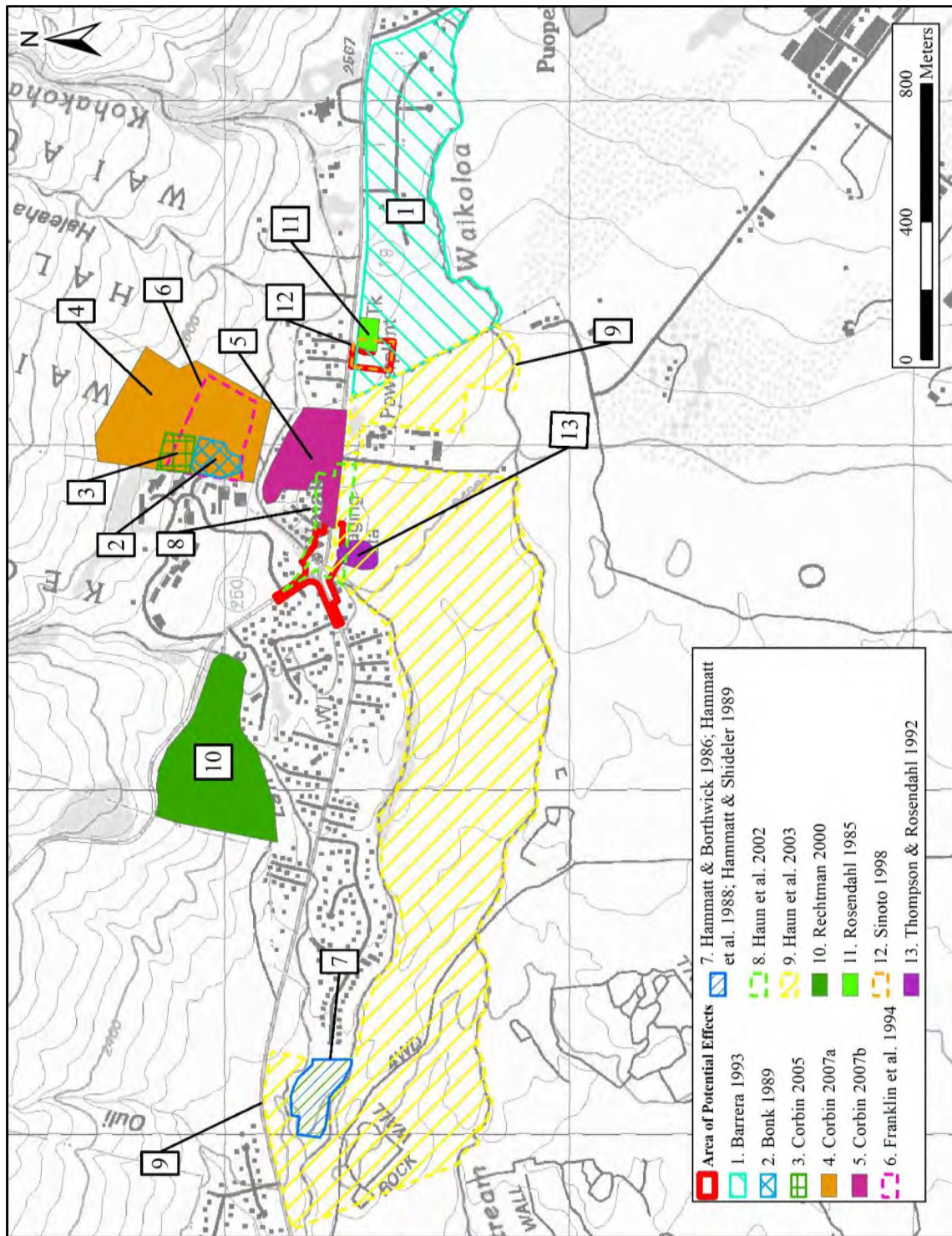
The Field Complex 2 area has been included in seven prior studies, and other nearby work has documented portions of neighboring Precontact agricultural and habitation sites as well as Historic ranching and habitation sites (Table 3, Figure 20). In general, these studies have identified field ridges, terraces, fields, and ditches associated with Field Complex 2, but have also documented areas near Kawaihae Road that have been disturbed.

The following discussion of prior archaeological studies begins with a summary of an AIS conducted by Haun et al. (2002) in support of two previous attempts to replace Wai‘aka Bridge. This is followed by summaries of the other studies that have included portions of the APE.

Table 3. Previous archaeological studies conducted in the vicinity of the current study area.

<i>Year</i>	<i>Author(s)</i>	<i>Type of Study</i>	<i>Location</i>	<i>Relevant Findings*</i>
1985	Rosendahl	Reconnaissance	East of APE	No archaeological features
1986	Hammatt and Borthwick	AIS	West of APE	Site 11097 Keanu'i'omanō Pondfields Site 11098 Wall & Midden scatter Site 11099 Rectangular Enclosure Site 11100 Historic Pipeline Site 11101 Mounds Site 11102 Wall Site 11103 Rectangular Enclosure Site 11104 Lanikepu Agricultural Terraces
1988	Hammatt et al.	AIS	West of APE	Site 11105 Enclosure Site 11106 Terrace wall Site 11107 Habitation enclosure Site 11108 Stone alignment Backhoe trenching at these sites and sites identified in Hammatt and Borthwick 1986
1989	Bonk	Reconnaissance	North of APE	Site 19644 Field Complex 1 features
1989	Hammatt and Shideler	AIS	West of APE	Additional trenching at Sites 11,097 and 11,107
1992	Thompson and Rosendahl	AIS	South of APE	Site 18054 agricultural fields. No 'auwai. Subsurface testing negative.
1993	Barrera	AIS	Sandalwood Estates, outside of APE	Site 14948 portion of Field Complex 2
1994	Franklin et al.	AIS	North of APE	Site 19644 Field Complex 1 features
1998	Sinoto	Archaeological Assessment	TMK: (3) 6-6-001:011; Potential staging area	Subsurface testing, no archaeological features.
2000	Rechtman	Supplemental AIS	27-acre parcel north of current APE	13 sites, including agricultural and habitation. Sites 18569, 18579, 18580, 18580, 18581, 18587, 18588, 18589, 18590, 18591, 18592, 48593, 18595, 18596.
2002 (2012)	Haun et al.	AIS	South of APE	Site 22632: seven soil terraces (Features XI, XN, XO, XP, XQ, XS, and XU) and fields, two irrigation ditches (Features TS and XR) and two field boundaries (Feature XT and XV). Site 23312 ditch segments northeast of APE. Site 23313 concrete foundation. Site 29221 Wai'aka Stream Bridge.
2003	Haun et al.	AIS	HDOT staging, DHHL west potential staging	Same results as Haun et al. 2002
2005	Haun et al.	Data Recovery	West of APE	Trenching of Site 22632 terrace and field boundary features found no artifact, one hearth feature. C14 dates mid-1400s to the mid-1600s or later.
2005	Corbin	AIS	North of current APE	Trenching in Site 19646
2007a	Corbin	AIS	North temporary use areas	No features in current APE. Site 25867, 25868, 25870 walls Site 25868 modified boulder Site 25871 <i>kuaiwi</i> Site 25872 mound Site 25873 vault with canoe and reported burial Site 25874, 25875 rectangular ditches
2007b	Corbin	AIS	North of current APE	Historic boundary or ranching walls
2013	MKE and Fung	Inventory	Wai'aka Bridge	NRHP eligible under Criterion C.

*Site numbers preceded by SIHP-50-10-06-



Wai‘aka Bridge Replacement (2002 and 2012) AIS and Section 106 consultation (Haun et al. 2002)

In 2002, Haun & Associates conducted an archaeological inventory survey (Haun et al. 2002) in support of an earlier iteration of the current Undertaking. The AIS investigated a 9.8-acre APE comprising portions of TMKs: (3) 6-5-01: por. 033, 6-6-01: por. 077 and 6-6-04: por. 001 (Figure 21). This area includes the majority of the current APE. The AIS was conducted in 2002, but the replacement of the bridge did not occur at that time. In 2011, during a revived attempt to replace the bridge, Section 106 consultation and Chapter 6E-8, HRS review was conducted for the project. The AIS was updated and a revised report (Haun et al. 2002) was resubmitted. That report was accepted by DLNR-SHPD (Letter May 15, 2012, Log No. 2012.1353, Doc. No. 1205MV04), who noted that it met the requirements of HAR 13-276 as well as the Secretary of the Interior’s Standards (see Appendix A). In partial fulfillment of the Section 106 and HRS 6E-8 requirements, the study included an archaeological survey and consultation with Native Hawaiian Organizations (NHOs) and other consulting parties. Haun et al. (2002) identified 4 sites (SIHP 50-10-06-22632, SIHP 50-10-06-23312, SIHP 50-10-06-23313, SIHP 50-10-06-29221) with the 2002/2012 APE (see Figure 21).

SIHP 50-10-06-22632 is a large (>700 acres) agricultural complex, and several projects conducted before the Haun et al. (2002) AIS documented portions of it, but under different SIHP numbers. It was designated as Site 22632 during fieldwork conducted for an AIS of the DHHL Residential Development at Lālāmilo by Haun et al. (2003), which is discussed below. Within the 2002 and 2012 Wai‘aka Bridge replacement project APE, Haun et al. (2002) documented eleven features of Site 22632. These features included seven soil terraces (Features XI, XN, XO, XP, XQ, XS, and XU), two linear mounds of soil interpreted as field boundaries (Features XT and XV), and two irrigation ditches (Features TS and XR). These features generally extend northwest to southeast across the 2002/2012 APE, with the exception of Feature XU, which was roughly perpendicular to the others. The features are all subtle in appearance because they are much wider than they are tall (or deep, in the case of the two ditches), and tend to be obscured when grass covering the ground surface is thick. The soil terraces range between 2.75 and 4.1 meters wide, standing an average of 18 centimeters tall on their upslope sides and an average of 61 centimeters tall on their downslope sides. The longer of the two field boundaries, Feature XT, was 1.7 meters wide by 41 centimeters tall; the shorter, Feature XV, was 1 meter wide and 50 centimeters tall. The ditch designated Feature TS was 1.8 meters wide and 40 centimeter deep, while the other ditch, Feature XR, was 3.5 meters wide and 65 centimeters deep. During a review of a draft version of the AIS report, DLNR-SHPD commented that they believed that the features of the site “extend all the way to and were truncated by the construction of the Kawaihae Road. This is significant because even small changes to the road alignment may impact these sites” (Log No. 2011.2213, Doc. No. 1111MV03). Haun et al. (2002) responded by re-inspecting the site and concurring that the features extend closer to the road, as depicted in the final version of their AIS (Haun & Associates letter to Theresa K. Donham of March 03, 2012). In this final version of the report, the features are shown abruptly ending at the barbed wire fence adjacent to the road.

North of Kawaihae Road, to the east of the proposed temporary use areas, Haun et al. (2002) identified a segment of an irrigation ditch (Site 23312) extending roughly parallel to Kawaihae Road. Within Keanu‘i‘omanō Stream, Haun et al. (2002) identified a concrete foundation as Site 23313, suggesting that it was built to support a pump used to raise water from the stream. The study also documented Wai‘aka Bridge (Site 29221), but not to Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) requirements. This modest reinforced concrete slab bridge with a center pier was identified as the first bridge built with Federal Aid funds on Hawai‘i Island.

In addition to the archaeological study, Section 106 consultation was conducted for the Wai‘aka Bridge replacement project in 2011 and 2012 (FHWA 2012). This included public notices in the *Honolulu Star-Advertiser*, *West Hawaii Today*, and *Hawaii Tribune*. Groups and individuals consulted included Pua Aiu, Administrator of DLNR-SHPD; Kimo Lee, Chair of the Hawaii Island Burial Council (HIBC); Keola Lindsey of the Office of Hawaiian Affairs (OHA); Jeffrey Fujimoto of the DHHL; Katie Kissling of the Hawaii Historic Foundation (HHF); Halealoha Ayau of Hui Malama I Na Kupuna O Hawaii; Mr. Hugh “Buttons” Lovell and Ms. Leimana Damate of the Aha Kiolo Advisory Committee, Aha Moku; Waimea Hawaiian Civic Club (WHCC), Kaena Peterson and Maulili Dickson of the South Kohala Civic Club (SKCC); and Ms. Nicole Lui. Among the information shared by consulting parties was that the portion of Keanu‘i‘omanō Stream in the APE is not ideal for the concealment of *iwi* and that *iwi* are located further *mauka* above Hawaii Preparatory Academy and further south. OHA was comfortable with the level of effort taken to identify historic properties of significance to the Hawaiian People within the 2012 APE. With respect to the proposed replacement of Wai‘aka Bridge, some respondents were in favor of replacement. Kiersten Faulkner of the Historic Hawaii Foundation concurred with the NRHP eligibility determination and the “adverse effect” determination for the replacement project. As a result of this consultation, SHPD concurred that Wai‘aka Bridge was eligible for the NRHP under Criterion C as a good example of a modest reinforced concrete slab bridge and that the project would have an adverse effect on it (Log No. 2011.2731, Doc No. 1108MA05).



Figure 21. Haun et al. (2002) site location map overlaid on recent aerial imagery (GoogleEarth 2019) with the current APE indicated in red.

As a result of the Haun et al. (2003) study, one site (SIHP 50-10-06-29211, Wai'aka Bridge) was determined to be eligible for inclusion in the NRHP. All four documented sites were determined to be significant under HRS Chapter 6E. Site 22632 was determined significant under Criterion a for its association with the broad pattern of traditional and early historic agricultural intensification in Hawai'i, under Criterion c as a well-preserved example of an agricultural field complex, and Criterion d for the information yielded relative to late prehistoric to historic land use in the project area. Haun et al. (2002:53) recommended data recovery for the features of Site 22632 located in the Wai'aka Bridge APE "if the sites are to be impacted by the proposed road improvements."

SIHP 50-10-06-23312, the ditch segment located outside of the current APE, was assessed to be significant under Criterion d for the information yielded relative to historic land use in the project area. Data recovery was recommended if the site were to be impacted by the proposed project.

SIHP 50-10-06-23313 was assessed to be significant under Criterion d for the information yielded relative to historic land use in the project area. The mapping, written descriptions, and photography conducted at Site 23313 was considered to have adequately documented the site and no further mitigation or preservation was recommended.

SIHP 50-10-06-29221 was determined to be eligible for the National Register of Historic Places under Criterion C as a good example of a modest reinforced concrete slab bridge that embodies the distinctive characteristics of a type, period, or method of construction (Log No. 2011.2731, Doc. No. 1108MA05). Although not explicitly stated, the Haun et al. (2002:53) report appears to conclude that the bridge is also HRS 6E-8 significant under Criterion c for the same reason, and under Criterion d for the information yielded during that study. The proposed replacement or widening of the bridge was determined to have an adverse effect on the historic property. Data recovery in the form of Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Level I or Level II documentation. The project was withdrawn in 2015, before a memorandum of agreement concerning the mitigation of adverse effects could be prepared.

Other archaeological studies conducted within the current APE and its vicinity

Five other prior archaeological studies have included portions of the current APE, and several others have occurred on adjacent parcels (see Figure 20). Within the current APE, these studies documented features of the large agricultural field system (SIHP 50-10-06-22632) on the south side of Kawaihae Road, but not on the north side. Areas of prior ground disturbance were also reported. Results of these studies are summarized below. In addition to these archaeological studies, the Hawai'i Statewide Historic Bridge Inventory (MKE and Fung 2013) includes Wai'aka Bridge.

In 1985, Paul H. Rosendahl, Inc. (PHRI) conducted an archaeological reconnaissance (Rosendahl 1985) of a 32,000 square foot parcel located immediately east of the staging area in the current APE (see Figure 20). Although that study area is not located in the current APE, it is similar in its topography and degree of prior surface disturbance. During a pedestrian survey of the parcel, no archaeological remains of any kind were identified, including no surface structural archaeological features, portable artifacts, or midden. No subsurface testing was conducted.

In 1992, PHRI conducted an Archaeological Inventory Survey (Thompson and Rosendahl 1992) of seven potential locations of the North Hawai'i Community Hospital. The location designated "Parcel 7" comprises a roughly 250 meter by 130 meter area located immediately south of the current APE (see Figure 20). A series of at least six agricultural fields were documented as SIHP 50-10-06-18054 (Figure 22). The fields are described as:

The edges of the fields were demarcated by low soil retaining faces constructed of soil with no obvious inclusion of rock. The ridges were less than 50 cm high and the width of the fields was 20-30 m each. The lengths varied from 60-80 m and several of the ridges appear to have been truncated on the northwest in the past by the existing Waimea-Kawaihae road. The ridges all paralleled one another and were oriented perpendicular to the prevailing wind (NW to SE). No 'auwai were apparent during the inventory. The parcel is currently being used as a cattle pasture and modern field traffic has cut paths across some of the fields, creating the illusion of ditches in some cases. There was nothing apparent that was as distinct as the ditches noted in Parcels 1, 3, and 4. (Thompson and Rosendahl 1992:10-11)

Seven backhoe trenches (see Appendix B) were excavated in Parcel 7. Thompson and Rosendahl (1992:12) identified a buried agricultural soil horizon in portions off all seven trenches:

The trenches were placed across the parcel in order to cross section the agricultural fields noted during the surface inventory. The trenches were placed such that a representative sample of the soils present within the parcel were revealed. A buried agricultural soil termed Stratum II was identified

intermittently in all seven trenches. The stratum was apparent as a darkly stained soil, sometimes containing flecks of charcoal. The boundaries were wavy and the distribution was sporadic, across the site.

Based on these results, Thompson and Rosendahl (1992:16) concluded that:

The site (18054) identified within Parcel 7 is an agricultural field complex. It is typical of other field systems identified in the region on earlier projects (Clark 1981, Clark and Kirch 1983). The size of the fields and the construction techniques are consistent with other field complexes identified within the Waimea-Lalamilo agricultural system, specifically, Field Complex 2 as defined by Clark (1981). No samples suitable for age determination were collected during the current project. However, based on similarity to other sites in the region, an age range of AD 1600 to AD 1800 is speculated, a time frame when the usage of the area for agricultural purposes is documented. The further work in the parcel should most definitely include the location of suitable samples for dating to confirm or dispute this estimate so as to better define the settlement and land usage patterns of the region over time.

Overlaying the Thompson and Rosendahl (1992) site location map (see Figure 22) on recent satellite imagery suggests that there are some inaccuracies in their mapping that make it difficult to correlate their findings with those reported by (Haun et al. 2002). In particular, the orientation of the roads and Keanu'i'omanō Stream appear to be skewed, and the distance between the fence on the project boundary and Kawaihae Road may not have been measured in the field. The overlay shown in Figure 22 represents the best effort made without distorting the representation of the archaeological features, as their orientation and length would likely have been directly measured. The discrepancies in the map are undoubtedly what led Haun et al. (2002) to state that they were unable to positively re-identify individual field ridges based on this map.

Despite the potential mapping inaccuracies, the Thompson and Rosendahl (1992) report provides information about conditions within their project area and beneath the field ridges in the immediate vicinity of the current APE. One detail worth noting is that Thompson and Rosendahl (1992) did not observe the field ridges extending all the way to Kawaihae Road (contra Haun et al. 2002). They documented no ditches and only five field ridges, of which two appear to extend into the current APE. Two test trenches appear to have been located near the southern end of the current APE. Trench BT-4 examined a field ridge that might be Feature XO of SIHP 50-10-06-22632. This test trench did not contain anything other than the buried agricultural soil (Stratum II). Test trench BT-5 was located in a field area possibly located between Features XP and XQ. This trench appears to have cut through an area with a relatively higher concentration of cobbles within all layers but no constructed rock subfeatures. That information suggests that the field ridges are composed of accumulated wind-blown soil with no rock construction associated with the fields or ridges, and that artifacts or other cultural material is unlikely to be present beneath the surface.

In 1993, Chiniago, Inc. conducted an inventory survey (Barrera 1993) of a 50-acre property that became the Sandalwood Estates subdivision. During that survey, thirty-three earthen field ridges were recorded as Site 50-10-06-14948 (Figure 23), which Barrera associated with Field Complex 2 of the Waimea Agricultural System. None of these field ridges were noted to extend into the current APE. Ten test trenches were excavated by backhoe to examine cross-sections of the field ridges, sample open space between ridges, and investigate potential archaeological features. Three basin-shaped hearth features and four charcoal deposits were identified. Radiocarbon dates obtained from charcoal recovered from these features were interpreted to indicate that the earliest usage of the fields may have post-dated A.D. 1430, and more certainly after the sixteenth century.

In 1998, Aki Sinoto Consulting conducted an AIS (Sinoto 1998) of the 2.33 acre parcel that contains the staging area at the eastern end of the current APE (see Figure 20). The parcel, situated on a rocky scarp, was almost entirely disturbed by prior land alteration. The portion of the parcel adjacent to Kawaihae Road was found to be levelled and cleared of stones, and a bulldozed road extended along the southern boundary. No archaeological sites or deposits were identified. Subsurface testing near the southern parcel boundary found culturally sterile soils, and a test pit near the northern boundary found culturally sterile gravelly silt loam that was interpreted as fill material. SHPD concurred with the study's findings (Log No. 21228; Doc. No. 9803RC41).



Figure 22. Thompson and Rosendahl (1992:14) project area map overlaid on recent aerial imagery (Google Earth 2019) and current APE in red.



Figure 23. Barrera (1993) site location map overlaid on recent aerial imagery (Google Earth 2019) with current APE indicated in red.

In 2001, Haun & Associates conducted an AIS (Haun et al. 2003) of a roughly 266-acre Department of Hawaiian Home Lands (DHHL) parcel for the DHHL Residential Development at Lālāmilo (Figure 24). Their study area included portions of the current APE but extended more than two kilometers to the west and nearly one kilometer to the south. It also included two smaller areas that were subject to earlier survey and data recovery projects (Hammatt and Borthwick 1986; Hammatt et al. 1988; Hammatt and Shideler 1989). The agricultural features of Site 22632 located in the current APE were documented as part of 76 archaeological sites containing 819 features within the larger project area. Formal feature types identified during fieldwork included terraces, mounds, enclosures, field boundaries, stone walls, irrigation ditches, platforms, walled terraces, C-shapes, U-shapes, modified outcrops, surface hearths, L-shapes, cairns, pond fields, concrete piers, and a small number of isolated objects. Terraces were the most predominant of the identified features, followed by mounds. The sites were interpreted to primarily date to the Precontact Period, with only six possibly dating to the Historic Period. Feature functions varied considerably; however, Haun et al. (2003) noted that features relating to agriculture were the most common in the project area, followed closely by permanent habitation features. More than 300 discrete agricultural fields covering 28.7 hectares (70.93 acres) were identified, along with clusters of mounds of stones cleared from cultivation plots and two probable pondfields that suggested the limited cultivation of wet taro. Nearly three miles of irrigation ditches were documented. The walls that were documented formed large enclosures that appear to have been built to keep cattle out of the fields. Eighteen burials were identified, seven of them within an existing Historic cemetery. The remaining eleven burials were identified during subsurface testing at features thought to have a high potential for yielding human remains. Further work was not recommended for seven of the sites encountered during the study, as they were deemed to have been adequately documented. Data recovery was recommended for the remainder of the sites, excluding the burials and a portion of the large agricultural complex (SIHP 50-10-06-22632), which were recommended to be preserved in place. During the follow-on data recovery for Phase I of the DHHL Residential Development project (Haun et al. 2005), none of the features in the current APE were investigated. Seven terrace and field boundary features (Site 22632 Features HH, HI, HK, HN, HP, AAA, and AAB) located west of the current APE were sectioned with backhoe trenches. Most of the trenches contained no cultural material, and the few faunal remains that were recovered (e.g., rat bone) were not related to subsistence. A trench excavated through Feature AAB (a linear terrace) exposed a conical subfeature containing carbon-stained silt with patches of ash and charcoal fragments that was interpreted to be a hearth. A trench through Feature HI (a linear terrace) exposed a deposit of grayish brown to light brownish gray ash with sparse charcoal fragments, which was also interpreted to be a hearth. A radiocarbon sample was taken from inside these subfeatures, along with samples recovered from soil matrix in other trenches interpreted to be buried agricultural soils. All of these samples appear to have been submitted without wood identification (Haun et al. 2005:Appendix A). Calibrated 2σ calendric age ranges for these samples generally span the mid-1400s to the mid-1600s, although a few samples returned more recent dates (including those taken from Features HK, HP, AAA, and the hearth feature in AAB). In general, these results were interpreted to mean that the terraces and field boundaries ridges dated to the mid-fifteenth century but saw continued use into the early historic period. Subsequent data recovery for Phase II of the DHHL Residential Development project (Escott 2019) focused on habitation features and did not excavate agricultural features such as those found in the current APE.

In 2006, PHRI conducted an AIS (Corbin 2007a) of an approximately 16-acre project area located on the north side of Kawaihae Road to assist planning for the development of a new K-8 Campus at Hawai'i Preparatory Academy. The project area included a small portion of which includes temporary use areas within the current APE (see Figure 20). During the surface survey of the project area, nine sites were identified, none of which were located in the current APE (Figure 25). Three of the sites (SIHP 50-10-06-25867, -25868, and -25870) are historic boundary or ranching walls. The remaining sites include a boulder used as a sharpening station (SIHP 50-10-06-25868), a low *kuaiwi* wall (SIHP 50-10-06-25871), a large mound composed of earth and rocks (SIHP 50-10-06-25872), a buried vault containing a canoe and a human burial (SIHP 50-10-06-25873), and two rectangular ditches with unknown functions (SIHP 50-10-06-25874 and SIHP 50-10-06-25875). All of these sites were assessed to significant under HRS 6E-42 as significant under Criterion d for information content. In addition, Site 25873 was assessed as also significant under Criterion c as an excellent example of a site type and Criterion e for its cultural value. Site 25873 was recommended for preservation. No further archaeological work was recommended for the remaining sites. The Corbin (2007a) AIS was among four other studies (Bonk 1989; Corbin 2005, 2007b; Franklin et al. 1994) conducted for planning and development of the Hawai'i Preparatory Academy campus. These other studies were all located north of the current APE. They documented the presence of Waimea Agricultural System features associated with Field Complex 1, along with historic boundary or ranching walls. Backhoe trenching was used to investigate field ridges and terraces, which resulted in the recovery of radiocarbon samples (identified only as charcoal) from soil layer contexts. The 2σ calibrated date ranges for these samples generally post-dated the mid-17th century, although one sample may have been as old as the mid-fifteenth century.

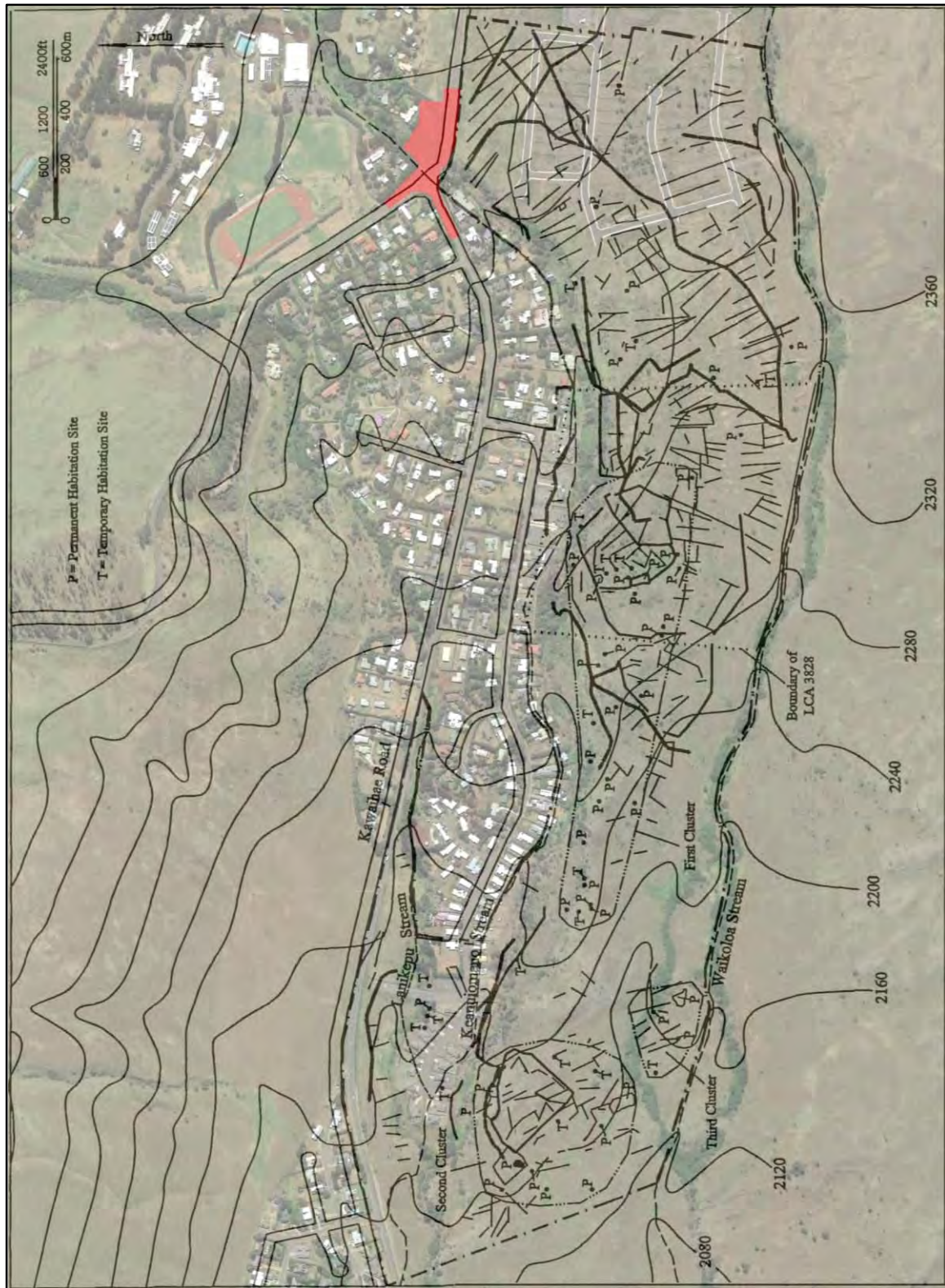


Figure 24. Site 22632 features overlain on recent aerial imagery (Haun et al. 2003) with the current APE indicated in red.



Figure 25. Corbin (2007a) site location map overlaid on recent aerial imagery (Google Earth 2019) with the APE indicated in red.

Hawai'i State Historic Bridge Inventory (MKE and Fung 2013)

Wai'aka Bridge was included in the Hawai'i *State Historic Bridge Inventory and Evaluation* ("SHBIE", MKE and Fung 2013). The bridge was identified as a historic property and determined eligible for the National Register of Historic Places (see Appendix C). The bridge was described as:

The Waiaka Stream Bridge carries Hawaii Belt Road across the Waiaka Stream. This reinforced concrete and masonry bridge is in its original location, is generally in good condition, and its materials remain intact. The bridge has concrete solid panel parapets. This bridge's name which is engraved on the parapet is obscured by three beams. It contains arch piers and the middle support is a double arch. The workmanship of the bridge has not been obscured by addition or repair and retains its historic feeling. The MOA between DOT and the Central Federal Lands considering the bridge for replacement in 2013 was completed. Per the MOA, the bridge is scheduled for replacement and road re-alignment (MKE and Fung 2013:6 - 174)

MKE and Fung (2013:6 - 175) noted that the bridge is eligible for the NRHP under Criterion C "as a good example of a 1930's reinforced concrete bridge that is typical of its period in its use of materials, method of construction, craftsmanship, and design."

While the architectural details of Wai'aka Bridge in the SHBIE are accurate, some details about its location are incorrect (see Appendix C). The data in the SHBIE places the bridge at Milepost "0.53," which appears to have been a typographic error, as the bridge is located at Mile Marker 58.79 as calculated by HDOT. Also, the SHBIE erroneously refers to the portion of Highway 19 within the APE as "Hawai'i Belt Road" instead of Kawaihae Road (Hawaii Statewide G. I. S. Program 2014). Hawai'i Belt Road refers to the former Waimea-Kona Belt Road and later, Māmalahoa Highway, and its associated walls (Langlas et al. 1999; Rechtman et al. 2014). The roadway was constructed between 1916 and 1922, and it served as the main Kona-Waimea connector for 11 years until it was superseded by construction of the Māmalahoa Highway (now Highway 190) in 1933. The Waimea-Kona Belt Road was assigned SIHP 50-10-20-20855 The Hawai'i Belt Road continued eastward from Waimea toward Honoka'a and generally followed the current alignment of Māmalahoa Highway (SIHP 50-10-06-30187) (LaChance et al. 2017). Thus, Wai'aka Bridge is not located on Hawai'i Belt Road, but rather Kawaihae Road.

3. CONSULTATION

The goal of the consultation portion of the Section 106 process is to identify historic properties potentially affected by the Undertaking, assess effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties. Subpart A §800.2 (4) stipulates that the Agency consults with the State Historic Preservation Officer (SHPO), whose responsibility it is to reflect the interest of the State and its citizens in the preservation of their cultural heritage; and Native Hawaiian Organizations (NHOs) that attach religious and cultural significance to historic properties that may be affected by an undertaking. The following paragraphs present the consultation methodology utilized in this study as well as the findings from the consultation process, along with a summary of findings.

CONSULTATION SPECIFIC TO SECTION 106

To meet these requirements, the Agency initiated consultation with the SHPO via letter dated July 21, 2021, requesting information and concurrence with the APE. In a reply letter dated August 18, 2021 (Project No.: 2021PR00849; Submission No.: 2021PR00849.001; Doc No.: 2108SH06), the Deputy State Historic Preservation Officer stated no objections to the APE as defined and recommended the Agency expand their search for NHOs by referring to the NHO list provided by the U.S. Department of the Interior (DOI) as well as contacting civic clubs and historic preservation interest groups.

The agency sent requests via consultation letters and maps of the current APE via U.S. postal service and email to the government agencies, NHOs, and interested parties listed in Table 4. Some of these NHOs were identified using the U.S. DOI's NHO list (as updated October 14, 2021) that is publicly accessible on the DOI website. Other organizations not listed on the DOI list were identified based on their geographical location and anticipated knowledge of historic properties in the APE. The letters requesting consultation included a detailed description of the Undertaking, a request for comment on the APE, and a request for identification of historic properties within the APE, maps showing the location of the APE, as well as the appropriate contact information.

ADDITIONAL CONSULTATION DURING THE CHAPTER 343, HRS ENVIRONMENTAL ASSESSMENT

In addition to the Section 106 consultation efforts conducted by the Agency, ASM Affiliates consulted with knowledgeable individuals and stakeholders during the preparation of a Cultural Impact Assessment (Ishihara and Rechtman 2022) that was written to accompany the Chapter 343, Hawai'i Revised Statutes Environmental Assessment for the Undertaking (DOT 2022). To identify individuals knowledgeable about past and ongoing customary and traditional cultural practices associated with the current project area, efforts were made by ASM staff to contact sixteen individuals and/or organizations via mail and email on August 18, 2021. Of the sixteen individuals and organizations contacted, five responses were received from Dr. Billy Bergin, Leningrad Elarionoff, Ku'ulei Keakealani, Nicole Lui, and Barbara Robertson. Dr. Bergin and Ms. Keakealani were interviewed over the telephone. A public notice was also submitted to the Office of Hawaiian Affairs (OHA) on August 11, 2021, for their monthly newspaper, Ka Wai Ola. The notice was published in the September 2021 edition of Ka Wai Ola and a copy of the notice has been included in Appendix A of this report.

COMMENTS RECEIVED DURING CONSULTATION

The followings recipients (Table 4) were asked to review the proposed Undertaking, comment on the APE, and to share information regarding historical and cultural sites within the APE. Note that a number of property owners for surrounding parcels were included in the Section 106 Consultation List, though they were not identified as potential Section 106 consulting parties. Recipients were asked to respond within 30 days from notice. This list also includes individuals with whom ASM Affiliates consulted during the preparation of the CIA. Copies of comment letters and emails are reproduced in Appendix D. Summaries of responses received and interviews conducted by ASM Affiliates are presented below.

1 **Table 4. Agencies, Native Hawaiian Organizations, and interested parties contacted.**

<i>Name / Organization</i>	<i>106 consultation letter recipient?</i>	<i>Response Date (if any)</i>	<i>Comment relevant to Section 106?</i>	<i>Requested Consulting Party status?</i>
Aha Wahine	Yes	n/a		
Anna Ranch Heritage Center	Yes	n/a		
Association of Hawaiian Civic Clubs	Yes	n/a		
Association of Hawaiians for Homestead Lands	Yes	n/a		
Au Puni O Hawaii	Yes	n/a		
Council for Native Hawaiian Advancement	Yes	n/a		
E Mau Na Ala Hele	Yes	n/a		
George K. Cypher Ohana	Yes	n/a		
Hawaii Island Burial Council	Yes	n/a		
Hawaii Preparatory Academy	Yes	2022-03-03	Yes	Yes
Hawaiian Civic Club of Hilo	Yes	n/a		
Hawaiian Community Assets, Inc.	Yes	n/a		
Historic Hawaii Foundation	Yes	n/a		
Hui Ho‘oniho	Yes	n/a		
Hui Huliau	Yes	n/a		
Hui Kakoo Aina Ho‘opulapula	Yes	n/a		
Imua Hawaii	Yes	n/a		
Ka Haka ‘Ula O Ke‘elikōlani, University of Hawaii Hilo, College of Hawaiian Language Larry Kimura	Yes	2022-04-01	Yes	No
KAHEA-Hawaiian Alliance	Yes	n/a		
Kamehameha Schools	Yes	n/a		
Kanu o ka Aina Learning Ohana	Yes	n/a		
Kingdom of Hawai‘i	Yes	n/a		
Kohala Watershed Partnership	Yes	n/a		
Ko‘olau Foundation	Yes	n/a		
Kua‘aina Ulu ‘Auamo	Yes	n/a		
Na Koa Ikaika Ka Lahui Hawaii	Yes	n/a		
Na Ku‘auhau ‘o Kahiwakaneikopolei	Yes	n/a		
Na Kupuna Moku O Keawe	Yes	n/a		
Nanakuli Housing Corporation	Yes	n/a		
National Trust for Historic Preservation	Yes	n/a		
Native Hawaiian Economic Alliance	Yes	n/a		
Paniolo Preservation Society	Yes	n/a		
Papa Ola Lokahi	Yes	n/a		
Pi‘ihonua Hawaiian Homestead Community Association	Yes	n/a		
Partners in Development Foundation	Yes	n/a		
Royal Hawaiian Academy of Traditional Arts	Yes	n/a		
South Kohala Hawaiian Civic Club	Yes	n/a		
South Kohala Traffic Safety Committee	Yes	n/a		
Sovereign Council of the Hawaiian Homestead Associations	Yes	n/a		
The I Mua Group	Yes	n/a		
The Makua Group	Yes	n/a		
University of Hawaii at Manoa	Yes	n/a		
Waimea Community Association	Yes	n/a		
Waimea Hawaiian Civic Club	Yes	n/a		

(Table continues)

1 **Table 4. Continued.**

<i>Name / Organization</i>	<i>106 consultation letter recipient?</i>	<i>Response Date (if any)</i>	<i>Comment relevant to Section 106?</i>	<i>Requested Consulting Party status?</i>
Patricia Bergin and William Bergin	Yes	Consulted on 2021-8-19	Yes	No
Leningrad Elarionoff	Yes	2022-02-10 2022-02-13	Yes	No
Dr. Lilikalā Kame‘eleihiwa	Yes	n/a		
Ku‘ulei Keakealani	Yes	Consulted on 2021-8-30 and 2021-10-27	Yes	No
Nicole Keaka Lui	Yes	2021-8-30; Consulted on 2022-03-01	Yes	No
Momi Naughton. Ph.D.	Yes	2022-02-14; Consulted on 2022-7-13	Yes	No
Barbara Robertson	No	Consulted on 2021-10-29; <i>additional consultation pending</i>	Yes	No
<u>State and County Agencies</u>				
State of Hawaii, Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD)	Yes	2022-03-07	Yes	Yes
DLNR Aha Moku Advisory Committee	Yes	n/a		
State of Hawaii, Department of Hawaiian Home Lands	Yes	2022-02-23	No	No
State of Hawaii, Office of Hawaiian Affairs	Yes	n/a		
Representative David Tarnas, State Legislature, House District 7	Yes	2022-02-11	No	No
County Councilmember Herbert ‘Tim’ Richards III, District 9	Yes	n/a		
County of Hawaii Planning Department	Yes	n/a		
Hawaii County Cultural Resources Commission, Kamuela Plunkett,	Yes	2022-03-24	No ¹	No
<u>Private property owners and Community members</u>				
Laurie Ainslie	Yes	n/a		
Michael Aronowitz / Vivienne Aronowitz	Yes	2022-03-06 2022-03-07	No	Yes
John Barton	Yes	n/a		
Marion Barton	Yes	n/a		
Big Buck Trust (via Carlsmith Ball LLP)	Yes	2022-03-04	Yes	Yes
Carol Buck	Yes	n/a		
Fred Cachola	Yes	n/a		
Charles Campbell / Campbell Family Trust	Yes	2022-02-11	No	No
Chuck Clarke	Yes	n/a		

(Table continues)

2

Table 4. Continued.

<i>Name / Organization</i>	<i>106 consultation letter recipient?</i>	<i>Response Date (if any)</i>	<i>Comment relevant to Section 106?</i>	<i>Requested Consulting Party status?</i>
Gillian Culff	Yes	n/a		
David and Aimee Doi	Yes	2022-02-14	No	No
Ross Fulmer	Yes	n/a		
David Gomes	Yes	n/a		
Mike Hannah	Yes	n/a		
T. J. Kalaniopio	Yes	n/a		
Steve Kittell	Yes	n/a		
Wayne Kuwaye	Yes	n/a		
Clemson Lam	Yes	2022-02-11	No	No
Thomas Mar	undeliverable	n/a		
Michele Medeiros	Yes	n/a		
Joyce O'Connor	Yes	n/a		
Peter, Linda, Andrew, Lauren Paisley	Yes	n/a		
Eliza Pond, Waiaka Neighborhood Watch	No	2022-03-07 (phone call)	No	No
William Pratt	Yes	n/a		
Barrie Rose	Yes	n/a		
J. William Sanborn	Yes	n/a		
Aaron Stene	Yes	2022-02-13	No	No
Fran Tabor	Yes	n/a		
Sherman Warner	Yes	n/a		
Kathryn Wiese	Yes	n/a		
Margaret Wille	Yes	n/a		
Sinclair White	Yes	n/a		
Waimea Gardens	Yes	n/a		

¹Deferred comments until proponent's staff or contractors are ready to make a formal presentation at an official CRC meeting.

(End of table)

State Historic Preservation Officer

Section 106 consultation was initiated via letter dated July 21, 2021. The SHPO responded on August 18, 2021 via letter (Project No. 2021PR00849; Doc. No. 2108SH06). In this response, the SHPO stated no objections to the APE as it was defined, made recommendations for potential consulting parties, and noted the presence of two historic properties (SIHP 50-10-06-19648 and 50-10-06-19649) located outside of the APE, approximately 200 meters slightly northeast of TMK: (3) 6-5-001:015. In a letter dated February 3, 2022, HDOT continued consultation with the SHPO, requested comments on the APE as it was defined at that time, and requested information regarding historic and cultural sites, as well as persons or organizations with cultural affiliates to the project area. The SHPO responded by letter on March 7, 2022, (Project No. 2021PR00849; Doc. No. 2203SH05). In this response, the SHPO stated no objection to the APE as it was described at that time. The SHPO, however, noted that there were discrepancies between information about the bridge presented in the *State Historic Bridge Inventory and Evaluation* (MKE and Fung 2013) and HDOT's letter. The SHPO also noted that "Hawai'i Belt Road is considered a historic property eligible for listing in the NRHP." HDOT responded on March 7, 2022, with information clarifying the names of the bridge, stream, and location and the errors in the SHBIE (see Page 48 of this report; HICRIS Submittal 2021PR00849.003). On March 8, 2023, the SHPO acknowledged HDOT's clarification and requested the Agency's assessment of how the proposed undertaking will, or will not, impact the character defining features of the Wai'aka Stream Bridge and Hawai'i Belt Road (HICRIS Submittal 2021PR00849.004). These concerns are addressed in the findings and conclusions of this report.

Hawai'i Preparatory Academy

Fred Wawner, representing Hawai'i Preparatory Academy (HPA), responded via email on March 3, 2022. Mr. Wawner stated that HPA knew of several people with information regarding burial sites, building foundations, and

other important artifacts. He noted the presence of a historical rock wall enclosure, homestead with gravesites, possible burials in areas, possible historical sites, caves, and the former location of the 1860 Catholic church on the HPA parcel near the APE.

DOT response:

DOT took this suggestion under advisement, but deemed that no further communication with Mr. Wawner was necessary. Additional consultation regarding historical rock wall enclosure, homestead with gravesites, possible burials in areas, possible historical sites, caves, and the former location of the 1860 Catholic church on the HPA parcel was conducted with other parties. See summaries of consultation with Auntie Barbara Robertson, Kuulei Keakealani, Nicole Lui, and Momi Naughton.

Ka Haka ‘Ula O Ke‘elikōlani (University of Hawaii Hilo, College of Hawaiian Language)/Larry Kimura

Mr. Larry Kimura responded via email dated April 1, 2022. He expressed support of the project and stated, “The only concern I have is the location of this site can likely uncover archaeological remains of earlier human habitation or use that can be contributive to Waimea’s cultural history and that perhaps there will be present qualified personnel to be watchful for such finds..”

DOT response:

DOT took this suggestion under advisement, but deemed that no further communication with Mr. Kimura was necessary.

Dr. Billy Bergin

Dr. Billy Bergin spoke to ASM Affiliates staff, Ms. Nicole Ishihara via phone on August 19, 2021, and in March 2022 over a series of email correspondence for the Section 106 consultation regarding the proposed Wai‘aka Stream Bridge replacement and road realignment project. Dr. Bergin was asked about his connection to the APE, if he knew of any past and/or ongoing traditional cultural practices within or in the vicinity of the proposed APE, and if he had any concerns about the project or could offer mitigation measures.

Born in Laupāhoehoe in 1940, Dr. Bergin grew up in Hāmākua and Hilo. From the age of eight years old until he left for college, he began to spend more time working at the ranches that surround Mauna Kea. By the late 1950s, he had worked at most of the ranches around the island as a summer employee but continued to reside at Kūhiō Village in Waimea. In 1958, he left for Kansas to attend veterinary medical school and returned a decade later to practice veterinary medicine in Kona before moving back to Waimea where he served as Parker Ranch’s veterinarian for twenty-five years. He also authored four books on the history of Parker Ranch.

As a resident of Waimea for over fifty years, Dr. Bergin has used the Wai‘aka Stream Bridge and roadway many times as a mode of transportation. The bridge was used extensively to visit family and places in the Waimea and Kohala region as he has a passion for learning the early history of the area. Concerning the APE, Dr. Bergin shared three places of interest in the vicinity: the location of the first Catholic church in Waimea; the evolution of the Hawai‘i Preparatory Academy (HPA); and the history of the Kamuela Museum.

Dr. Bergin shared that the first Catholic church in Waimea was built in the vicinity of the APE with assistance from Saint Damien, also known as Father Damien, who is known for his missionary efforts with the leper colony at Kalaupapa, Moloka‘i. Before his work on Moloka‘i, he spent several years on Hawai‘i Island, which included time spent in the Kohala District. After Dr. Bergin had a conversation with resident Barbara Robertson whose family has a long-standing history in the area, Ms. Robertson believes the former Catholic church once stood within the HPA property (outside of the APE boundaries). She also mentioned that HPA built homes for their staff near Kawaihae Road and believes the church was either where the staff homes were or in the vicinity of the staff homes.

According to Dr. Bergin, the HPA campus is located to the north of the APE on land once owned by Parker Ranch. He stated that the school opened to the public in 1949 and was originally called Hawai‘i Episcopal Academy and once occupied the grounds of St. James Episcopal Church on Kawaihae Road, east of the current APE. He added that when they acquired the current property, it became a place of significant expansion for the campus with the school eventually changing its name and becoming non-denominational.

Dr. Bergin also discussed Kamuela Museum stands, which at the time of his comment was located within the APE boundaries and immediately southwest of the Wai‘aka Stream Bridge. Dr. Bergin shared that the Solomon family built the museum—a longtime Kohala family—and described the museum as a regional museum underscored by the

1 ranching industry. He recalled the museum consisting of several rooms with an “eclectic collection” of Hawaiiana
2 with “some modern things.” For example, he recalled a 6-inch cord from a parachute being on display that was from
3 Camp Tarawa as well as saddles and saddle parts.

4 Regarding cultural sites, Dr. Bergin knows of the *pōhaku* (stone, rock) called Manaua being in the vicinity of the
5 APE. Dr. Bergin shared that Parker Ranch staff would trek to the stone to leave offerings and conduct blessings,
6 especially during droughts. He pointed out that Waimea is currently in a drought and that a recent brushfire in the
7 region destroyed approximately 40,000-acres. In the past, he recalled elders in the area describing “The Great Fire,”
8 a large fire that occurred in the 1800s, which destroyed vegetation along the Mauna Kea mountains and forest reserve,
9 but also the forested plains below. He pointed out that the devastation was so intense, that the trees never grew back
10 on the plains. Dr. Bergin suggested speaking to Ku‘ulei Keakealani, Pua Case, and/or Ms. Robertson for more details
11 on Manaua.

12 Concerning the historic properties within the APE including Site 22632 (large agricultural complex with 700-
13 features), Site 23312 (irrigation ditch), Site 23313 (concrete foundation within Keanuiamano Stream), and Site 29221
14 (Wai‘aka Bridge), Dr. Bergin is familiar with all of them as he has been in the area via horseback. He pointed out that
15 Site 22632, Site 23312, and Site 23313 are approximately one to two miles *makai* of the APE.

16 Dr. Bergin pointed out that portions of the Kohala Mountain Road alignment, which are outside of the APE, were
17 once an ancient foot trail that was converted to a horse and cattle trail and later into a wagon trail. As a resident of
18 Lālāmilo, he can see remnants of the carriage road from his home. He added that the Kohala Mountain Road is
19 considered a lifeline for residents who live further north such as Hāwī and Kapa‘au.

20 He also shared that if you look at the slope of the Kohala Mountains at the brow above Wai‘aka, the flat façade
21 is known as Haleaha and from the brow descending *makai* were taro *lo‘i* that lead to the Waimea field system. The
22 three waterways—Waikoloa, Wai‘aka, and Keanu‘i‘omanō—that traverse the Waimea landscape were known to have
23 been intensively farmed. Additionally, Waimea was known for its dryland agriculture in comparison to Waipi‘o Valley
24 which was rich in wetland agriculture. When asked if the Wai‘aka stream was intermittent or perennial, he considered
25 it to be perennial because during severe droughts there might be some water in it. He also pointed out that during the
26 1960s, a comprehensive Federal project related to the Mauna Kea Soil Conservation District diverted a part of the
27 Waikoloa Stream for flood control measures.

28 *DOT response:*

29 Additional consultation and research into the Wai‘aka Catholic Church was conducted (see summaries of consultation
30 with Aunty Barbara Robertson, Kuulei Keakealani, Nicole Lui, and Momi Naughton). The Kamuela Museum and
31 surrounding parcel has been removed from the APE. The *pōhaku* Manaua is not located in the APE. Features of the
32 Waimea Field System have been documented to the south of the APE (Haun et al. 2003; Thompson and Rosendahl
33 1992) and to the north of the APE (Athens et al. 1981; Corbin 2005, 2007b; Franklin et al. 1994). The archaeological
34 fieldwork conducted for the current study confirmed that none of these features are located within the APE (see
35 Chapter 5 below).

36 **Leningrad Elarionoff**

37 The late Mr. Leningrad Elarionoff responded to HDOT’s Section 106 consultation letter on February 10, 2022, and
38 February 13, 2022. ASM Affiliates also consulted with Mr. Elarionoff in August 2021 and March 2022 during the
39 preparation of the Cultural Impact Assessment (Ishihara and Rechtman 2022). He was asked about his connection to
40 Waimea; knowledge of historic properties found within the APE; if he had any information of any other sites and/or
41 pertinent information outside of the APE that needed to be addressed; and if he had any recommendations, concerns,
42 and/or mitigation measures.

43 Mr. Leningrad Elarionoff was born and raised in Ka‘ū. His mothers side of the family was from Waimea, while
44 his father came from Russia. He attended college in the mainland then returned with hopes to live and work in Kona.
45 Fortunately, there were no job openings in Kona, so he made his way to Waimea where he worked as a policeman and
46 later served as a County Councilman. Now retired, he spends much of his time improving his community of Waimea
47 and volunteering.

48 He began the interview by defining the word Waimea—*wai* meaning “water” and *mea* which is defined as
49 “something”—or “something in the water.” Mr. Elarionoff explained that the translation refers to the yellow tint in
50 the water supply which comes from the *hāpu‘u* (*Cibotium splendens*) fern spores. He described how the rain passes
51 through the *hāpu‘u* forests before moving down the Kohala Mountains and is then collected in a reservoir, processed
52 through a filtration plant then sent out for potable use. He noted that only within the last sixty years has a water

filtration system been installed in Waimea to rid the water of its yellow tint. He added that some of the long-time residents of the area would wrap a Bull Durham smoking tobacco bag on the end of their faucet to filter the water. He also defined the word Wai‘aka, which translates to “shadow water” or “shadow brook” and clarified that “the Hawaiian language often name[s] things backwards from the English language” but wanted to point out that the word “brook” is equal to water or stream.

Regarding the historic properties found within the APE, he recalled walking through the large agricultural complex (SIHP 50-10-06-22632) south of the APE years ago where he gathered sweet potato shoots. He mentioned that the complex is south-southwest of the APE. Other than the complex, Mr. Elarionoff could not recall SIHP 50-10-06-23312 (irrigation ditch, no longer in the APE) or SIHP 50-10-06-23313 (concrete foundation within Keanuimano Stream).

Concerning sites and/or information outside of the APE, Mr. Elarionoff shared that he knows of a burial cave with a canoe (SIHP 50-10-06-25873) located to the north of Kawaihae Road outside of the APE. While he was a policeman, he was tasked to warn HPA students to not enter the cave. It was to his understanding that the cave was later closed and sealed. During the late 1960s to early 1970s, he served on the Waimea Traffic Committee with the late *kupuna*, Auntie Anna Perry Fisk, who looked forward to the replacement and completion of the Wai‘aka Bridge. Mr. Elarionoff expressed frustration regarding the Wai‘aka Stream Bridge Replacement and Realignment project as it has been an issue for many years that has not been addressed.

DOT response:

The burial cave containing the canoe (SIHP 50-10-06-25873) mentioned by the late Mr. Elarionoff is not located in the APE (see Figure 25). The large agricultural complex (SIHP 50-10-06-22632) is located south of the APE (see Figures 21, 22 and 24). DOT took this information under advisement but deemed no further communication was necessary with Mr. Elarionoff.

Ku‘ulei Keakealani

ASM Affiliates interviewed Ku‘ulei Keakealani via phone on August 30, 2021. Ms. Keakealani was asked about her connection to the APE; traditional and/or historical cultural practices that occur within and in the vicinity of the project area; and if she had any further recommendations, mitigation, and/or referrals.

Born in Kealahou at Kona Hospital, Ms. Keakealani was raised at Pu‘uanahulu and Waimea. Her father was a cowboy for Parker Ranch, often spending the weekdays in Waimea and weekends and school breaks at Pu‘uanahulu with her grandparents. She considers both places her *‘āina kūpuna* (ancestral lands).

When asked about any ongoing traditional and/or historical cultural practices within or in the vicinity of the Wai‘aka Stream Bridge APE, Ms. Keakealani confirmed that cultural practices still occur within and along the entire Wai‘aka Stream corridor. These traditional cultural practices include ceremonies along the stream and ceremonial baths within the stream. For *hula* (traditional dance) practitioners, *pōhaku* (stones) are gathered from the streambed then *mele* (song) is composed that honors Waimea and the waters of that *wahi* (place). When the *mele* is completed, the *pōhaku* are returned to Wai‘aka Stream. When asked if *imu* (underground oven) stones were gathered there as well, she stated that the *pōhaku* found within Wai‘aka Stream are too big and *imu* stones are gathered elsewhere. Ms. Keakealani was asked if she knows of any plants or animals that were gathered from Wai‘aka Stream. She stated that she has not seen anything personally but would not rule out the possibility of gathering such resources. She recalled once attempting to reestablish the *‘ōpae* (general name for shrimp) population *mauka* (towards the mountain) of Wai‘aka Stream but they did not take.

Ms. Keakealani retold a traditional account of a *mo‘o wahine* (female water spirit) named Manaua who resides throughout the Wai‘aka Stream corridor. She shared that the source of this account is from the late Mary Kalani Ka‘apuni Phillips whom she is directly related to. According to Ms. Keakealani, the story of Manaua is linked to a *lawai‘a manu* (bird catcher) story called “The Bird Fisherman of Waimea.” She pointed out that the traditional practice of *lawai‘a manu* in the area no longer exists due to the fact that there are restrictions around the *kōlea* (Pacific golden plover; *Pluvialis dominica*)--the bird primarily hunted, caught, and eaten. She also mentioned that Manaua is the name of a *pōhaku* located in Waimea and many cultural practices still occur at that particular site. These practices include but are not limited to water ceremonies that request and show gratitude for rain; *ha‘i mo‘olelo* (storytelling) in place; and *hula* and *mele* offerings.

Concerning water sources, Ms. Keakealani pointed out that many of the traditional settlement patterns in Waimea were prominent along the stream and riverbanks. She felt this made sense for people to live close to their water source as it is vital to our living. An important feature she pointed out was that the stream changes its name based on the land

section it is in. According to Ms. Keakealani, as the water flows down *makai* (towards the ocean) the stream is called Kohakohau then Waiauia, Wai‘aka, Keanuimano (also known as Keanu‘i‘omanō), and Wai‘ula‘ula before it drains into the ocean. She has walked most of the tributary but not to the *po‘owai* (headwaters) located in the Kohala Mountains.

In October 2021, Ms. Keakealani contacted ASM Affiliates and shared her knowledge of burials in the vicinity of the Wai‘aka Stream Bridge APE. After she had spoken with her aunt, Barbara Robertson, who lives near the APE, she mentioned a graveyard in the southeastern corner of the Hawai‘i Preparatory Academy (HPA) property.

Regarding cultural impacts, Ms. Keakealani does not believe there would be any impacts to cultural practices at or in the vicinity of the Wai‘aka Bridge as there are easier access points to the stream. She pointed out that they exercise their cultural practices either much more *mauka* or *makai* from the Wai‘aka Stream Bridge project area. Regarding recommendations, Ms. Keakealani does not want the stream altered in any way, which also includes the *pōhaku* of the stream, streambanks, and especially the water as it is *waiola a Kāne*—the lifegiving waters of Kāne.

DOT response:

At the time of the initial consultation with Ms. Keakealani, the map depicting the APE that was included with DOT’s consultation letter appeared to include portions of the Hawai‘i Preparatory Academy campus where the graveyard she described is located. This graveyard is known to be on the other side of a rock wall that is located outside of the actual APE boundary. A thorough visual inspection of the APE was conducted (see Chapter 5 below), which confirmed that the graveyard is not located within the APE. The rain rock Mana Ua is located outside of the APE.

Nicole Keaka Lui

Ms. Nicole Keaka Lui responded to ASM Affiliates’ request to consult during the preparation of the Cultural Impact Assessment (Ishihara and Rechtman 2022) via email on August 30, 2021. She was asked about her connection to the APE; if she had knowledge of any sites found within the APE; knowledge of any other sites and/or stories outside of the APE; and if she had any concerns, recommendations, and/or mitigation measures she wanted to share

Born in 1962, Ms. Lui has resided in Kona since the age of four in the district of North Kona in the sub-region of Kekaha-wai-ole-o-na-Kona. Her connection to the Wai‘aka Stream Bridge APE is via her great-granduncle Kehau Solomon, which she pointed out “this is the Alapia [Arabian] Solomon not the Hawaiian Kolomana ‘ohana who later changed their name to Solomon.” She continued to explain that her Uncle Kehau built the Kamuela Museum (located adjacent to the western end of the APE) with his own two hands including the home and the wall that surrounds the property. The work done by her Uncle Kehau included planting the trees around the property with his wife, Hennrietta Waipa, who was a great-granddaughter of Samuel Parker, a major landowner, and businessman who was an heir to Parker Ranch. In addition to being related to the Solomon ‘ohana, Ms. Lui is also connected to the Stevens, Purdys, Raymonds, Bells, Lincolns, and Lindseys—families who hail from the Waimea-Kohala region for generations. Ms. Lui added that the Kamuela Museum is now owned by Roseanne Barr. She recalled that when visiting her Uncle, they would often go to the stream where they would put their feet in the water to cool off and lounge on the streambank.

When asked if she knew of the historic properties in the APE, including Site 23313 (concrete foundation within Keanuimano Stream) and Site 29221 (Wai‘aka Bridge), she did not know of the sites and could not provide feedback on them. She also did not have information to share about Site 22632, the large agriculture complex located south of the APE on DHHL land, or Site 23312, the irrigation ditch located north of the APE recorded by (Haun et al. 2002). She did share the *mo‘olelo* of a rain rock located east of the APE near the Jacaranda Inn that was guarded by a *mo‘o*. Both the rock and *mo‘o* are known as Mana Ua, Ms. Lui stated that Pua Case and her family continue as the caretakers of the rain rock of Mana Ua.

Ms. Lui also responded to the DOT’s Section 106 consultation letter on March 1, 2022. In her response, she described her genealogical connections to South Kohala and her family’s connection to the Kamuela Museum (located on a parcel that is adjacent to the APE). She stated that she was (at the time) a commissioner on the Cultural Resources Commission and recommended that DOT consult with them. She also stated:

I am also concerned that TMK: (3) 6-6-001:011 DHHL is deemed to be the staging area. Was an AIS ever done on the property? Has it been previously impacted by machinery or is it pasture land? This is Hawaiian land. I know *makai* of that area are burials and a burial cemetery for the Vredenburg ohana. Uncle Keawe Vredenburg is a descendant of those burials. There is also *makai* side a reinternment site. We reinterred iwi kupuna with Halealoha Ayau. Halealoha was instrumental in forming some of the laws that govern inadvertent burials and previously known burials. I am just

stating this because I just want to make sure that the property is in the clear and we make a consorted effort to do it right the first time,

DOT response:

When consultation with Ms. Lui was begun, the APE included a portion of the parcel containing the Kamuela Museum; since that time, the APE has been adjusted and no longer includes any portion of that parcel or the Kamuela Museum (see Figures 1 and 4, see response to Big Buck Trust on Page 59). The rain rock Mana Ua is located outside of the APE. The Department of Hawaiian Home Lands parcel (TMK: (3) 6-6-001:011) that is proposed to be a staging area was included in an AIS conducted by Sinoto (1998), who reported no archaeological features or cultural material on the previously disturbed parcel. Parcel 011 was also visually inspected during the current study by ASM Affiliates, who reached the same conclusion (see Chapter 5 below). The Vredenburg family cemetery discussed by Ms. Lui is located makai (west) of the APE in the DHHL Residential Development at Lālāmilo project area (see Haun et al. 2003).

Momi Naughton, Ph.D.

Momi Naughton, Ph.D., responded to a request for consultation via email on February 14, 2022. A researcher familiar with the history of Wai‘aka, made general observations about the historic importance of the area, stating, “With the stream and multiple ‘auwai in the Wai‘aka region, it is obvious that it was an area where agricultural [sic] thrived in ancient times.... It does not appear that there were heiau in the immediate region in question.” Dr. Naughton also identified a historic home, the Edwin Lindsey (1883-1952) house, sometimes called the William (1848-1905) and Kaluna Lindsey home, that she understood to be in the vicinity of the project. Additionally, she stated that the former site of the St. John the Evangelist Catholic Church may also be in the vicinity of the project. The St. John the Evangelist Catholic Church is associated with Father Damien, who is known for going to Kalaupapa, Molokai to minister to Hansen’s Disease patients. The following is an abridged version of Dr. Naughton’s comments regarding this potentially significant historic site:

However, my main concern about this section of the Wai‘aka area has to do with it being the possible site of the Catholic Church, St. John the Evangelist.... One of the things Father Damien was noted for while serving in the Kohala and Hāmākua districts, was building churches. A number of the churches built by Damien were simple “grass huts” but he did build more substantial ones. One such church, said to be made out of wood, was constructed at Wai‘aka.... In 1868, Damien had a revelation to build a church in Wai‘aka and dedicated it to St. John the Evangelist. The exact location of this church has not been discovered to my knowledge; however, one person has indicated to me that it was in the area of the maintenance facility for Hawai‘i Preparatory Academy at the lower end of the campus. There is a 1884 map that has the notation of “Cath Ch” on it that seems to indicate this area as well. Using this map to locate the church is tricky as there is what appears to be a road that is actually a trail going up towards the Kohala Road. It’s best to follow the contour of the stream on the map and match it with current maps. I’m attaching a portion of the 1884 map that we used in an exhibit.

St. John the Evangelist Church in Wai‘aka burned down in 1900 and was rebuilt in 1916. In 1936 the church was relocated to the area where the Catholic Church now stands across from the Anuenue Playground on Kawaihae Road.... Although there is no church standing in this area, there may be foundations and burials associated with St. John and Evangelist Church in the TMK (3)6-5-001-033 portion that might be impacted. In walking through the area next to the maintenance facility, there are old stone walls and other features of interest. If this is the church site, there could well be burials too. I assume that some archaeology will be conducted or at least monitors will be on hand during construction.

DOT response:

On July 13, 2022, Benjamin Barna, Ph.D., met with Momi Naughton, Ph. D. at the Honoka‘a Heritage Center to discuss her comments on the project. Topics discussed included the locations of known and potential historic properties near the APE, including the Edwin Lindsey House, the St. John the Evangelist Church site, and family grave sites known to be on the Hawai‘i Preparatory Campus. Several historic maps and photographs were examined during the conversation. The use of archaeological monitoring during construction was discussed, and Dr. Naughton agreed that doing so would be appropriate. The conversation also included discussions of place names, families with historical ties to Waimea, and other historic buildings and sites in the Waimea area.

Information obtained during this conversation, the documentary research, and other consultation conducted during the current study confirms that the Edwin Lindsay House is located outside of the APE within the Lālāmilo Subdivision. During the interview with Barbara Robertson (see below), additional information concerning the church and family graves was obtained that suggests that they are most likely located north of the APE. The location shown in Figure 15 is probably west of the actual site, which was described as “enclosed by a stone wall” by Barbara Robertson (see below); the location of the church as it was rebuilt in 1916 was described as “outside of the stone wall” and this is also likely located north of the APE.

Barbara Robertson

ASM Affiliates contacted Aunty Barbara Robertson after she was referred by Dr. Billy Bergin and her niece, Ku‘ulei Keakealani (see interview summaries above). She was formally interviewed for the Wai‘aka Bridge project on January 26, 2022. She was asked about her connection to the project area; knowledge of any traditional cultural practices that occurred or are still occurring within or in the vicinity of the project area; and if she had any concerns, recommendations, and/or mitigation to offer.

Aunty Barbara was born in Waikī‘i, Hawai‘i in November 1936. She currently resides in Wai‘aka on a long-standing family property located near the project area. Her connection to the project area is the family property and her family’s presence in the Waimea area that goes back several generations. She shared that her great-great-grandfather owned his own business based in Waimea where he worked as a transporter, often taking his wagon and horses to Kawaihae Harbor to pick up parcels for residents and delivering it to them off for a fee. When asked if the family property was a *kuleana* lot, she replied “no” and explained that her grandfather bought the 15-acre property where her great-great-grandfather formerly resided in Waimea. A memory she shared was her late mother recalling when she attended school in Waimea and was scared to walk there due to wild cattle roaming freely as there were no fences. During this time, the Wai‘aka Stream Bridge was also made of wood.

When asked if she knew of any traditional cultural practices still occurring within or in the vicinity of the Wai‘aka Bridge project area, Aunty Barbara emphasized the importance of the stream and how it was used for daily household chores and agricultural purposes. She recalled the women in the neighborhood taking clothes to the stream, which were scrubbed against the large rocks then dried on top. The stream was also used to bathe in. Aunty Barbara explained to make things easier for grandma by not hauling clothes to the stream daily, a culvert was installed and ran through the Lindsey property and then to their family property. The water was diverted for her grandmother to wash clothes daily at home and for their family’s *lo‘i*. She recalled her grandmother having a washing stone, but by the time they moved back to the family property, it had been stolen. When asked if the culvert to their home still exists, she replied that due to water taxes and the Lindsey’s subdividing their property, the culvert no longer exists. Regarding aquaculture within Wai‘aka Stream, Aunty Barbara recalled ‘*o‘opu* (general name for *Eleotridae*, *Gobiidae*, and *Blennidae*) and ‘*ōpae* (general name for shrimp) being plentiful at one time.

Regarding burials within or in the vicinity of the project area, Aunty Barbara pointed out that Father Damien, a Belgian priest who is famous for his work with leprosy patients at Kalaupapa, Moloka‘i, built a Catholic church where the maintenance building stands today, located in the southeastern corner of the Hawai‘i Preparatory Academy (HPA) property. She recalled the Catholic church and a graveyard being enclosed by a stone wall. The church burned down, and another structure was built to replace it, however, it was now on the outside of the stone wall. The church was later moved further east on Kawaihae Road across from Waimea Park. Aunty Barbara shared that her grandmother, along with all her grandmother’s children, was baptized Catholic. Her great-grandmother and grandmother are buried at the former site of the Catholic church where HPA’s maintenance building stands today. She recalled the graves not having any markers, but was told that when the area was cleaned at one time, some grave markers were found. Another place she knows of with burials is a small cave located near the Wai‘aka Stream bank within the HPA property. She added that this cave has been sealed up and is inaccessible today.

When asked if she knew of any *mo‘olelo* or *wahi pana* related to the Wai‘aka area, Aunty Barbara shared that her late mother shared a story of a “water nymph” who lived in the stream. Unable to recall the details of the story, Aunty Barbara deferred to Ku‘ulei Keakealani who was told the story by her mother. She added that a painting of this character can be found on a mural outside the Kahilu Theatre.

Regarding cultural impacts, concerns, recommendations, and mitigation measures, Aunty Barbara was concerned about the burials and posed the following question: “How close are you going to get to where the church used to be?” She related this question as according to the maps provided; the project area boundaries extend beyond the HPA wall

and may encroach on the burials. If burials are found, Auntie Barbara would like a plaque or marker to commemorate the site. She also recommended that the road be fixed immediately as there are many “lumps and bumps.”

DOT response:

The “small cave” discussed by Mrs. Robertson is not the same burial cave (SIHP 50-10-06-25873) discussed above by Leningrad Elarianoff. During the archaeological fieldwork conducted for the current study, no caves (concealed or otherwise) were observed within the APE. Thus, the small cave was not found within the APE. The former location of the Catholic church appears to have been inside the area enclosed with a rock wall on TMK: (3) 6-5-001:033, adjacent to the north side of the APE. A review of historic maps (see Figures 14, 15, and 16) indicates that this rock wall was in place by the 1910s

At the time of the initial consultation with Mrs. Robertson, the map depicting the APE that was included with DOT’s consultation letter appeared to include portions of the Hawai‘i Preparatory Academy campus where the former church site and graveyard she described are located. Both are known to be on the other side of a rock wall that is located outside of the actual APE boundary. A thorough visual inspection of the APE was conducted (see Chapter 5 below), which confirmed that the former church site and graveyard is not located within the APE, nor is the small cave located near the Wai‘aka Streambank within the HPA property.

Big Buck Trust, via Carlsmith Ball LLP

Carlsmith Ball LLP, attorneys for Big Buck Trust, provided comments in a letter dated March 4, 2022, stating the following concerns:

That the Wai‘aka Bridge Project “will significantly affect the Trust’s property, which was formerly the location of the historic Kamuela Museum. The Waiaka Bridge Project proposes to use, as a temporary use area, a 0.34-acre portion of the Trust’s Property upon which the Kamuela Museum is located . It is our understanding that the Kamuela Museum structure was constructed in the early 1900s and opened to the public in 1968. Because the Kamuela Museum structure is over fifty years old, it is considered a historic property under Hawai‘i law. See HRS §6E-2. Though the museum is no longer open to the public, numerous artifacts remain on the Trust’s Property in their original display cases and the structure continues to be well-maintained. Thus, the Waiaka Bridge Project’s impacts raise significant concerns for the preservation of historical and cultural artifacts related to the Trust’s Property.”

“Furthermore, the Waiaka Bridge Project affects the Trust’s legal and economic interests. The proposed area of use as depicted on the APE map covers a portion of the Trust’s Property upon which the residential structure sits and which is currently occupied by a family with a young child. Such proposed use of this area would essentially eliminate all beneficial use of the Trust’s Property as a residential property. In addition, the letter notes the possibility of the State’s permanent acquisition of the subject portion of Client’s Property. Suffice to say, the Trust takes the position that this is unacceptable.”

DOT response:

The APE has been adjusted and no longer includes any portion of the Big Buck Trust parcel or the Kamuela Museum (see Figures 1 and 4).

4. APE EXPECTATIONS

The current APE has been included in five prior archaeological studies, which provide a substantial amount of information about the potential to encounter historic properties and archaeological resources. Within the APE, Haun et al. (2002) identified two sites (SIHP 50-10-06-23313 and SIHP 50-10-06-29221). SIHP 50-10-06-23313 was reported as a concrete foundation located in Keanu‘i‘omanō Stream. SIHP 50-10-06-29221 is Wai‘aka Bridge. To the south of the APE, Haun et al. (2002) identified SIHP 50-10-06-22632, a large agricultural complex containing terraces and ditches. Features of this site were documented near the southern boundary of the APE, but appeared to have been truncated by construction of Kawaihae Road and its shoulders—on both sides of the road.

Several of the individuals consulted for the current study discussed the history of the north side of the APE, including Keanu‘i‘omanō Stream and the portion currently owned by HPA (TMK: (3) 6-5-00-:033). In these

4. APE Expectations

discussions, they stated that graves are located both in the stream and on the HPA parcel near the APE. The HPA parcel was also identified as the location of the Catholic church built under the direction of Fr. Damian in 1860.

The remainder of the APE appears to be previously disturbed by road construction or cleared for pasture. Given these conditions, the likelihood of encountering previously undocumented archaeological sites appears to be low.

5. FIELDWORK

Archaeological fieldwork for the current study was conducted on August 26, 2020, by Johnny Dudoit, B.A., and Benjamin Barna, Ph. D. (Principal Investigator), with a follow-up field visit on October 14, 2020, by Dr. Barna. Additional field photographs were taken on August 4, 2021, by Brooke Kauoa under supervision of Dr. Barna. A total of nine person-hours were expended during the fieldwork.

FIELDWORK METHODS

During the archaeological field survey, the entire (100%) ground surface of study area was visually inspected. Field archaeologists walked transects spaced at no more than 5 meters apart oriented parallel to Kawaihae Road. In Keanu‘i‘omanō Stream, field archaeologists walked a parallel to the stream along its upper banks and inside the stream immediately below its banks. When archaeological features were encountered, their positions were plotted on a map of the current study area using a handheld tablet computer running ESRI’s Collector application connected to an EOS Arrow 100 GNSS receiver with sub-meter accuracy (set to the UTM NAD 83 datum, Zone 5N North. Additionally, areas of previous disturbance, conspicuous landforms, and vegetation patterns were mapped. Identified features located within the current study area were then cleared of vegetation, photographed (both with and without a meter stick for scale), depicted on a scaled drafted plan map, and described using standardized feature record forms.

No subsurface testing was conducted in previously disturbed or in areas where prior subsurface suggests a low likelihood of buried archaeological deposits.

FIELDWORK RESULTS

As a result of the background research, consultation, and archaeological fieldwork for the current study, two previously recorded potential historic properties were identified in the APE (Table 5). The locations of the two structures relative to the current APE is presented in Figure 26. The sites are described below.

A thorough visual inspection of both banks of Wai‘aka Stream was made within the APE. No caves, concealed or otherwise, were observed. Based on these observations, the burial cave discussed by Barbara Robertson (see interview summary on Page 58) is not located within the APE.

Table 5. Potential historic properties recorded during the current study.

<i>SIHP Site Number</i>	<i>Property type</i>	<i>Status</i>	<i>Type</i>	<i>Function</i>	<i>Age</i>
50-10-06-23313	Structure	Previously documented	Concrete foundation	Stream monitoring	Historic
50-10-06-29221	Structure	Previously documented	Wai‘aka Bridge	Transportation	Historic



Figure 26. Site location map.

SIHP 50-10-06-23313

SIHP 50-10-06-23313 (Figure 27) is the Keanu‘i‘omanō Stream Gage (USGS 16756500) located within Keanu‘i‘omanō Stream, on the eastern side of the stream approximately 38.5 meters upstream from the Wai‘aka Bridge. The site was documented as a “concrete foundation” by Haun et al. (2002:46):

Site 23313 is a concrete foundation located within the Keanuimano Stream drainage, on the eastern side of the stream. The site is situated 38.5 m upstream to the north from Waiaka Bridge. The foundation consists of two concrete slabs and a concrete curb located on the eastern side of the stream [Figure 28, see Figure 27]. The main slab is 4.18 m long (east-west) and 1.25 m wide. The western portion of the slab is built on a bedrock outcrop situated adjacent to the stream, with the eastern portion constructed on the stream bank. The southern half of the slab is buried beneath a soil mound. The slab is 0.47 to 0.51 m in height on the north side.

A low, irregularly shaped slab is located adjacent to the main slab, 0.2 m to the west. This slab has been poured onto the surface of the outcrop, possible to level a depressed area. This slab is 0.73 m long (north-south) and 0.65 m wide. The surface of this slab is level with outcrop. There is a rectangular-shaped curb situated adjacent to the smaller slab to the west. This curb is 1.15 m long (north-south), 0.22 m wide at the top and 0.4 m wide at the base. The top of the curb is 0.38 m in height above the stream on the west side, and 0.21 m in height above the outcrop on the east side.

A metal bolt is imbedded in the outcrop to the north of the north of the curb. The bolt has been cut off level with the surface of the outcrop and is 0.02 m in diameter. There is a 2” galvanized metal pipe set vertically in the ground 0.7 m north of the northeastern corner of the main slab. A threaded pipe cap has been screwed onto the top of the pipe. A circular brass United States Geologic Survey benchmark is located on the top of the outcrop to the south of the site. No cultural remains were found in association with the site.

Site 23313 is unaltered and in fair condition. The nature of the slab and its location within the stream drainage suggests it potentially functioned as the foundation for a pump used to obtain water from the stream. The concrete used in the construction of the foundation is weathered and does not appear recent. However, the galvanized pipe is modern suggesting that a pump may have existed here.

During the fieldwork for the current study, SIHP 50-10-06-23313 was located and its current condition noted. The site’s condition is as described by Haun et al. (2002), with the addition of stream gauge equipment and metal support braces that have been attached to the galvanized pipe (see Figure 28).

This stream gauge is the Keanuimano Stream gauging station (USGS 16756500). Available records from the United States Geological Survey (USGS) indicate that this gauging station has been in operation since 1955 (USGS 2021).

The form and location of the concrete structure indicate that it is a weir built for the stream gage, contrary the prior interpretation as a water pump foundation made by Haun et al. (2002). At stream gaging stations, a weir is used to pond water above the gage so that changes in the height of the ponded water can be used to calculate stream flow (Reinhart and Pierce 1964). The site was previously evaluated to be HRS Chapter 6E significant under Criterion d for information yielded relative to historic land use. The current study has identified the site as a USGS stream gaging station dating to 1955. This information is not considered to be “important in history or prehistory” in either of the Section 106 or HRS Chapter 6E-8 contexts, and the site itself has no additional potential to yield such information. The site is not recommended eligible for inclusion in the NRHP, and assessed to be not significant under HRS Chapter 6E-8.



Figure 27. SIHP 50-10-06-23313, view to the east.

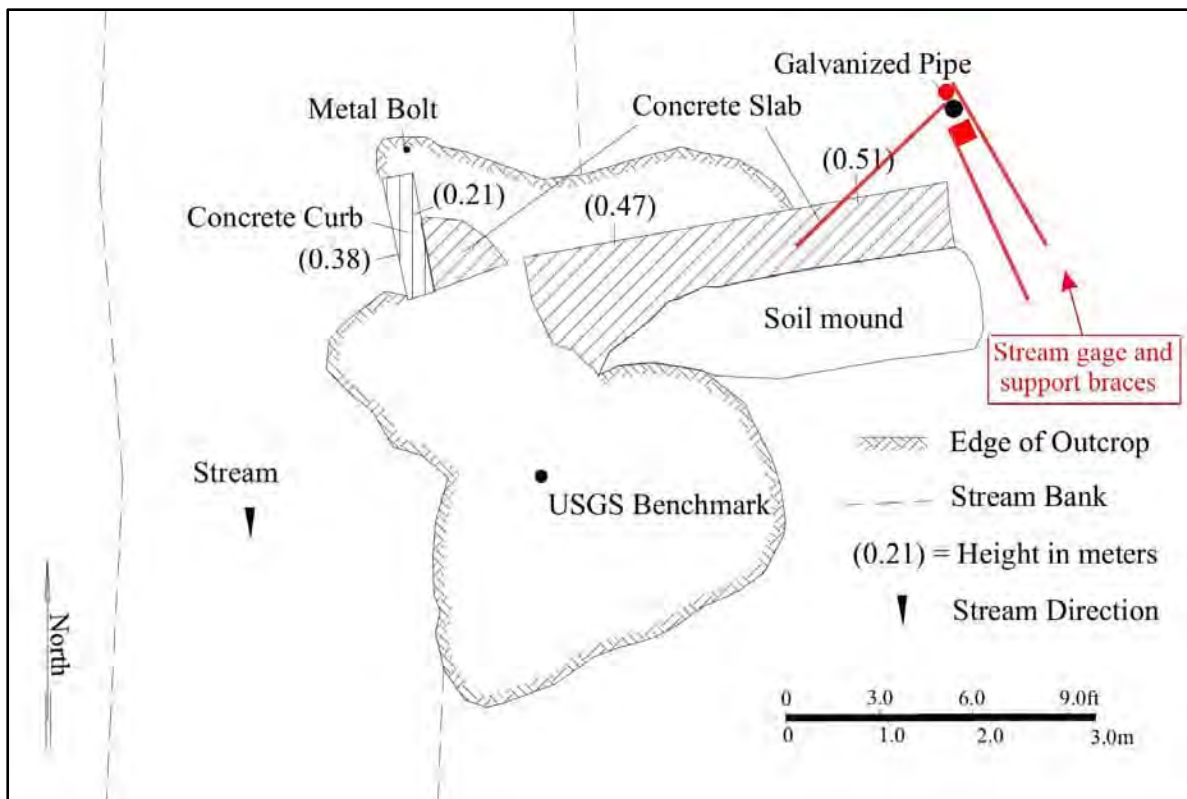


Figure 28. SIHP 50-10-06-23313 plan view map showing current conditions (after Haun et al. 2002:47).

SIHP 50-10-06-29221

SIHP 50-10-06-29221 is the Wai‘aka Bridge (Figures 29 and 30), located at the intersection of Kawaihae Road (State Route 19) and Kohala Mountain Road (State Route 250). The bridge was constructed in 1932 from a design by Charles H. Will and was the first bridge funded by federal money on Hawai‘i Island (Log No. 2011.2731, Doc. No. 1108MA05). The bridge was documented by SOI-qualified architectural historians in the *Hawaii State Historic Bridge Inventory and Evaluation* (MKE and Fung 2013). During that study, the bridge was determined to be eligible for listing in the National Register of Historic Places under Criterion C as a good example of a 1930’s reinforced concrete bridge that is typical of its period in its use of materials, method of construction, craftsmanship and design. The inventory adds this description:

The Waiaka Stream Bridge carries Hawaii Belt Road across the Waiaka Stream. This reinforced concrete and masonry bridge is in its original location, is generally in good condition, and its materials remain intact. The bridge has concrete, solid panel parapets. This bridge’s name which is engraved on the parapet is obscured by three beams. It contains arch piers and the middle support is a double arch. The workmanship of the bridge has not been obscured by addition or repair and retains its historic feeling. The MOA between DOT and the Central Federal Lands considering the bridge for replacement in 2013 was completed. Per the MOA, the bridge is scheduled for replacement and road re-alignment. (MKE and Fung 2013:6-174)

The bridge was also documented by Haun et al. (2002). Their description is quoted at length below and supplemented with photographs of the bridge’s current condition. The bridge spans Keanu‘i‘omanō Stream about 2 miles west of Waimea Town. Haun et al. (2002) described the bridge as:

...a concrete slab structure that is paved with asphalt and is rectangular in shape, measuring 11.2 m in length (northwest by southeast) and 8.4 m wide [Figure 31]. The surface of the bridge is supported by concrete retaining walls along the northwest and southeast sides of the stream drainage walls and a vertical, free-standing wall located in the center of the stream [Figure 32]. The retaining walls have wing walls at each end that angle away from the main wall. The end of each of the wing wall sections are comprised of mortared stone. The sides of the bridge are bordered by formed concrete walls, slightly curved and have decorated recessed areas on each side with metal guard rails. A partial inscription remains that include the date “1932” and the letters “KA,” that likely reads “Waiaka”.

There are two horizontal metal pipes that are suspended along the southwestern exterior side of the bridge by metal brackets. These pipes are 10” in diameter and are joined by metal bolted couplings. A pressure valve is present on the outside pipe at the southwestern end of the bridge. These pipes extend to the northwest and southeast from the bridge an undetermined distance.

A wooden foot bridge is present along the northeastern side of the bridge for pedestrian traffic... The foot bridge is supported by a framework of wooden beams that rest on top of the retaining walls and the free-standing wall located in the center of the stream. The surface of the bridge is comprised of 2” by 10” wooden planks and there is a vertical railing that extends along the northeast side. This railing is built of vertical 4” by 4” posts with five horizontal 2” by 10” planks nailed to them.

During the current fieldwork, SIHP 50-10-06-29221 was visited, and its current condition was compared with the description provided by Haun et al. (2002). The Wai‘aka Bridge is a flat concrete slab bridge with two spans (see Figures 29 and 30). It is supported by concrete abutment walls (Figure 33) and a concrete wall pier between the two spans. The abutment walls are solid with basalt masonry wing walls (Figure 34) extending both upstream and downstream. The central wall pier (see Figure 32) is constructed with two solid arches centered on its length. The bridge’s parapet design is concrete solid panel with cap (Figure 35). There are four panels per side with additional concrete pilasters installed asymmetrically on each parapet. The pilasters on the southern parapet have steel bolts and/or bolt scars (both filled with concrete and unrepaired) that indicate that pipes or other utilities were formerly suspended from the bridge parapet. The parapet cap has beveled edges and the parapets flare outward at each end. The parapets show signs of their age such as cracks and impact damage. The parapets for each span are connected to each other by large bolts and strapping. On the northern side of the bridge, the wooden footbridge (Figure 36) is also supported by steel girders directly attached to the abutments and central wall pier. Minor cosmetic damage to the bridge includes graffiti on the abutments and central wall pier. As Haun et al. (2002) noted, the installation of three beams (guardrails) has obscured the inscriptions reading “Waiaka” and “1932” on the parapets. Overall, the condition of Site 29221 (at least cosmetically) does not appear to have degraded much since the 2002 fieldwork. Additional

5. Fieldwork

damage to the parapets has been minimal, and surprisingly, many of the graffiti designs observed appear in Haun et al.'s (2002) report.

The Wai'aka Bridge (SIHP 50-10-06-29221) was previously determined to be eligible for the National Register of Historic Places under Criterion C at the local level of significance as a good example of a modest reinforced concrete slab bridge that embodies "[t]he distinctive characteristics of a type, period, or method of construction" and as the first Federal Aid bridge constructed on Hawai'i Island (Log No. 2011.2731, Doc. No. 1108MA05). DLNR-SHPD determined that replacing or widening the bridge would result in an adverse effect to historic properties (Log No. 2011.2731, Doc No. 1108MA05). DLNR-SHPD recommended SIHP 50-10-06-29221 for data recovery to consist of documenting the bridge following Historic American Building Survey (HABS) guidelines.



Figure 29. SIHP 50-10-06-29221, the Wai'aka Bridge, north elevation.



Figure 30. SIHP 50-10-06-29221, the Wai'aka Bridge, south elevation.

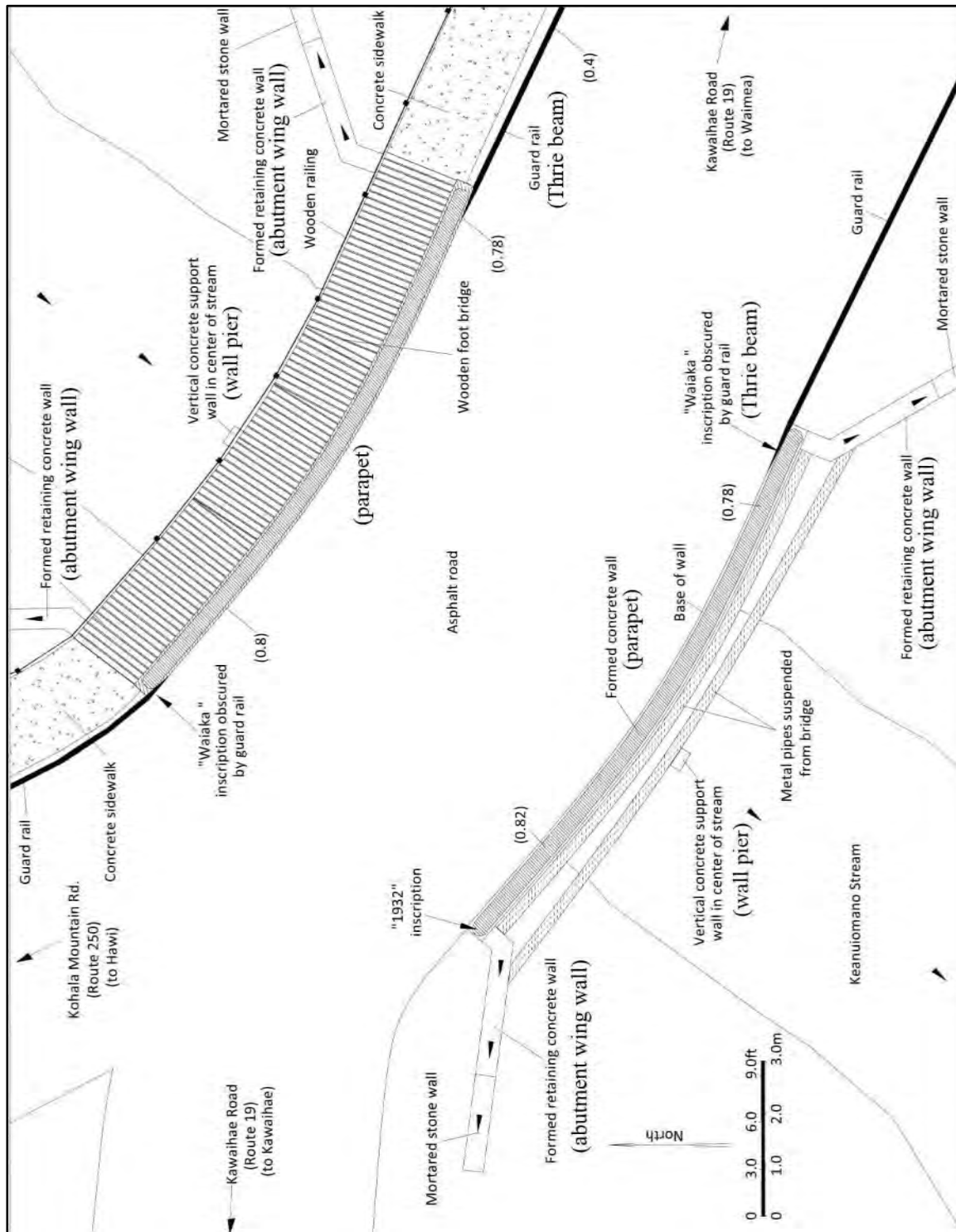




Figure 32. SIHP 50-10-06-29221 Wai'aka Bridge wall pier, view to the southeast.



Figure 33. SIHP 50-10-06-29221 Wai'aka Bridge concrete abutment wall, view to the northwest.



Figure 34. SIHP 50-10-06-29221 Wai'aka Bridge concrete and masonry abutment wing walls, view to the northwest.



Figure 35. SIHP 50-10-06-29221 Wai'aka Bridge detail of parapet, view to the northeast.



Figure 36. SIHP 50-10-06-29221 Wai'aka Bridge wooden foot bridge, view to the east.

Based on the observations made during the current study, the Wai'aka Bridge (SIHP 50-10-06-29221) continues to be considered eligible for the National Register of Historic Places under Criterion C as described above. With respect to HRS Chapter 6E significance, the bridge is considered significant under Criteria c and d for the same reasons listed above. A more detailed discussion of NRHP eligibility and 6E significance is provided below.

6. NRHP ELIGIBILITY AND DETERMINATION OF EFFECT RECOMMENDATIONS

The recorded properties are assessed for eligibility for inclusion in the National Register of Historic Places (NRHP). To be eligible for listing in the NHRP, properties must meet one of the National Register Criteria for Evaluation by being associated with an important historic context and retaining historic integrity of those features necessary to convey its significance. The criteria, as defined in 36 CFR §60.4, state:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

Recommendations for NRHP eligibility for the two recorded properties are presented in Table 7 and discussed below.

Table 6. NRHP eligibility recommendations.

<i>SIHP Site no.</i>	<i>Property</i>	<i>Temporal Affiliation</i>	<i>NRHP eligibility</i>
50-10-06-23313	Keanu‘i‘omanō Stream gage	1955	Not eligible
50-10-06-29221	Wai‘aka Bridge	1932	C

SIHP 50-10-06-23313

50-10-06-23313 is the USGS Keanu‘i‘omanō Stream gaging station, located in Keanu‘i‘omanō Stream. The gaging station was established in 1955 as one of around 100 stations installed between 1950 and 1964 (USGS 2021). Based on this information, the site is re-evaluated within the historical context of USGS Stream Gaging in Hawai‘i, with a period of significance of 1909-1964. The Keanu‘i‘omanō Stream gaging station was established late in the period of significance. A search of historic newspapers and other sources did not identify any specific events in which the Keanu‘i‘omanō Stream gaging station played an important role (not eligible under Criterion A), and no person or persons of historic importance could be directly associated with the gage (not eligible under Criterion B). It is of a simple, utilitarian, and non-descript design that cannot be said to embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (not eligible under Criterion C). The information obtained during the current and prior studies has not yielded information that can be said to be important in prehistory or history, nor does the site appear to be likely to yield such information through further architectural or archaeological research (not eligible under Criterion D.) Therefore, 50-10-06-23313 is recommended **not eligible** for inclusion in the NRHP under any criterion.

SIHP 50-10-06-29221

SIHP 50-10-06-29221, the Wai‘aka Bridge, was previously evaluated by SOI-qualified architects and was determined eligible for the NRHP under Criterion C within the context of “Bridge Construction and the Federal Aid Program (1925-1941)” (MKE and Fung 2013:2-11). The bridge was constructed in 1932 by Charles H. Will as the first bridge to be funded by federal money on Hawai‘i Island. The eligibility of the bridge was justified because it is “a good example of a 1930’s reinforced concrete bridge that is typical of its period in its use of materials, method of construction, craftsmanship and design” (MKE and Fung 2013:6-174). The materials, method of construction, craftsmanship and design are essentially unchanged since the bridge was evaluated in 2013. Thus, it retains integrity of all categories, with minor diminishment of its integrity of design due to the attachment of utility lines (e.g., water lines) to the exterior of the bridge. Site 50-10-06-29221, the Wai‘aka Bridge, remains eligible for inclusion in the NRHP under Criterion C at the local level of significance, with a period of significance of 1932-1941 as defined in the “Bridge Construction and the Federal Aid Program (1925-1941)” historical context.

SECTION 106 RECOMMENDED DETERMINATION OF EFFECT

Under 36 CFR 800.5, the agency shall apply the criteria of adverse effect to historic properties. An adverse effect is found:

when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. [36 CFR 800.5(a)(1)]

The Undertaking would include the demolition of Wai'aka Bridge (SIHP 50-10-06-29221), which would result in the physical destruction of all or part of the property. The recommended determination of effect under 36 CFR 800.5 for the Undertaking is therefore "Adverse effect." It is recommended that HDOT consult further to resolve the adverse effect pursuant to 36 CFR 800.6. Recommended mitigation measures that could be used to resolve the adverse effect are discussed in Chapter 8 below.

7. CHAPTER 6E SIGNIFICANCE AND DETERMINATION OF EFFECT RECOMMENDATIONS

Under HRS Chapter 6E, for a resource to be considered significant it must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more of the following criteria:

- a Be associated with events that have made an important contribution to the broad patterns of our history;
- b Be associated with the lives of persons important in our past;
- c Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
- d Have yielded, or is likely to yield, information important for research on prehistory or history;
- e Have an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts—these associations being important to the group’s history and cultural identity.

HRS Chapter 6E significance recommendations are presented in Table 7 and discussed below.

Table 7. HRS 6E significance recommendations.

<i>SIHP Site no.*</i>	<i>Property</i>	<i>Temporal Affiliation</i>	<i>HRS 6E significance</i>
50-10-06-23313	Keanu‘i‘omanō Stream gage	1955	Not significant
50-10-06-29221	Wai‘aka Bridge	1932	c, d

SIHP 50-10-06-23313

SIHP 50-10-06-23313 is the USGS Keanu‘i‘omanō Stream gaging station, located in Keanu‘i‘omanō Stream. The gaging station was established in 1955 as one of around 100 stations installed between 1950 and 1964 (USGS 2021). Based on this information, the site is re-evaluated within the historical context of USGS Stream Gaging in Hawai‘i, with a period of significance of 1909-1964. The Keanu‘i‘omanō Stream gaging station was established late in the period of significance. A search of historic newspapers and other sources did not identify any specific events in which the Keanu‘i‘omanō Stream gaging station played an important role (not significant under Criterion “a”), and no person or persons of historic importance could be directly associated with the gage (not significant under Criterion “b”). It is of a simple, utilitarian, and non-descript design that cannot be said to embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (not significant under Criterion “c”). The information obtained during the current and prior studies has not yielded information that can be said to be important in prehistory or history, nor does the site appear to be likely to yield such information through further architectural or archaeological research (not significant Criterion “d”). Consultation conducted during the current study, previous iterations of this project, and other projects in the Waimea area did not identify this site as having an important traditional cultural value to the native Hawaiian people or to another ethnic group of the state due to associations with traditional cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts (not significant Criterion “e”). Based on this analysis, SIHP 50-10-06-23313 is now recommended *not significant* under any criterion.

SIHP 50-10-06-29221

SIHP 50-10-06-29221 was previously assessed as significant under Criterion “c” (Log No. 2011.2731, Doc. No. 1108MA05) and Criterion “d” (Haun et al. 2002). Under Criterion “c,” it was noted by DLNR-SHPD to be a good example of a modest reinforced concrete slab bridge that embodies the distinctive characteristics of a type, period, or method of construction. Under Criterion “d,” Haun et al. (2002) stated that the bridge “yielded information important for understanding late prehistoric to historic land use in the project area,” which is presumed to refer to a period of significance beginning in the 1930s in the case of this bridge. The results of the current study indicate that the bridge retains sufficient integrity of all categories to convey its significance under Criteria “c” and “d.” Therefore, SIHP 50-10-06-29221 continues to be recommended significant under those criteria.

1 **RECOMMENDED DETERMINATION OF EFFECT**

2 Under HAR §13-275-7(a), the effects or impacts of a project on significant properties shall be determined by the
3 agency. The proposed project would include the demolition of Wai‘aka Bridge (Site 23221), which would result in
4 the physical destruction of all or part of the property. Because the project will affect this historic property and the
5 effects will be harmful, the recommended determination of effect under HAR §13-275-7 for the proposed project is
6 therefore “Effect, with proposed mitigation commitments.” Proposed mitigation commitments are discussed below.

8. MITIGATION RECOMMENDATIONS

The recommended effect determinations under Section 106 and HRS Chapter 6E would require mitigation of adverse effects to Site 29221. To resolve adverse effects under Section 106, procedures outlined in 36 CFR 600.6 would need to be followed, ultimately resulting in the execution and implementation of a memorandum of agreement (MOA) in compliance with Section 106 and 36 CFR 600.6 and govern the Undertaking and all of its parts. Under HRS Chapter 6E, the procedures outlined in HAR §13-275-8 and 13-275-9 would be followed to propose, implement, and verify the completion of mitigation commitments. Recommended mitigation measures are discussed and proposed below.

Table 8. Proposed mitigation commitments.

<i>Site Number</i>	<i>Site Type</i>	<i>NRHP eligibility</i>	<i>HRS 6E significance</i>	<i>Proposed mitigation</i>
SIHP 50-10-06-29221	Wai‘aka Bridge	C	c, d	Architectural recordation

SIHP 50-10-06-29221

The Undertaking would demolish the Wai‘aka Bridge, an action which is by definition an adverse effect. The bridge is eligible for inclusion in the NRHP under Criterion C as a good example of a 1930’s reinforced concrete bridge that is typical of its period in its use of materials, method of construction, craftsmanship and design. It is significant under HRS Chapter 6E under Criterion “c” as a good example of a 1930’s reinforced concrete bridge that is typical of its period in its use of materials, method of construction, craftsmanship and design, and under Criterion d for information it yielded about land use in the historic period. To mitigate adverse effects caused by its demolition, architectural recordation prior to demolition is recommended. This recordation could take the form of Historic American Engineering Record Level I or II documentation of the bridge.

PRECAUTIONARY MONITORING

The archaeological fieldwork, documentary research, and consultation conducted for the current study did not identify historic properties other than Wai‘aka Bridge in the APE. The general area north of the APE near Keanu‘i‘omanō Stream; however, was identified as the location of the former the St. John the Evangelist Catholic church site (the location of which has not been confirmed) and associated graves, including those of Barbara Robertson’s family members, and a small cave located in a bank of Wai‘aka stream. Additionally, a rock wall surrounding the former Grant 8577 parcel is located immediately north of the APE on the HPA campus. Although the project is not anticipated to affect any of these properties, two precautionary measures are recommended. Due to the sensitive nature of the area, archaeological monitoring is recommended for identification purposes during ground disturbing activities associated with the Undertaking. It is also recommended that protective fencing be erected along the limits of the project to provide additional protection for the rock wall located on the former Grant 8577 boundary. The installation of this fence should be verified as part of the recommended archaeological monitoring effort.

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4
5

APPENDIX A. SHPD CORRESPONDENCE RELATED TO THE 2011-2012 SECTION 106 CONSULTATION




NEIL ABERCROMBIE
GOVERNOR OF HAWAII

RECEIVED
DEC 01 2011

WILSON OKAMOTO

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
HISTORIC PRESERVATION DIVISION
KAHUIHEWA BUILDING
601 KAMOKILA BLVD, KAPOLEI HI 96706



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

GUY H. KAULIKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

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

DATE: October 6, 2011 **LOG:** 2011.2731

TO: Mr. Lance Manabe **DOC:** 1108MA05
Department of Transportation
869 Punchbowl Street
Honolulu, HI 96813 Architecture

SUBJECT: **Section 106 Historic Preservation Review/ Environmental Assessment**
Project: Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches
Owner: State of Hawaii
Location: Waiaka, South Koala, Hawaii
Tax Map Key: (3) 6-5-001:033, (3) 6-5-001:015, (3) 6-6-004:001, (3) 6-6-001:077

This letter is in response to materials dated July 5, 2011 and received by the State Historic Preservation Division on July 6, 2011. The transmittal provided our office with a copy of the draft EA for the proposed Waiaka Bridge improvement project. The Hawaii State Department of Transportation (DOT) proposes to either replace or repair Waiaka Bridge using federal funds.

The Waiaka Bridge is located at mile marker 58.88 at the intersection of State Route 19 and State Route 250. It was constructed in 1932 by Charles H. Will and is a modest reinforced concrete slab structure with a center pier. It measures approximately 26' x 38' and has a 3' wide wooden walkway bolted to its side.

The fact that the bridge has been determined to be structurally deficient provides the DOT with the opportunity to replace the bridge and address safety issues related to the crossing, including realigning the intersection approaches along Kawaihae Road and Kohala Mountain Road to improve visibility and create a left turn storage lane on Kawaihae Road for access to Kohala Mountain Road. A new bridge would also allow the elimination of the existing central pier that has the potential to catch debris in times of flooding and thus restrict the flow under the bridge when it is most needed.

The Area of Potential Effect (APE) would be the bridge and its immediate surrounding vicinity.

The Waiaka Bridge has local significance and meets criterion C for listing in the National Register of Historic Places, as a good example of a modest reinforced concrete slab bridge that embodies "the distinctive characteristics of a type, period, or method of construction." The bridge was the first federal aid bridge on Hawaii Island.

We have reviewed the enclosed draft EA pertaining to the Kawaihae Road/Waiaka Bridge Project, which included site plans, photographs, and verbal discussion of the proposed project.

SHPD accepts the draft EA as acceptable.

SHPD also determines that replacement or widening of the bridge would have an **adverse effect upon historic property.**

SHPD is very concerned with retaining the historic character of our state's highways. In particular, this includes bridge approaches, abutments, and railings that have period appropriate designs mirroring those of the original bridges. To accomplish this, SHPD has worked with the State DOT to find such designs that also meet current highway crash resistance and height requirements. Included in the agreements are provisions to provide either original bridge designs (HABS II) or record such information (HABS I).

Any questions should be addressed to Ross W. Stephenson, SHPD Historian, at (808) 692-8028 (office), (808) 497-2233 (cell) or ross.w.stephenson@hawaii.gov.

Mahalo for the opportunity to comment.



Angie Westfall
Architecture Branch Chief, Hawaii Historic Preservation Division

cc: Ms. Tracy Fukuda
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

030 rec'd 5/17/12
WILLIAM J. AIELA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCES MANAGEMENT
GUY KAULUKUKUI
FIRST DEPUTY
WILLIAM M. TAM
DEPUTY DIRECTOR - WATER
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAOIOLA WEALE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

May 15, 2012

Dr. Alan Haun
Haun and Associates
73-1168 Kahuna A'o Road
Kailua Kona, Hawai'i 96740

LOG NO: 2012.1353
DOC NO: 1205MV04
Archaeology

Dear Dr. Haun:

**SUBJECT: Chapter 6E-8 and Section 106 Historic Preservation Review -
Revised Archaeological Inventory Survey, Waiaka Bridge Replacement and
Realignment of Approaches
Waimoa Ahupua'a, South Kohala District, Island of Hawai'i
TMK (3) 6-6-001:033, :040 & :077 (portion)**

Thank you for the opportunity to review the revised draft report titled *Archaeological Inventory Survey Waiaka Bridge Replacement and Realignment of Approaches Lands of Lalamilo Keoniki, Kaunihō and Waiaka I, South Kohala District, Island of Hawai'i TMK (3) 6-6-001:033, :040 & :077 (portion)*. A. Haun, D. Henry and Ka'ohulani McGuire (February 2012). This document was received by our office on March 6, 2012. We apologize for the delayed review and thank you for your patience. This report presents the findings of an archeological inventory survey that was conducted on 9.8 acres in the surrounding the intersection of Kawaeae Road and Kohala Mountain Road. The report was prepared at the request of The State Department of Transportation, who proposes to replace the Waiaka Bridge and realign the roads that lead into this intersection. Field work for this study consisted of a 100% pedestrian survey of the surface environment with no subsurface investigation. According to the report, four historic sites, one previously identified and three newly identified were located within this survey area. These sites include an agricultural field complex previously described by Haun et. al. 2002 (SIHP Site 50-10-6-22632); a water diversion ditch (Site 22312); a concrete foundation located within Keanuomano Stream (Site 22313); and the Waiaka Bridge (Site 29221).

The revisions made to this report are the result of the SHPD review of a previous draft (Log 2011.2213, Doc 1111MV03); questions raised in our prior correspondence have been addressed. The report now contains an excellent description of the project alternatives and indicates the potential for these alternatives to impact Site 22632. We concur with your site evaluations and proposed mitigation commitments for these sites, including data recovery for Sites 22632 and 23312; no further work for Site 23313, and HABS documentation for Site 29221. We also concur with your recommendation for onsite archaeological monitoring during ground disturbing activities associated with this project. We look forward to the opportunity to review and accept archaeological data recovery and monitoring plans prior to the commencement of ground disturbing activities.

This report meets the requirements of HAR 13-276 as well as the secretary of the interiors standards, and is accepted by SHPD. Please send one hardcopy of the document, clearly marked **FINAL**, along with a copy of this review letter and a text-searchable PDF version on CD to the Kapolei SHPD office. Please contact Mike Vitousek at (808) 652-1510 or Michael.Vitousek@Hawaii.gov if you have any questions or concerns regarding this letter.

Aloha,

Theresa K. Donham, Archaeology Branch Chief

APPENDIX B. THOMPSON AND ROSENDAHL (1992)

BACKHOE TRENCH PROFILES

During their AIS of “Parcel 7,” Thompson and Rosendahl (1992) documented seven soil profiles within backhoe trenches excavated across agricultural fields and field ridges in Site 18054. Stratigraphic profile descriptions are from those trenches are reproduced below, along with the profile drawings included in the Thompson and Rosendahl (1992) report.

PARCEL 7, BT-1

Layer	Description
I	0-10 cmbs; dark reddish brown (5YR 3/2 moist); silty clay loam; reddish brown (5YR 4/2 dry); moderate, medium crumb structure; slightly hard, friable, slightly sticky, slightly plastic;
II	30-40 cmbs; dark reddish brown (5YR 3/3 moist); silt loam; dark reddish brown (5YR 3/4 dry); structureless; loose, loose, slightly sticky, slightly plastic;
III	80-90 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; yellowish red (5YR 4/6 dry) moderate, coarse, crumb structure; soft, very friable, sticky, plastic;
IV	135-145 cmbs; dark reddish brown (2.5 YR 2.5/4 moist); silty clay loam; yellowish red (5YR 5/8 dry); weak, fine crumb structure; soft, very friable, sticky, plastic.

PARCEL 7, BT-2

Layer	Description
I	0-30 cmbs; dark reddish brown (5YR 3/3 moist); clay loam; reddish brown (5 YR 4/4 dry); moderate, fine crumb structure; hard, friable, slightly sticky, slightly plastic;
II	10-45 cmbs; dark reddish brown (5YR 3/4 moist); silty clay loam; yellowish red (5YR 4/6 dry); structureless; soft, loose, slightly sticky, slightly plastic;
III	35-115 cmbs; dark brown (7.5YR 3/3 moist); silty clay loam; strong brown (7.5YR 4/6 dry); weak; very coarse crumb structure; soft, very friable, sticky, plastic;
IV	100-115 cmbs; dark reddish brown (2.5YR 2.5/4 moist); silty clay loam; strong brown (7.5YR 5/8 dry); weak, coarse crumb structure; soft, very friable, sticky, plastic.

PARCEL 7, BT-3

Layer	Description
I	0-10 cmbs; dark reddish brown (SYR 2.5/2 moist); silty clay loam; dark reddish brown (5YR 3/4 dry); moderate fine crumb structure; hard, friable, slightly sticky, slightly plastic;
II	30-40 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; reddish brown (5YR 4/4 dry); weak, fine to coarse crumb structure; soft, very friable, slightly sticky, slightly plastic;
III	90-100 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; yellowish red (5YR 5/6 dry); weak, fine to coarse crumb structure; soft very friable, slightly sticky, plastic;
IV	150-160 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; yellowish red (5YR 4/6 dry); weak, fine to coarse crumb structure; soft, very friable, slightly sticky, plastic.

PARCEL 7, BT-4

Layer	Description
I	10-20 cmbs; dark brown (7.5YR 3/3 moist); silty clay loam; dark brown (75YR 3/4 dry); moderate, fine crumb structure; hard, friable, slightly sticky plastic
II	25-35 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; dark reddish brown (5YR 3/4 dry); weak, fine to coarse crumb structure; soft, very friable, slightly sticky, slightly plastic
III	65-75 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; strong brown (7 .5YR 4/6 dry); weak, fine to coarse, crumb structure; soft, very friable, slightly sticky, slightly plastic;
IV	90-100 cmbs; dark reddish brown (SYR 3/3 moist); silty clay loam; strong brown (7.5YR5/8 dry); weak, fine to coarse crumb structure; soft, very friable, slightly sticky, plastic.

1 **PARCEL 7, BT-5**

Layer	Description
I	0-35 cmbs; dark brown (7.5YR 3/3 moist); clay loam; dark brown (7 .5YR 3/4 dry); moderate fine crumb structure; hard, friable, slightly sticky, slightly plastic;
II	30-45 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; dark reddish brown (5YR 3/4 dry); weak, fine to coarse crumb structure; soft, very friable, slightly sticky, plastic;
III	30-150 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; strong (7 .5YR dry); weak, fine to medium crumb structure; soft, very friable, slightly sticky, plastic;
IV	80-105 cmbs; dark reddish brown (2.5YR 2.5/4 moist); clay loam; strong brown (7.5YR 5/8 dry); weak, fine to medium crumb structure; soft, very friable, sticky, plastic.

2 **PARCEL 7, BT-6**

Layer	Description
I	0-35 cmbs; dark brown (7 .5YR 3/3 moist); clay loam; dark brown (7.5YR 3/4 dry); moderate fine crumb structure; hard, friable, slightly sticky, slightly plastic;
II	20-45 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; dark reddish brown (5YR 3/4 dry); weak, fine to coarse crumb structure; soft, very friable, slightly sticky, plastic
III	25-65 cmbs; dark reddish brown (5YR 3/3 moist); silty clay loam; strong (7 .5YR dry); weak, fine to medium crumb structure; soft, very friable, slightly sticky, plastic
IV	60-90 cmbs; dark reddish brown (2.5YR 2.5/4 moist); clay loam; strong brown (7.5YR 5/8 dry); weak, fine to medium crumb structure; soft, very friable, sticky, plastic;
V	100-120 cmbs; dark brown (7.5YR 3/2 moist); clay loam; dark brown (7 .5YR 3/3 dry); moderate, fine to medium crumb structure; hard, friable, sticky, plastic

3 **PARCEL 7, BT-7**

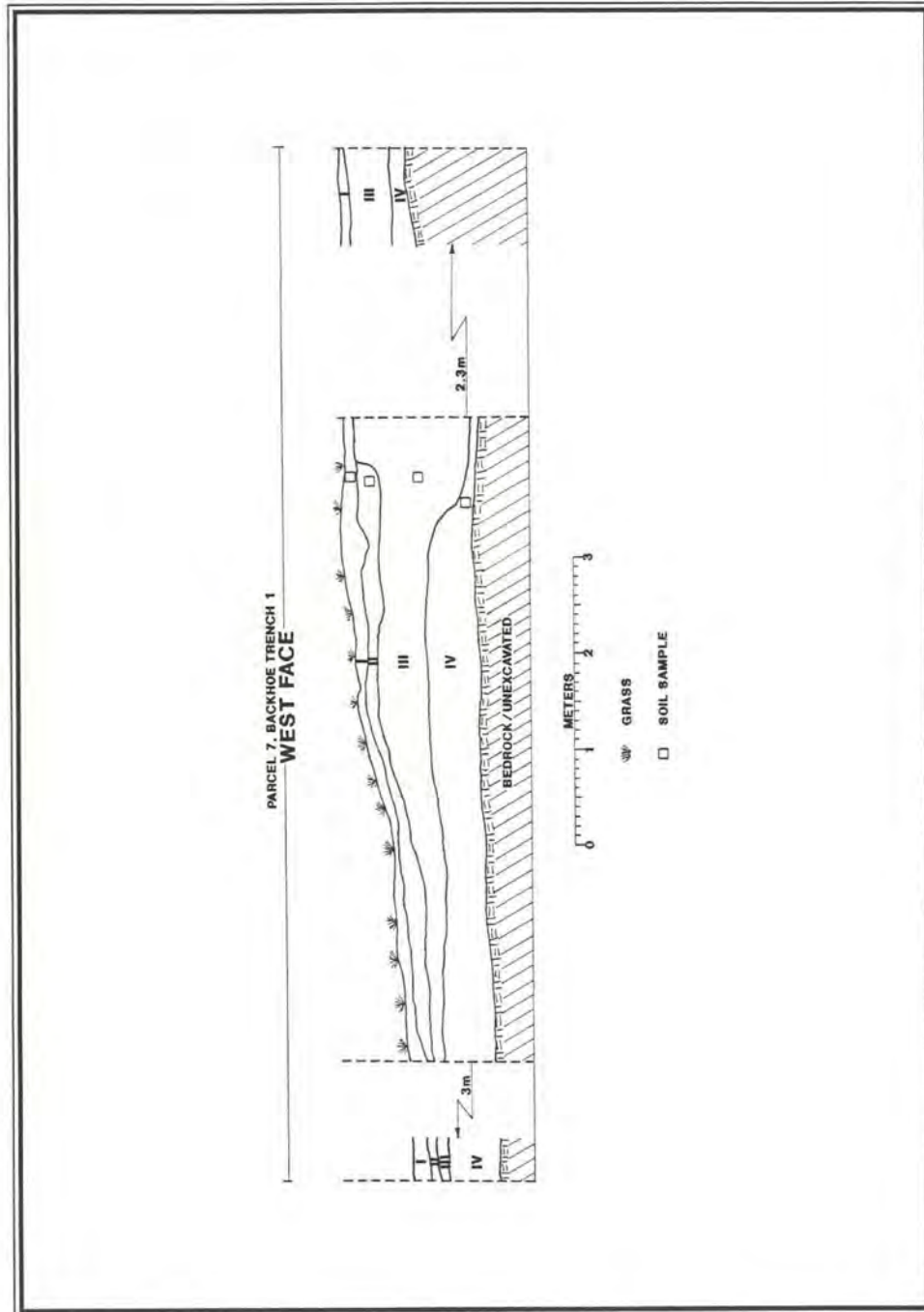
Layer	Description
I	0-30 cmbs; dark reddish brown (5YR 3/3 moist); clay loam; dark brown (7.5 YR 3/4 dry); moderate, medium crumb structure; hard, friable, slightly sticky, slightly plastic;
II	10-00cmbs;darkreddishbrown(2.5YR2.5/4moist); silty clay loam; strong brown(7.5YR4/6dry);weak, medium crumb structure; soft, very friable, slightly sticky, plastic;
III	30-125 cmbs; dark reddish brown (2.5YR 2.5/4 moist); clay loam; strong brown (7.5YR 4/6 dry); moderate, fine to medium crumb structure; hard, very friable, slightly sticky, plastic;

4

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*Figure B-6. Stratigraphic Sequence, BT-1, Parcel 7.*

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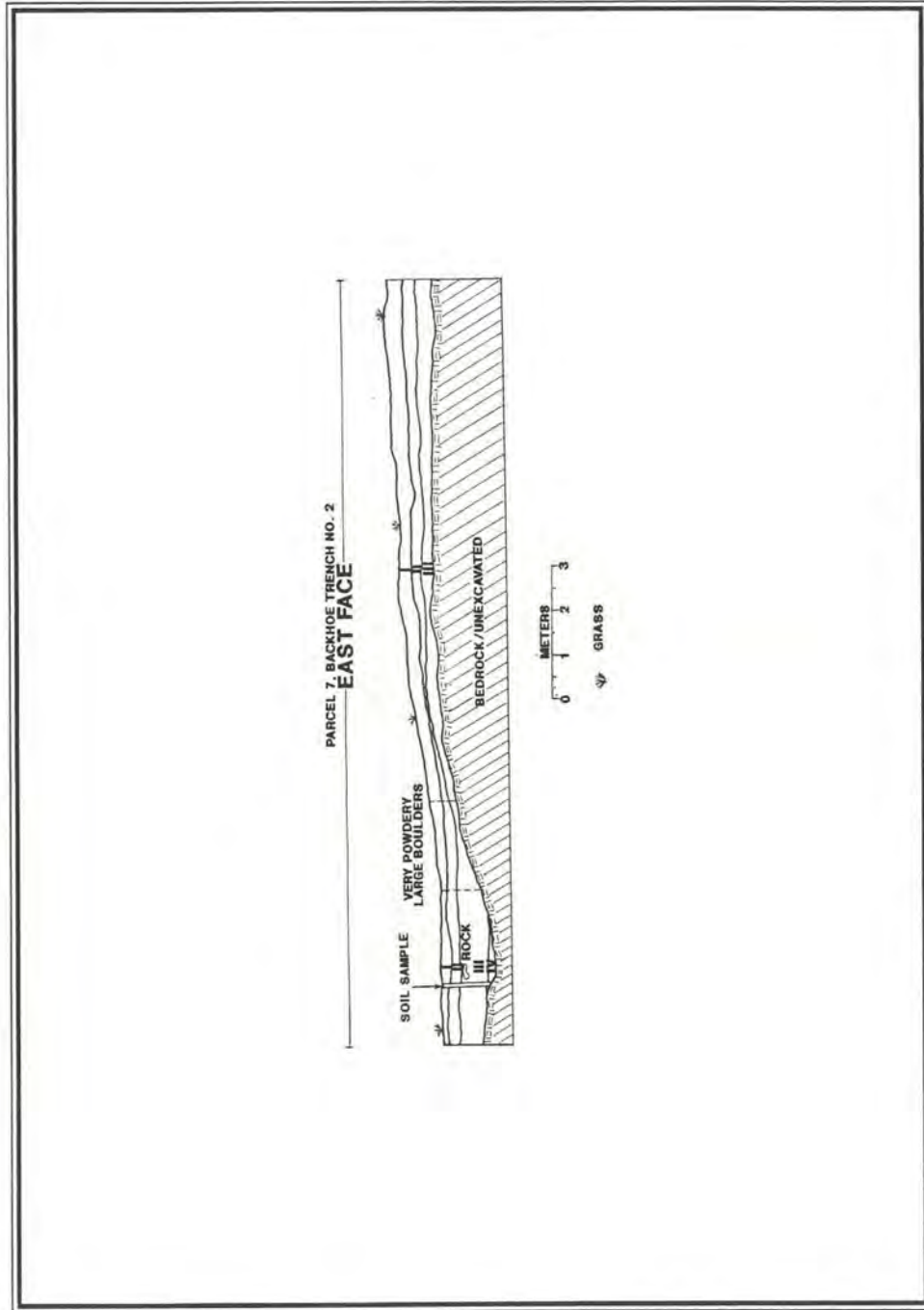


Figure B-7. Stratigraphic Sequence, BT-2, Parcel 7

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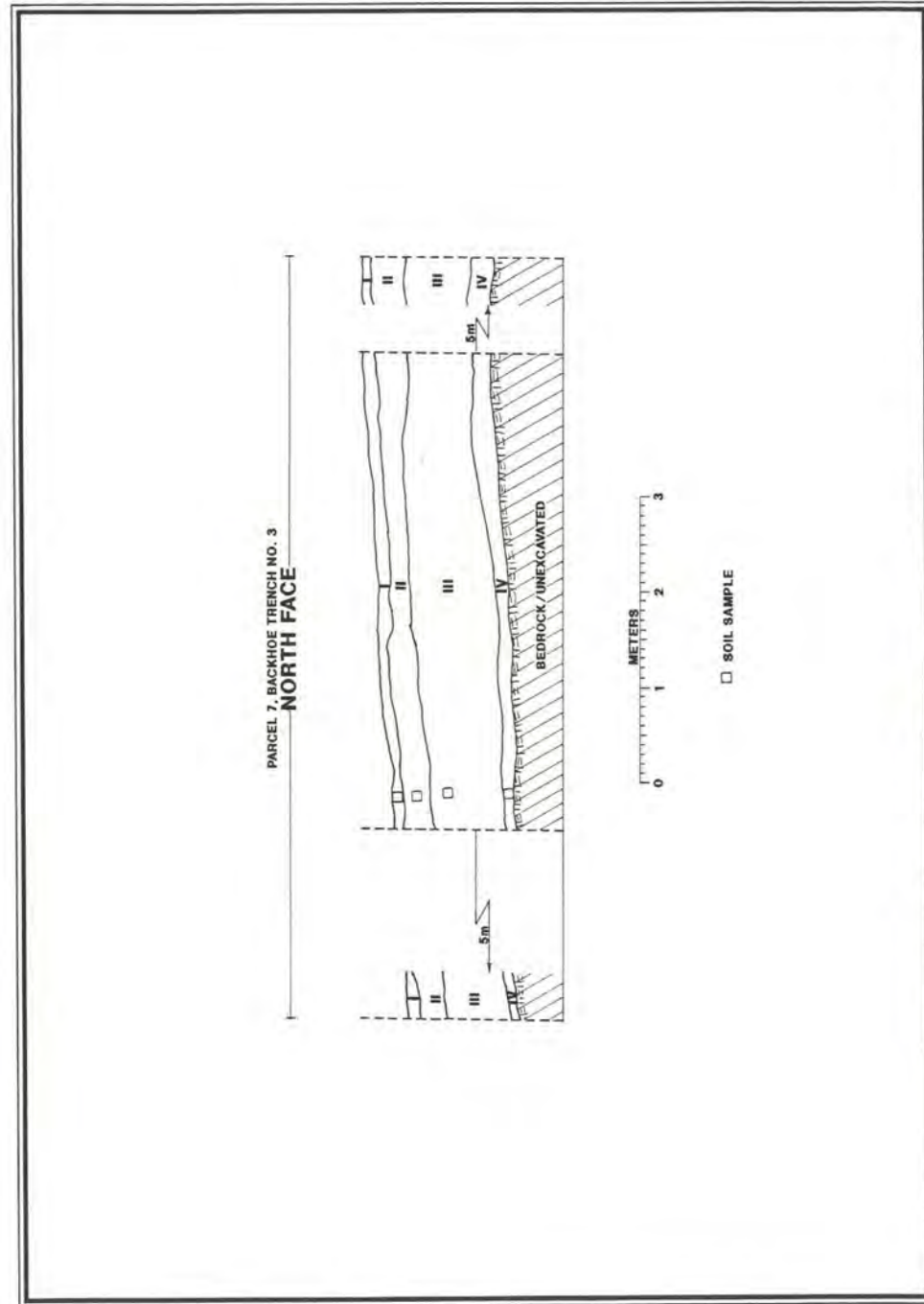
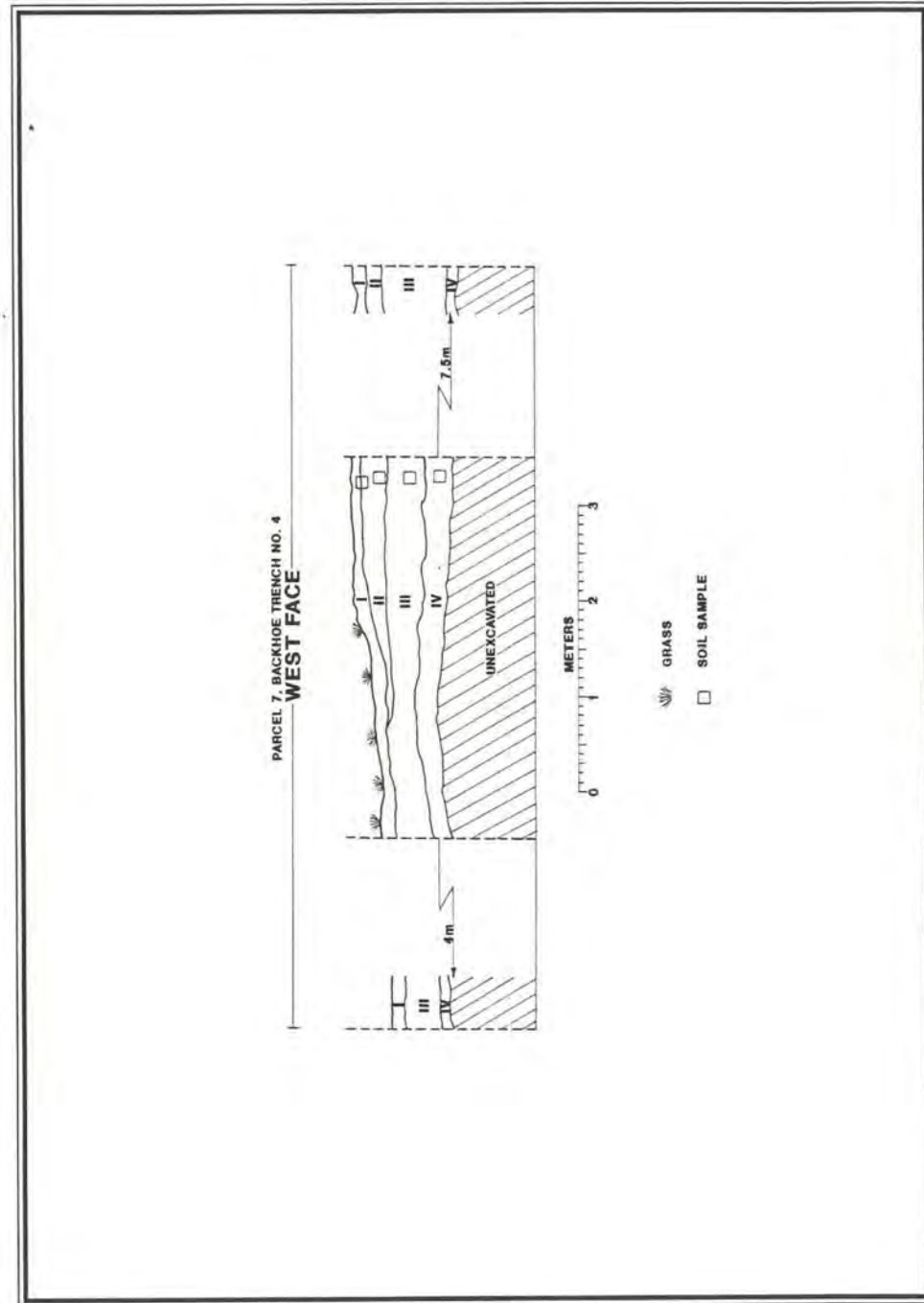


Figure B-8. Stratigraphic Sequence, BT-3, Parcel 7

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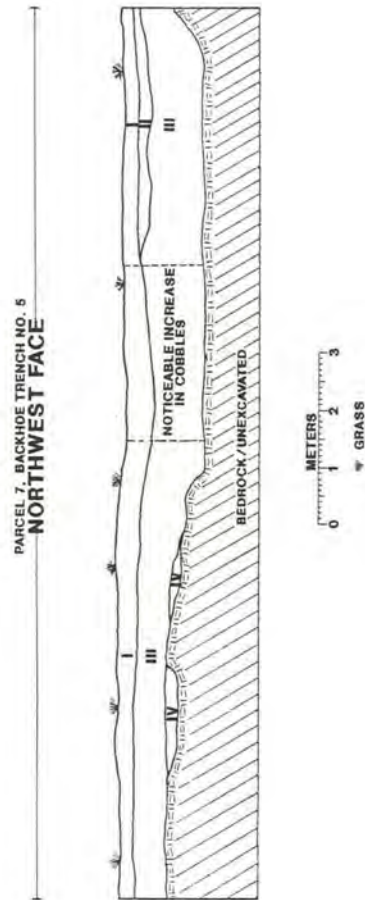
47

*Figure B-9. Stratigraphic Sequence, BT-4, Parcel 7*

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*Figure B-10. Stratigraphic Sequence, BT-5, Parcel 7*

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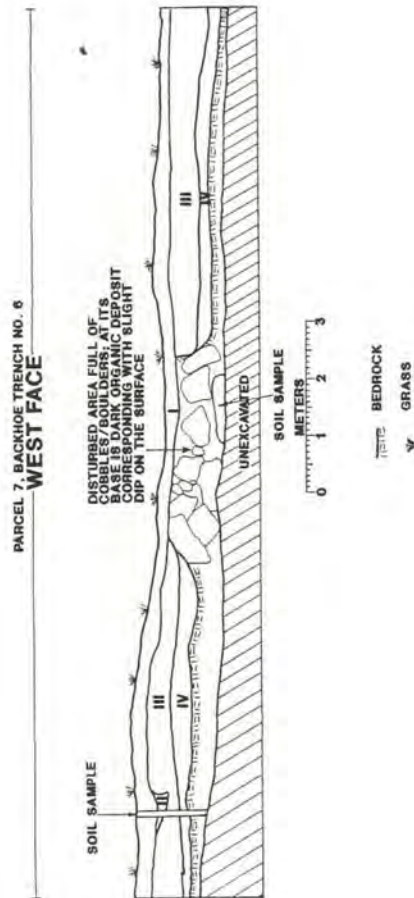


Figure B-11. Stratigraphic Sequence, BT-6, Parcel 7

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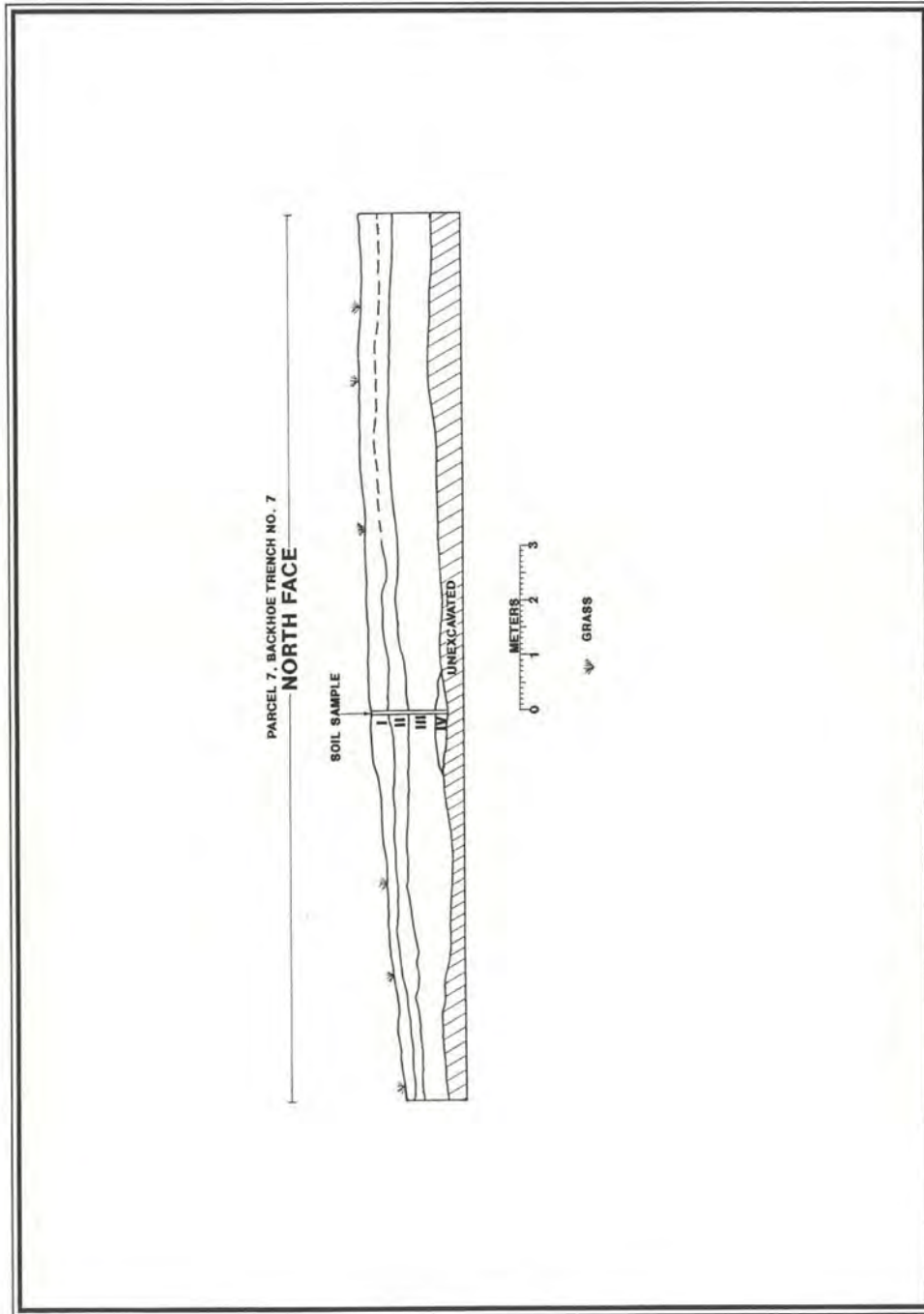



Figure B-12. Stratigraphic Sequence, BT-7, Parcel 7

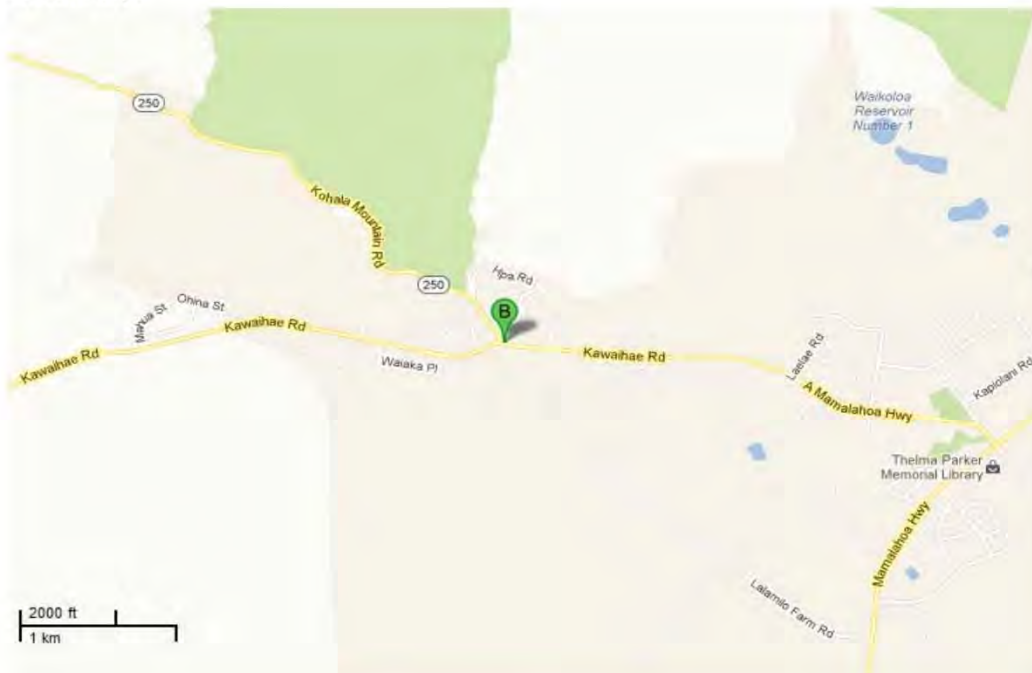
APPENDIX C. EXCERPT FROM THE *HAWAII STATE HISTORIC BRIDGE INVENTORY AND EVALUATION* (MKE AND FUNG 2013)

Inventory Form (State)

General Information

Bridge Number: 001002500500053	Route No: 19	
Popular Name: Waiaka Stream Bridge		
Feature Crossed: Waiaka Stream		
Feature Carried: Kawaihae Road		
Milepost: 0.53 mi.	Island: Hawaii	
Longitude: 155d-41m-56.06s	Latitude: 20d-01m-35.97s	
Location: 0.08 Miles East of Lindsey Road		
Historic Name: Waiaka Stream Bridge		
Designer/Engineer:		
Builder/Contractor:		

Location Map:



001002500500053 Waiaka Stream Bridge

Construction Information

Bridge Type: Concrete Slab	Construction Date: 1932	Replaced? No
Altered? No Alteration Date(s):		
Alteration Type(s):		
Alteration Description(s):		

Bridge Information

Number of Spans: 2	Max Span: 15.1 ft.	Total Length: 38.1 ft.	Deck Width: 26.9 ft.
Superstructure: Concrete Slab			
Substructure: Concrete Abutment Wall and Concrete Wall Pier			
Floor/Decking: Concrete Deck with AC Overlay			
Parapets/Railings: Concrete Solid Panel with Cap			
Setting:			
Other Features:			

Historic Association

Eligibility Status: Eligible	Criteria: C	State/National Registered? No
Current Function: Bridge		Historic Function: Bridge
Area of Significance: Engineering		
Narrative Description: <p>The Waiaka Stream Bridge carries Hawaii Belt Road across the Waiaka Stream. This reinforced concrete and masonry bridge is in its original location, is generally in good condition, and its materials remain intact. The bridge has concrete, solid panel parapets. This bridge's name which is engraved on the parapet is obscured by three beams. It contains arch piers and the middle support is a double arch. The workmanship of the bridge has not been obscured by addition or repair and retains its historic feeling. The MOA between DOT and the Central Federal Lands considering the bridge for replacement in 2013 was completed. Per the MOA, the bridge is scheduled for replacement and road re-alignment.</p>		

001002500500053 Waiaka Stream Bridge

Significance Statement:



This bridge is eligible under Criterion C as a good example of a 1930's reinforced concrete bridge that is typical of its period in its use of materials, method of construction, craftsmanship and design.

001002500500053 *Waiaka Stream Bridge*

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2

APPENDIX D. SECTION 106 CONSULTATION COMMENT LETTERS

 <p style="text-align: center; font-size: small;">DAVID V. IGE GOVERNOR OF HAWAII</p>	 <p style="text-align: center; font-weight: bold;">STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES</p> <p style="text-align: center; font-size: x-small;">STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD., STE 555 KAPOLEI, HI 96707</p>	<p style="text-align: right; font-size: x-small;">SUZANNE B. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSIONER OF WATER RESOURCE MANAGEMENT</p> <p style="text-align: right; font-size: x-small;">ROBERT K. MASEDA FIRST DEPUTY</p> <p style="text-align: right; font-size: x-small;">M. KALO MANUEL DEPUTY DIRECTOR, WATER</p> <p style="text-align: right; font-size: x-small;">AQUATIC RESOURCES BOATING AND UPLAND RESOURCES BUREAU OF ENVIRONMENT TERRAQUA: W. WATER RESOURCES MANAGEMENT CONSERVATION AND UPLANDS PROTECTION AND RESOURCES ENFORCEMENT (ENFORCEMENT)</p> <p style="text-align: right; font-size: x-small;">FORESTRY AND WILDLIFE HISTORIC PRESERVATION BUREAU OF LAND AND NATURAL RESOURCES LAND STATE PARKS</p>
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>March 7, 2022</p> <p>Karen Chun Engineering Program Manager Design Branch, Highways Division State of Hawai'i Department of Transportation 601 Kamokila Boulevard Kapolei, Hawai'i 96707 Email: Karen.Chun@hawaii.gov Electronic Transmittal Only, No Hard Copy to Follow</p> <p>Dear Karen Chun:</p> <p>SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review – Continued Consultation, Request for Concurrence with the Revised Area of Potential Effects Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment Approaches Ref. No. HWY-DS 2.7423, Federal Aid Project No. 19D-01-19 Lālanilo, Keanu'i-omanō Ahupua'a, Kohala District, Island of Hawai'i TMK: (3) 6-5-001:015, (3) 6-5-001:033, (3) 6-6-001:011, (3) 6-6-001:077, (3) 6-6-004:001 Kawaihae Road Right-of-Way and Kohala Mountain Road Right-of-Way</p> </div> <div style="width: 35%; font-size: small;"> <p>IN REPLY REFER TO: Project No.: 2021PR00849 Doc No.: 2203SH05 Archaeology Architecture</p> </div> </div>		
<p>The State Historic Preservation Division (SHPD) received a letter dated February 3, 2022 from the State of Hawai'i Department of Transportation (HDOT) on behalf of the Federal Highway Administration (FHWA) to continue the Section 106 historic preservation process for the Replacement of Waiaka Stream Bridge and Realignment Approaches project on Kawaihae Road on the island of Hawai'i. The SHPD received this submittal on February 7, 2022 (HICRIS Submission No. 2022PR00849.002).</p> <p>The proposed HDOT project is currently only state funded but <i>may</i> receive funding from FHWA. At this time, the proposed project is subject to compliance with Hawaii Revised Statutes (HRS) §6E-8; should the proposed project receive federal funding it would also be subject to compliance with Section 106 of the NHPA. Pursuant to the Programmatic Delegation of Authority (May 2016), the FHWA has delegated Section 106 consultation to the Hawai'i Department of Transportation.</p> <p>HDOT states the proposed project will bring Waiaka Stream Bridge up to current standards for roadway width, load capacity, bridge railings, and bicycle and pedestrian access. This project proposes to replace the existing bridge and realign the roadway approaches toward the bridge. There are two build alternatives being considered for the project: 1) a replacement bridge with a T-Intersection or 2) a replacement bridge with a roundabout.</p> <p>The proposed project is located in South Kohala at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. HDOT has defined the Area of Potential Effects (APE) to include the existing highway right-of-way that encompasses this intersection and Waiaka Bridge (Mile Post 58.88), which carries Kawaihae Road over Keanuomano Stream leaving Waimea Town. The proposed APE also includes areas for construction staging and a temporary roadway and bridge facilities.</p> <p>The APE has been minimized since the start of Section 106 consultation for the proposed undertaking to avoid culturally sensitive areas (Personal Communication; March 7, 2022 Andrew Hirano [HDOT] and Stephanie Hacker</p>		

Karen Chun
March 7, 2022
Page 2

[SHPD]). The area of the APE has been revised from approximately 7.3 acres to approximately 6.6 acres. The APE includes the following, as measured from the center of the existing intersection:

- 450 feet along Kohala Mountain Road (roughly 130 feet wide);
- 500 feet along Kawaihae Road toward Kawaihae (roughly 105 feet wide at its widest point);
- 550 feet along Kawaihae Road, including Waiaka Bridge, approaching the intersection while leaving Waimea Town (roughly 190 feet wide); and
- Privately-owned parcel, (3)6-5-001:015 (13,865 square feet / 0.32 acres).

Based on the information received, the State Historic Preservation Officer (SHPO) has no objections to the revised APE as it is defined.

As stated previously in SHPD's letter dated August 18, 2021 (SHPD Doc No. 2108SH06), there are two historic properties approximately 200 meters slightly northeast of TMK: (3) 6-5-001:015. One is State Inventory of Historic Places (SIHP) Site 50-10-06-19648, a Hawaiian habitation termed Wai'Aka. The other is SIHP Site 50-10-06-19649, also termed Wai'Aka and documented as a Hawaiian habitation and burial complex. North of these sites are a number of documented related sites assigned SIHP numbers. One can only assume this is a single cultural site assigned multiple SIHP numbers. Therefore, the subsurface of this area should be treated as culturally sensitive.

Additionally, according to HDOT's 2013 Bridge Inventory Survey, the Waiaka Stream Bridge was built in 1932 and is eligible for listing in the National Register of Historic Places (NRHP) under Criterion C and is considered a good example of a 1930s reinforced concrete bridge. However, SHPD found discrepancies between the locational data provided by HDOT and the data within the 2013 Bridge Inventory Survey. The Bridge Inventory Survey states the Waiaka Stream Bridge (Bridge Number 001002500500053) is at Milepost 53 and carries Hawai'i Belt Road over Waiaka Stream, not Keanuimano Stream as stated by HDOT. It appears from the APE map provided by HDOT and the map illustrating the location of Bridge Number 001002500500053 in the 2013 Bridge Inventory Survey that this is the same bridge, however **the SHPD requests** clarification of these discrepancies from HDOT and further points out, Hawai'i Belt Road is also considered a historic property eligible for listing in the NRHP.

Should the Waiaka Stream Bridge be a historic property, please provide HDOT's assessment of how the proposed undertaking will, or will not, impact the character defining features of the Waiaka Stream Bridge, as well as of Hawai'i Belt Road. Please provide a detailed assessment of the significance and integrity of these historic properties as well as a list of their character defining features.

In response to HDOT's request for a contact list of potential consulting parties and based on the consulting parties listed in HDOT's letter, the SHPD recommends HDOT expand consultation to interested parties such as civic clubs and historic preservation interest groups including Historic Hawai'i Foundation and the National Trust for Historic Preservation. Contact information for Historic Hawai'i Foundation and the National Trust for Historic Preservation are copied with this letter.

Per HDOT's request, the SHPD is confirming its intent to participate in the Section 106 process for this project. The SHPD looks forward to continuing the Section 106 process for the proposed project.

Please submit all forthcoming information and correspondence related to the subject project to SHPD HICRIS Project No 2021PR00849 using the Project Supplement option.

The HDOT and FHWA are the offices of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at Stephanie.Hacker@hawaii.gov or at (808) 692-8046 for matters regarding archaeological resources or this letter.

Karen Chun
March 7, 2022
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Aloha,

Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Andrew Hirano, HDOT (Andrew.j.Hirano@hawaii.gov)
Meesa Otani, FHWA (Meesa.Otani@dot.gov)
Julia Flauaus, SHPD (Julia.Flauaus@hawaii.gov)
Darin Chinen, WSP USA Inc. (Darin.Chinen@wsp.com)
Kiersten Faulkner, Historic Hawai'i Foundation (Kiersten@historichawaii.org)
Elizabeth Merritt, National Trust for Historic Preservation (emerritt@savingplaces.org)



March 3, 2022

Via email and USPS

State of Hawaii
Department of Transportation
Attn: Mr. Andrew Hirano, Project Manager
Technical Design Services Section, Design Branch, Highways Division
601 Kamokila Boulevard
Kapolei, Hawaii 96707

RE: HPA response to HDOT Wai'aka Bridge/Highway Project No. 19D-01-19

Dear Mr. Hirano:

Aloha and thank you for this opportunity to participate in the ongoing conversation around the best path forward for our community related to Kawaihae Road, Kohala Mountain Road and the Wai'aka bridge. This letter serves as our written intent to participate in the Section 106 process for the above referenced project.

Hawai'i Preparatory Academy is a longstanding member of our Waimea community and we care deeply about the safety and development of Hawai'i Island and our neighborhoods. We have addressed specific areas of your letter in the sections below, and we also included a historical and cultural perspective on the areas impacted and in discussion.

Current use impact

With construction and flow potentially lasting through one or more school sessions, we would like to discuss an emergency route through our campus that gives the ability to pass from Kohala Mountain Road through our campus, exiting on Kawaihae Road past the area of construction. We believe this to be necessary to support HPA and the greater Waimea and Kohala community should emergency passage be needed.

Areas of Potential Effect

- TMK (3)6-5-001:033
 - Historical rock wall enclosure - homestead with gravesites
 - Utility service - electrical, communications (phone / internet), water
 - Possible burials in areas
 - Possible historical sites, caves and cultural significance mentioned in affected areas

Safety Concerns

There are potential safety concerns related to this project and its location. Our Upper School morning drop off and afternoon pick up will back traffic up and that will impact travel times and create potential irritation for the Waimea community. We also see potential safety concerns with our student drivers trying to maneuver through any construction areas as inexperienced drivers.

65-1692 Kohala Mountain Road ■ Kamuela, Hawai'i 96743-8476 ■ Telephone: 808.885.7321 ■ Facsimile: 808.881.4003 ■ Web: www.hpa.edu

Since faculty, students, staff, families, and sporting teams continuously traverse through this intersection, these are questions about alignment that have surfaced:

- What is the safest route/alignment for peak hour traffic?
- What alignment at this particular location, considering a stream crossing, an angled approach, an intersection, and a sloped terrain, will provide all users of the road (buses, cars, trucks, pedestrians, cyclists) a safe transit?
- As we encourage more walking and biking to school, how can we improve bike and walking lanes?
- Which alignment provides the best access onto Kawaihae road from Kohala Mtn. Rd.?
- The current iteration has well-known and established visibility issues.
- There are too many potential points of contact in the current state. With the number of young drivers utilizing the road, how can we provide them the safest option for merging onto a busy thoroughfare?

Some additional questions about process are:

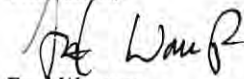
- What is the expected length of construction?
- Projected dates?
- Will work be carried out only during the day?

Historical and Cultural

We know of several people who have information regarding burial sites, building foundations and other important artifacts that will better inform decisions about potential construction. Our property is at the base of (3) unique land locked Ahupua'a and an enormous area that had great cultivation. We are aware of multiple burial sites (ancient and modern). We have been in contact with Mrs. Barbara Robertson of the Phillips and Ka'apuni 'ohana, lineal descendants of the Wai'aka ahupua'a. HPA's land stewardship and administration teams are working with this 'ohana to ensure protection in perpetuity of their family graves located near our maintenance building. In 1868, Father Damien built the first Catholic wooden church in Wai'aka which later burned in a fire. Mrs. Robertson notified our leadership of the remains of the foundation of this historic structure located near her family gravesite. In our conversations with Mrs. Robertson and other lineal descendants of the Wai'aka and Hale'aha ahupua'a we have learned of many burial caves located in the banks of the Wai'aka stream. To our knowledge, these burial caves hold ancestral remains and moepū (artifacts of the deceased). A few decades ago they were sealed off to ensure safekeeping and protection as residents of the area were seen entering these sacred spaces. As the current stewards of this land, HPA will continue to collaborate with the lineal descendants and native residents to establish appropriate protocols and planning of campus development and maintenance. We strongly recommend that your esteemed department also works with these Wai'aka families in the planning and reconstruction of this historic bridge on celebrated land.

We are grateful to participate in this conversation. We are committed to moving forward together honoring the land, those that came before us, and building room for the future plans and aspirations for our school and island community.

With aloha,



Fred Wawner
Interim Head of School

McClellan, Malie

From: Chinen, Darin N.
Sent: Friday, April 1, 2022 12:04 PM
To: Adams, Rachel; McClellan, Malie
Subject: FW: [EXTERNAL] Waiaka Bridge Project

FYI, in case you folks weren't bcc'd.

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Sent: Friday, April 1, 2022 12:03 PM
To: Larry Kimura <[REDACTED]>
Subject: RE: [EXTERNAL] Waiaka Bridge Project

Thank you Larry.

Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Larry Kimura <[REDACTED]>
Sent: Friday, April 1, 2022 12:01 PM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] Waiaka Bridge Project

Hello Andrew,

I am in receipt of a letter from your office regarding any concerns for the Waiaka Bridge Project. I am support this project as necessary. The only concern I have is the location of this site can likely uncover archaeological remains of earlier human habitation or use that can be contributive to Waimea's cultural history and that perhaps there will be present qualified personnel to be watchful for such finds.

Mahalo. Larry Kimura

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Sent: Friday, February 11, 2022 6:33 AM
To: Chinen, Darin N. <Darin.Chinen@wsp.com>
Cc: Ramos, Kate S <kate.s.ramos@hawaii.gov>
Subject: FW: [EXTERNAL] Re: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuio mano 19D-01-19

Darin,

There was a typo in the letter and email. It was addressed to Mr, but in the salutation and body of the email it said Ms. Your spreadsheet had Mr.

Darin,

He provides an interesting story, but it is not an archaeological feature we would impact. He is talking about Hawaiian artifacts that have been poached.

Thanks,
 Andy

From: Leningrad Elarionoff [REDACTED] >
Sent: Thursday, February 10, 2022 9:16 PM
To: Ramos, Kate S <kate.s.ramos@hawaii.gov>
Cc: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] Re: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuio mano 19D-01-19

Hi to all involved, Especially Ms. Kate and Mr. Hirano,

First of all, at 83 years old, I have no doubt as to what my sexual gender identification may be so please don't refer to me as Ms, I am not confused and hope that you are not confused also. In your letter to me, you referred to me as both Ms and Mr. Someone is confused and it is not me!

Now in reference to the replacement of the Waiaka Bridge in So. Kohala. Approximately 42 years ago, I sat with the community organization, as a cop, trying to get the Bridge replaced. Nothing has been done besides there are those who are now working for the State with multiple sexual I.Ds. Hope that this progression (?) will expedite the project.

In all of that time we met as a community group with the goal of getting the State to do something about replacing the bridge, we had numerous local seniors come forward talking about preserving segments of the area. There are only two things that I remember to be interesting.

One incident took place as I was a Police Officer but was off duty when it took place. An HPA student heard about a canoe that was buried in a cave someplace up hill from the Waiaka Bridge. The canoe was removed from the cave by the student and replaced by the cops now long deceased.

The second incident I recall involved the burying of a rock beneath the home of A. K. Solomon. The rock had a history of being a strength factor between the Parker Ranch Cowboys and an ornery Irish Blacksmith who lived besides the road to Kohala. A. K. Solomon related the story to me when he heard that my mother was an Awaa descendent. According to Mr. Solomon, The Irish Black Smith daily harassed the Parker Ranch employees until the day that my mother's 17 year brother rode in the Wagon with the crew that went past the Black Smith's shop. The Black Smith immediately harassed the cowboys who talked my mothers 17 year old brother to challenge the Black Smith. with little effort, my mothers' brother picked up the rock by the metal ring and tossed it into the pasture to the dismay of the Black Smith.

A. K. Solomon owns the house next to the Waiaka Bridge with the concrete wall. Mr. Solomon was a cave thief taking all Hawaiian Artifacts he could from burial caves to be added to his museum Collection. He told me that he recovered the boulder from the Black Smith shop and buried under the floor of his newly built Museum believing that it would give him good luck.

I am sorry to say that other stories told about the area along with materials I once had access to have long been disposed of or forgotten.

I hope to see the bridge replaced in my life time,

Leningrad Elarionoff
Kamuela, Hawaii

-----Original Message-----

From: Ramos, Kate S <kate.s.ramos@hawaii.gov>

To: [REDACTED]

Cc: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>

Sent: Thu, Feb 10, 2022 12:01 pm

Subject: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuimano 19D-01-19

Aloha Ms. Elarionoff,

Please see attached letter.

Thank you,
Kate Ramos
Office Assistant
Technical Design
Design Branch - Highways Division
State of Hawaii - Department of Transportation

McClellan, Malie

From: Chinen, Darin N.
Sent: Friday, February 25, 2022 10:12 AM
To: Adams, Rachel; McClellan, Malie
Subject: FW: [EXTERNAL] My aggressiveness

FYI.

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Sent: Monday, February 14, 2022 7:43 AM
To: Leningrad Elarionoff <[REDACTED]>
Cc: Ramos, Kate S <kate.s.amos@hawaii.gov>
Subject: RE: [EXTERNAL] My aggressiveness

Thank you Leningrad. You have quite a knowledge of the Hawaiian history.

Andy Hirano

From: Leningrad Elarionoff <[REDACTED]>
Sent: Sunday, February 13, 2022 6:14 PM
To: Ramos, Kate S <kate.s.amos@hawaii.gov>; Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] My aggressiveness

Aloha Ms Ramos and Mr. Hirano,

After reading your response to my somewhat aggressive letter, I feel that I may owe you an apology so instead, I am sending you some local information not available in books. You need not read it.

In today's world, there seems to be a change being pushed by the Government to line us up like dummies as we are told what to do, how to dress (mask) and a number of other things. In the mean time, Government has stopped teaching History, penmanship, and some other subjects that once was thought to be mandatory because we learn from our mistakes. It has become obvious that the federal Gov. never learns from their mistakes. In our schools here, government has even taught gender preference to kids then telling them not to tell their parents. When I received the response from you, it sounded like that was the direction you were heading towards and I wanted to stop you there.

Judging from my name, you may suspect that I am Russian. Correct! My dad along with his family left Russia in 1910 on the pretense they were going on vacation and left all of their valuables and belongings just to allow us, the descendants, the opportunity to live in a free country. After months of discomfort along with loss of family, they legally entered the US through New York and became legalized. They were told to go West for more opportunities and did so. In California, they were invited to come to Hawaii and do

farming on Parker Ranch and did so. They ran from a socialistic type of government and today, America (Stupid Politicians) are taking us down that same path as those in Russia in 1917.

By the way, I am a retired Police captain, District Commander, not one of these nuts.

Somehow, my mom and dad met, in Waimea, both with their own first languages. My dad with a 3rd. grade education and my mom with a 7th. grade education. They worked together as a team and my dad got promoted to be a supervisor. Making the long story short, due to synthetics, the price of wool dropped making the raising of sheep almost useless especially on a cattle ranch. In the process, the Parker Ranch violated some health laws in their effort to rid the Ranch of sheep, and my dad was blamed and terminated without cause or a hearing although all he did was follow orders from the boss.

Those days, things were different. As a child, my mom was sent to a private school where she was taught by the white man that Hawaiians were lazy because they never worked to save money and accumulate property. They never bought land or even fenced off property they lived on. The white man couldn't understand that the Hawaiian believed that when he died, the property remained so how can one own it? Why fence it off as others might want to cross through it for their convenience.

I need to explain here that my mothers last name was Awaa, inherited from her father and his father. The name refers to ridges that go from up slope to down slope. It also refers to the long muscle on canoe paddlers. The implication is that my mothers descendants were canoe paddlers. This explains why my mothers brother at age 17 was such a strong kid. (story from las e mail) I remember my mothers brothers fighting but were prohibited by their father from touching each so in their fights, they picked up one end of the others automobile and just pounded it on the ground until they got tired. I share this with you in an effort to help you understand some cultural practices and some little known Hawaiian history. Hopefully this will not be boring and it will help you have a deeper understanding while doing your job. Here is some background information from a Russian Hawaiian Story Teller.

After my dad got fired, he had no choice but to move as far away from the Parker Ranch as possible which took our family to Kau where I was born. Kau was filled with people that were from the old days. Mary Kawena Pukui was a friend of our family and being that my mother was a story teller, they became good friends and tried to include me but I refused, choosing the ways of the white man. I have kicked myself many times over for that decision.

Allow me to ask you here, what does Aloha mean to you? In Hawaiian, Aloha is comprised of two words, Alo and Ha. Alo draws a picture of two people facing each other and Ha explains that they face each other with Ha, Breath, or Life. So in the welcoming greeting or the departure salutation, it is always Aloha or "I face you with Breath". The white man greet each other with: **HELL O** and when upset with that same person, they tell each other: **GO TO HELL!**

Now, let us to back to the days when the Hawaiians first came to Hawaii. They lived on some small island that they called Kahiki. Location unknown, it is only known as a "far off land". A decision was made that the land of Kahiki was too small and the local population needed more Space, Water, to maintain Ha, life. One day they set out to search for this place where there would be more space and water to maintain life. In Hawaiian, Ha refers to life or breath and wai refers to water, a necessary element to life

Boarding their canoes, they set out in search of water (wai) where they could have (Ha) life. They traveled for weeks and soon saw the glare of a volcanic eruption which caused them to ask each other, Ha Wai I ? Or, is this the place we are searching for that will supply us with sufficient Ha Wai I ? the last I in the word turns it into a question. Eventually these people landed at South Point and named the place Kau which means "ours" or "Breast" as in a woman's breast for supplying their physical needs, their well being from infancy into the nation they became. The name Hawaii began as a question when they first saw the land they were searching for upon leaving Kahiki.

As they grew stronger, the Hawaiians explored the shoreline going east and discovered a beautiful bay. They noticed that in spite of the mauka rains, there was no streams bringing the water down hill to the ocean and named that Ahapuaa Kahawai Ole which means "no fresh water streams". In their explorations, they noticed that far out into the bay, the ocean was boiling with water and realized that this was the cause for not having any streams as the water came down hill in lava tubes then boiled into the open ocean out in the bay. The old Hawaiians then named the bay Kailua referring to the hidden water erupting from the ocean floor.

I will stop here as you may not be interested. However, I make the offer, as should either of you come to this area to check out the project, let me know and I will provide you with the history of this area that is just fascinating.

Question: Kate, are you related to a Jack Ramos who once ranched and lived in Honokaa.

Leningrad Elarionoff

McClellan, Malie

From: Chinen, Darin N.
Sent: Wednesday, March 2, 2022 9:15 AM
To: Adams, Rachel; McClellan, Malie
Subject: FW: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuio mano 19D-01-19

FYI,

----- Original message -----

From: "Hirano, Andrew J" <andrew.j.hirano@hawaii.gov>
Date: 3/2/22 9:07 AM (GMT-10:00)
To: [REDACTED]
Cc: "Ramos, Kate S" <kate.s.amos@hawaii.gov>, "Chun, Karen" <karen.chun@hawaii.gov>, "Chinen, Darin N." <Darin.Chinen@wsp.com>
Subject: RE: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuio mano 19D-01-19

Hello Ms. Lui.

Thank you very much for your reply to our letter. I am the State's project manager for this project. You surely have a wealth of knowledge of the history of the area. We will take into consideration the Kamuela Museum property and the TMK: (3) 6-6-001:011 DHHL area you mentioned below. An AIS has not been done yet. As part of the Section 106 process, we are reaching out to the NHOs and other consulting parties regarding their knowledge of any historic resources in the area that may be impacted by the project's Area of Potential Effects (attachment to the letter).

Your reply is also being forwarded to the designer of the project for consideration.

Mahalo,
 Andy Hirano
 Project Manager
 State of Hawaii, Dept of Transportation
 Highways Division, Design Branch
 Technical Design Section (HWY-DS)
 email: andrew.j.hirano@hawaii.gov
 Tel: (808) 692-7546

From: Ramos, Kate S <kate.s.amos@hawaii.gov>
Sent: Wednesday, March 2, 2022 8:33 AM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: FW: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuio mano 19D-01-19

Hi Andy,

Please see below response from Ms. Lui.

Thanks,
Kate

From: Nicole Lui <[REDACTED]>

Sent: Tuesday, March 1, 2022 10:01 PM

To: Ramos, Kate S <kate.s.amos@hawaii.gov>

Subject: [EXTERNAL] RE: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuimano 19D-01-19

Aloha Karen,

Thank you for reaching out to me as part of the consultation process section 106. I do have ties to that immediate area. Genealogically I am connected to South Kohala through both parents. My Mother and Father have ancestral ties to that district both North and South Kohala. The property that is the site of the old Kamuela Museum belonged to my Great Granduncle Kehau Solomon. He is the Granduncle to Senator Malama Solomon. My Great Grandmother Violet Solomon is the sister of Kehau Solomon. On my Fathers side of the Family and on his mother side are the Solomons, Raymonds, Sproats, Husseys. On my Fathers Fathers side of the family come the Stevens, Purdys, Davis, Haa, Keliwahamana. On my Mothers Fathers side come the Lincolns, Bells, Lindseys, Lims, and on her Mothers side come Kaihemakawalu. This is just the surface. Been doing genealogy for 30 + years and am related to a great many people and I know many of them. From Kona to Kohala to Ka'u and Puna and on to Hamakua.

Kamuela Museum was built by my ggranduncle with his own two hands. He did the yard and planted the trees. I don't know who owns it now but it was a great loss when his children decided to sell. They just wanted the money. He had his most beautiful artifacts hidden in his room I know this because I was in my 30's when he took me into his room and showed me his prized 12 chinese zodiac animal signs carved out of pure ivory and ancient it was and many other artifacts that he did not put out for the public. I am in my 60's now and those memories is all I have. I hope that no danger will come to the property.

Karen I am a Commissioner on the Cultural Resource Commission and the CRC can be consulted with about this project. You will have to get ahold of the County Planning Dept and ask for Kamuela Plunkett and ask to be on the agenda. His Office Personnel is Kim Tanaka. They are in the Hilo Office I believe. I could reach out but I am super busy with work and caring for my parents that I would not want to promise to do it and not do it.

I am also concerned that TMK: (3) 6-6-001:011 DHHL is deemed to be the staging area. Was an AIS ever done on the property? Has it been previously impacted by machinery or is it pasture land? This is Hawaiian land. I know makai of that area are burials and a burial cemetery for the Vredenburg ohana. Uncle Keawe Vredenburg is a descendant of those burials. There is also makai side a reinternment site. We reinterred iwi kupuna with Halealoha Ayau. Halealoha was instrumental in forming some of the laws that govern inadvertent burials and previously known burials. I am just stating this because I just want to make sure that the property is in the clear and we make a concerted effort to do it right the first time,

I think I have said to much and will end here

Please contact Nicole Ishihara of ASM Consulting firm for my consultation report that I shared with her.

Me ka ha'ha'a,

Nicole Lui

Sent from [Mail](#) for Windows

From: [Ramos, Kate S](#)

Sent: Thursday, February 10, 2022 12:08 PM

To: [REDACTED]

Cc: [Hirano, Andrew J](#)

Subject: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuimano 19D-01-19

Aloha Ms. Lui,

Please see attached letter.

Thank you,

Kate Ramos

Office Assistant

Technical Design

Design Branch - Highways Division

State of Hawaii - Department of Transportation

McClellan, Malie

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Sent: Tuesday, February 22, 2022 1:03 PM
To: Chinen, Darin N.
Cc: McClellan, Malie
Subject: FW: [EXTERNAL] Waiaka Bridge
Attachments: Waiaka document.docx; Waiaka.png

Darin,

This is such a great response to our letter. Something I didn't expect with such detail.

Thanks,
Andy

From: Hirano, Andrew J
Sent: Tuesday, February 22, 2022 1:00 PM
To: Momi Naughton <[REDACTED]>
Subject: RE: [EXTERNAL] Waiaka Bridge

Dr. Naughton,

Thank you very much for providing us a number of cultural and historic features which we should be aware of as we continue to proceed with this project. You certainly have a wealth of knowledge of the history of the area. I'll be forwarding your response and your contact information to our design consultant. The map surely helps.

Thanks again,
Mahalo,
Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Momi Naughton <[REDACTED]>
Sent: Tuesday, February 22, 2022 12:39 PM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] Waiaka Bridge

Aloha e Andrew,

I recently received a letter asking for my comments on the proposed replacement of the Waiaka Bridge in Waimea. Please find attached my comments and a portion of a map from 1884 showing this area.

Feel free to contact me if you have questions on my comments.

Mahalo,
Momi Naughton, Ph.D.
[REDACTED]

To: Mr. Andrew Hirano
Technical Design Services Section
Hawai'i Department of Transportation
Email: andrew.j.hirano@hawaii.gov

From: Momi Naughton, Ph.D.
P.O. Box 2364
Kamuela, Hawai'i 96743
Email: mominaughton@gmail.com
Ph. (808) 756-1910

Date: February 14, 2022

Dear Mr. Hirano:

I very much appreciate the invitation to comment on the proposed replacement of the Wai'aka Bridge and realignment of approaches to that bridge. I am currently working on a book on early Waimea history and have done quite a bit of research on the area of Wai'aka.

With the stream and multiple 'auwai in the Wai'aka region, it is obvious that it was an area where agriculture thrived in ancient times. I'm sure you are consulting archaeological studies done of the region so I'll not cite those here. From the research I've done, it does not appear that there were *heiau* in the immediate region in question. The closest one was in the ahupua'a of 'Ōuli.

Because the map attached to your letter wasn't very detailed, I'm not sure if the planned construction will be near the Edwin Lindsey (1883-1952) house, sometimes called the William (1848-1905) and Kaluna Lindsey home. The earliest portions of the house were built in the late 1860s. This is a significant historic home that during the 1970s was considered for the State Historic Register.

However, my main concern about this section of the Wai'aka area has to do with it being the possible site of the Catholic Church, St. John the Evangelist. As you may be aware, prior to Father Damien going to Kalaupapa, Molokai to minister to Hansen's disease (Leprosy) patients in 1873, he served on Hawai'i Island. Initially, Father Damien was stationed in the district of Puna but in 1865 was transferred to the districts of Kohala and Hāmākua.

One of the things Father Damien was noted for while serving in the Kohala and Hāmākua districts, was building churches. A number of the churches built by Damien were simple "grass huts" but he did build more substantial ones. One such church, said to be made out of wood, was constructed at Wai'aka.

In 1868, Damien had a revelation to build a church in Wai'aka and dedicated it to St. John the Evangelist. The exact location of this church has not been discovered to my knowledge, however, one person has indicated to me that it was in the area of the maintenance facility for Hawai'i Preparatory Academy at the lower end of the campus. There is a 1884 map that has the

notation of “Cath Ch” on it that seems to indicate this area as well. Using this map to locate the church is tricky as there is what appears to be a road that is actually a trail going up towards the Kohala Road. It’s best to follow the contour of the stream on the map and match it with current maps. I’m attaching a portion of the 1884 map that we used in an exhibit.

St. John the Evangelist Church in Wai’aka burned down in 1900 and was rebuilt in 1916. In 1936 the church was relocated to the area where the Catholic Church now stands across from the Anuenue Playground on Kawaihae Road. At that time the name of the church was changed to Immaculate Conception Church but to avoid confusion since there was another church by the same name in North Kona, the name was changed in 1965 to Church of the Annunciation. That small church is still on the grounds and the current Church of the Annunciation was completed in 2003.

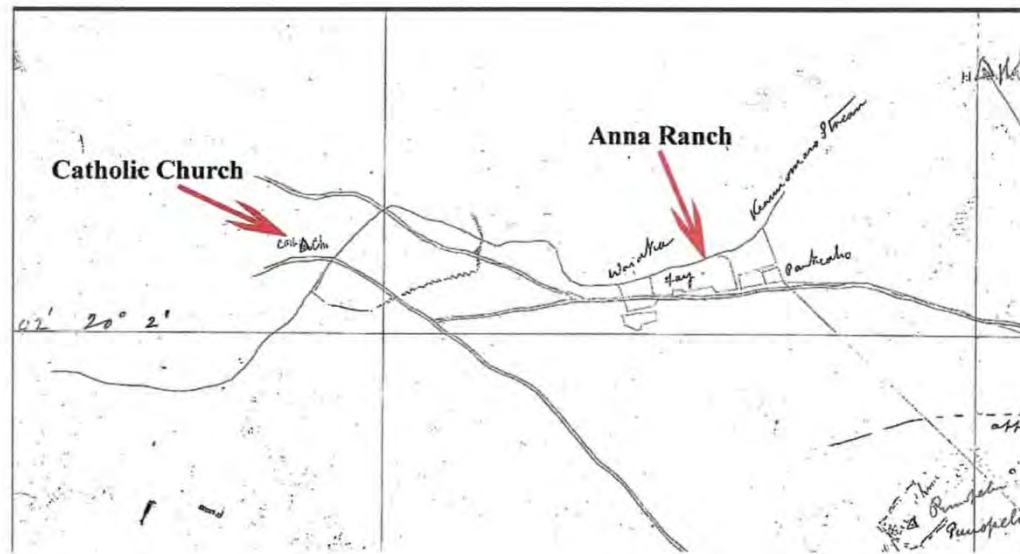
Although there is no church standing in this area, there may be foundations and burials associated with St. John and Evangelist Church in the TMK (3)6-5-001-033 portion that might be impacted. In walking through the area next to the maintenance facility, there are old stone walls and other features of interest. If this is the church site, there could well be burials too. I assume that some archaeology will be conducted or at least monitors will be on hand during construction.

As you know the Wai’aka Bridge (built in 1932) is a historic bridge, however, it has long needed to be replaced. I do hope that careful documentation of the bridge will be done for future generations.

Mahalo again for allowing me to submit testimony on this bridge replacement project and please feel free to contact me if you have questions on what I’ve submitted.

Me Ka Aloha Pumehana,

Momi Naughton, Ph.D.



1884 map enlarged

CARLSMITH BALL LLP

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SLIM@CARLSMITH.COM

March 4, 2022

VIA E-MAIL ANDREW.J.HIRANO@HAWAII.GOV

State of Hawai'i Department of Transportation
 Technical Design Services Section
 Design Branch, Highways Division
 Attn: Andrew Hirano
 601 Kamokila Boulevard
 Kapolei, Hawai'i 96707

Re: National Historic Preservation Act (NHPA) Section 106 Consultation
 Kawaihae Road, Replacement of Waiaka Bridge & Realignment of Approaches
 Ahupuaa of Lalamilo and Kanuiomano District (Moku) of Kohala, Island of
 Hawai'i, State of Hawai'i
 Project No. 19D-01-19
 HWY-DS 2.7423

Dear Mr. Hirano:

Our firm represents Harvey Bookstein, Trustee of the Big Buck Trust dated May 3, 1996 (the "Trust"), the fee owner of the parcel of land located in Lalamilo, Waimea, District of South Kohala, Island and County of Hawai'i, State of Hawai'i, identified as Tax Map Key ("TMK") No. (3) 6-6-004:001 ("Trust's Property"). The Trust is in receipt of your letter dated February 11, 2022 inviting comment on the proposed Area of Potential Effect ("APE") for the above-referenced bridge replacement project ("Waiaka Bridge Project"). This letter shall serve as written notice of the Trust's intent to participate in the Section 106 process and provide comment on the Waiaka Bridge Project's impacts on the Trust's legal, economic, and historic preservation interests.

The Waiaka Bridge Project will significantly affect the Trust's Property, which was formerly the location of the historic Kamuela Museum. The Waiaka Bridge Project proposes to use, as a temporary use area, a 0.34 acre portion of the Trust's Property upon which the Kamuela Museum is located. It is our understanding that the Kamuela Museum structure was constructed in the early 1900s and opened to the public in 1968. Because the Kamuela Museum structure is over fifty years old, it is considered a historic property under Hawai'i law. See HRS §6E-2. Though the museum is no longer open to the public, numerous artifacts remain on the Trust's Property in their original display cases and the structure continues to be well-maintained. Thus,

HONOLULU

HILO

KONA

MAUI

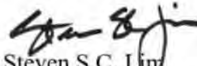
Andrew Hirano
March 4, 2022
Page 2

the Waiaka Bridge Project's impacts raise significant concerns for the preservation of historical and cultural artifacts related to the Trust's Property.

Furthermore, the Waiaka Bridge Project affects the Trust's legal and economic interests. The proposed area of use as depicted on the APE map covers a portion of the Trust's Property upon which the residential structure sits and which is currently occupied by a family with a young child. Such proposed use of this area would essentially eliminate all beneficial use of the Trust's Property as a residential property. In addition, the letter notes the possibility of the State's permanent acquisition of the subject portion of Client's Property. Suffice to say, the Trust takes the position that this is unacceptable.

Should you have any questions, please feel free to contact me.

Sincerely,



Steven S.C. Lim

cc: Harvey Bookstein, Trustee of the Big Buck Trust

4868-8258-3055.2

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Sent: Monday, March 7, 2022 6:18 AM
To: Dr.Mike Aronowitz <[REDACTED]>
Subject: RE: [EXTERNAL] REPLACEMENT OF WAIAKA BRIDGE, WEST OF WAIMEA/KAMUELA

Dr. Aronowitz,

Thank you very much for your response. We'll correct your address as noted in your response. The purpose of the letter was to gather cultural and historic assets information from the community within the Area of Potential Effects.

The Draft Environmental Assessment (EA) for the project is expected to be published on March 23 and 30 days for comments. The Draft EA will have the recommended alternative to go forth for the project. We look forward toward receiving your comments on the Draft EA.

Mahalo,
 Andy Hirano
 Project Manager
 State of Hawaii, Dept of Transportation
 Highways Division, Design Branch
 Technical Design Section (HWY-DS)
 email: andrew.j.hirano@hawaii.gov
 Tel: (808) 692-7546

From: Dr.Mike Aronowitz <[REDACTED]>
Sent: Sunday, March 6, 2022 12:10 PM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] REPLACEMENT OF WAIAKA BRIDGE, WEST OF WAIMEA/KAMUELA

Dear Mr. Hirano,

RE: HWY-DS 2.7423

I am responding to an e-mail I received on February 9, 2022 from the Hawaii Department of Transportation inviting my input regarding the planned replacement of the WAIAKA BRIDGE west of Waimea town. (APE).

I live at 66-1662 Waiaka Street, and my home is located 500 feet from the center of the current bridge.

1

I wish to express my very strong hope that the current bridge will be replaced with a ROUNDABOUT.

I believe that a roundabout would greatly mitigate the traffic noise to which my family and I will be subjected.

If cars and especially trucks (with loud air brakes) are required to come to a complete stop at a T-Intersection (alternative 1), **and then start up from having been stationary, traffic noise will increase greatly, making our lives miserable.**

I believe that a roundabout will also be significantly safer.

I am hereby indicating my wish and intent to participate in the Section 106 process.

Thank you for giving consideration to my request.

With aloha,

Dr. Michael Aronowitz.

From: Hirano, Andrew J
Sent: Monday, March 7, 2022 6:58 AM
To: Vivienne Aronowitz [REDACTED]
Subject: RE: [EXTERNAL] REPLACEMENT OF WAIAKA BRIDGE, WEST OF WAIMEA/KAMUELA

Thank you Vivienne for your response. The Draft Environmental Assessment (EA) is anticipated to be published on March 23 with a 30 day comment period. The Draft EA will have the recommended alternative for the project. We look forward to receiving comments on the Draft EA. Yes, noise is a factor in considering the best alternative for the project.

Mahalo,
Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Vivienne Aronowitz [REDACTED]
Sent: Monday, March 7, 2022 5:45 AM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] REPLACEMENT OF WAIAKA BRIDGE, WEST OF WAIMEA/KAMUELA

Dear Mr. Hirano,

I live at [66-1662 Waiaka Street](#), and my home is located 500 feet from the center of the current bridge.

I wish to express my very strong hope that the current bridge will be replaced with a ROUNDABOUT.

I believe that a roundabout would greatly mitigate the traffic noise to which my family and I will be subjected.

If cars and especially trucks (with loud air brakes) are required to come to a complete stop at a T-Intersection (alternative 1), and then start up from having been stationary, traffic noise will increase greatly, making our lives miserable.

I believe that a roundabout will also be significantly safer.

I am hereby indicating my wish and intent to participate in the Section 106 process.

Thank you for giving consideration to my request.

With aloha,

Vivienne Aronowitz

--

Vivienne Aronowitz

viviennearonowitz.com

--

Vivienne Aronowitz

viviennearonowitz.com

Section 106 Initiation Letter, Request for Contact Information, and Area of Potential Effect (APE)
Concurrence (July 21, 2021)

SHPO Response to Section 106 Initiation Letter (August 18, 2021)

HDOT request for information letter to SHPO (February 3, 2022)

NHO Consultation Invitation letter template (February 9, 2022)

SHPD Section 106 Review, Continued Consultation letter (March 7, 2022)

DAVID Y. IGE
GOVERNOR



JADE T. BUTAY
DIRECTOR

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

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
ENVIRONMENTAL DESIGN SECTION, ROOM 688A
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
TECHNICAL DESIGN SECTION, ROOM 688

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

IN REPLY REFER TO:
HWY-DS 2.4574

July 21, 2021

VIA: Hawaii Cultural Resource Information System website

TO: SUZANNE D. CASE, CHAIRPERSON
AND STATE HISTORIC PRESERVATION OFFICER
DEPARTMENT OF LAND AND NATURAL RESOURCES

ATTN: ALAN S. DOWNER, Ph.D.
ADMINISTRATOR AND DEPUTY STATE HISTORIC PRESERVATION OFFICER
STATE HISTORIC PRESERVATION DIVISION

FROM: KAREN CHUN *Karen Chun*
ENGINEERING PROGRAM MANAGER
DESIGN BRANCH, HIGHWAYS DIVISION

SUBJECT: NATIONAL HISTORIC PRESERVATION ACT: INITIATION OF
SECTION 106, REQUEST FOR CONTACT INFORMATION, AND
AREA OF POTENTIAL EFFECT (APE) CONCURRENCE
KAWAIHAE ROAD, REPLACEMENT OF WAIKAHAE STREAM BRIDGE AND
REALIGNMENT OF APPROACHES, AHUPUAA OF LALAMILO,
KEANUIOMANO
DISTRICT (MOKU) OF KOHALA, ISLAND OF HAWAII
PROJECT NO. 19D-01-19
TAX MAP KEYS: (3) 6-5-001:015, :033, (3) 6-6-001:011, :077; (3) 6-6-004:001;
KAWAIHAE ROAD RIGHT-OF-WAY AND KOHALA MOUNTAIN ROAD
RIGHT-OF-WAY

On behalf of the Federal Highway Administration (FHWA), the State of Hawaii Department of Transportation (HDOT) would like to initiate consultation under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (2006), for the subject bridge rehabilitation project. In addition, HDOT requests the State Historic Preservation Officer's (SHPO) concurrence on the proposed Area of Potential Effect (APE), pursuant to Section 106 of the NHPA and Title 36 of the *Code of Federal Regulations (CFR)*, § 800.4(a)(1).

This proposed project is currently state-funded, but there is the potential for federal funds to be used, which would result in the project being a federal action and undertaking, as defined by 36 CFR § 800.16(y).

If federal funds become involved, then the federally funded HDOT project would be considered a federal action and undertaking as defined in 36 CFR, §800.16(y). Effective May 1, 2016, FHWA issued a Delegation of Authority allowing the HDOT and local public agencies to conduct NHPA Section 106 Consultations with the SHPO, Native Hawaiian organizations (NHOs), and qualified consulting parties per 36 CFR, §800.2(c)(4). The FHWA will remain responsible for all findings and determinations charged to the agency during the Section 106 process.

Consultations

In addition to consulting with your agency, HDOT is simultaneously consulting with NHOs listed on the U.S. Department of Interior, Office of Native Hawaiian Relations, NHO List, with an applicable interest in the APE, including other qualified consulting parties per 36 CFR, §800.2(c)(4). Initial contact for the purpose of Section 106 consultation is by formal letter.

A Section 106 notice/advertisement will also be published in both *The Hawaii Tribune-Herald* and *West Hawaii Today* newspapers. NHOs and native Hawaiian descendants with ancestral, lineal or cultural ties to, cultural and historical property knowledge of and/or concerns for, and cultural or religious attachment to the proposed APE will be asked to provide a response within 30 days of notification. In addition, other individuals and organizations with demonstrated legal, economic or historic preservation interest will also be asked to respond to the Section 106 notice/advertisement.

Request for Information

Pursuant to 36 CFR §800.3(f) in consultation with the State Historic Preservation Division, we are interested if your agency is acquainted with any persons or organization that is knowledgeable about the proposed project area, or any descendants with ancestral, lineal or cultural ties to or cultural knowledge or concerns for, and cultural or religious attachment to the proposed project area. We would appreciate receiving their names and contact information within the 30 days of notification.

Per 36 CFR § 800.2(a)(4)(c)(5) we request the names of individuals and organizations who have demonstrated their legal, economic, historic preservation interest to SHPO on the proposed subject undertaking. As the office of record for this undertaking, we also request the SHPO provide us with a copy of the correspondence initiated by interested parties who have approached SHPO to request consulting party status for this undertaking.

Proposed Area of Potential Effect

The proposed project is located in South Kohala, at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. The proposed APE includes the existing highway right-of-way that encompasses this intersection and Waiaka Bridge (Mile Post 58.88), which carries Kawaihae Road over Keanuimano Stream leaving Waimea Town. The proposed APE also includes areas for construction staging and a temporary roadway and bridge facilities.

Please refer to the enclosed map of the proposed APE. The area of the APE is approximately 7.3 acres. The APE includes the following, as measured from the center of the existing intersection:

- 450 feet along Kohala Mountain Road (roughly 130 feet wide).
- 500 feet along Kawaihae Road toward Kawaihae (roughly 105 feet wide at its widest point).
- 550 feet along Kawaihae Road, including Waiaka Stream Bridge, approaching the intersection while leaving Waimea Town (roughly 190 feet wide).
- This includes use of a privately-owned parcel, (3)6-5-001:015 – 13,865 square feet / 0.32 acre.
- This includes use of a Department of Hawaiian Homelands (DHHL)-owned parcel, (3)6-6-001:077 – 31,090 square feet / 0.7 acre.
- This includes use of a DHHL-owned parcel, (3)6-6-001:011 – 8,544 square feet / 1.872 acres.

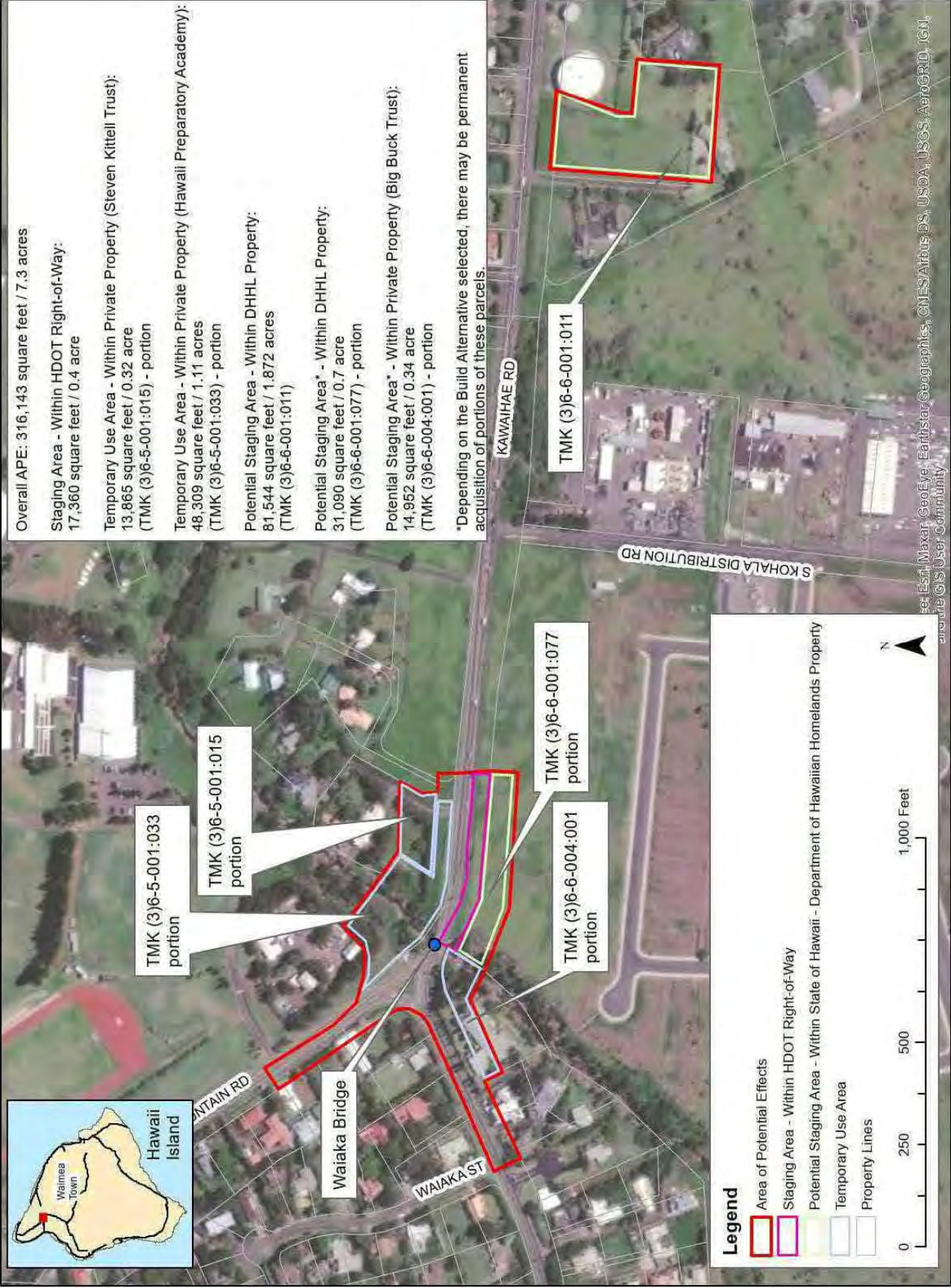
The purpose of this project is to bring Waiaka Bridge up to current standards for roadway width, load capacity, bridge railings, and bicycle and pedestrian access. This project proposes to replace the existing bridge and realign the roadway approaches toward the bridge. There are two build alternatives being considered for the project: 1) a replacement bridge with a T-Intersection and 2) a replacement bridge with a roundabout.

In addition to providing us with information regarding NHOs and other potential consulting parties, we ask for your concurrence on our proposed APE for the proposed project within 30 days from notification.

We would appreciate a written response within 30 days from date of receipt to the HDOT Project Manager, Mr. Andrew Hirano, via email at andrew.j.hirano@hawaii.gov. We look forward to working with you on this needed project.

Enclosure

c: Federal Highway Administration (Meesa Otani)
WSP USA Inc. (Darin Chinen)





Waiaka Stream Bridge – Approach along Kawaihae Road, Leaving Waimea Town



Waiaka Stream Bridge – Approach along Kawaihae Road, Leaving Waimea Town



Waiaka Stream Bridge – Abutment

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, HI 96707

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

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
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

August 18, 2021

Karen Chun
Engineering Program Manager
Design Branch, Highways Division
State of Hawai'i Department of Transportation
601 Kamokila Boulevard
Kapolei, Hawai'i 96707
Email: Karen.Chun@hawaii.gov
Electronic Transmittal Only, No Hard Copy to Follow

IN REPLY REFER TO:
Project No.: 2021PR00849
Submission No.: 2021PR00849.001
Doc No.: 2108SH06
Archaeology

Dear Karen Chun:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –
Initiation of Consultation and Request for Concurrence with the Area of Potential Effects
Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment Approaches
Ref. No. HWY-DS 2.4574, Federal Aid Project No. 19D-01-19
Lalamilo and Keanuimano Ahupua'a, Kohala District, Island of Hawai'i
TMK: (3) 6-5-001:015, (3) 6-5-001:033, (3) 6-6-001:011, (3) 6-6-001:077, (3) 6-6-004:001
Kawaihae Road Right-of-Way and Kohala Mountain Road Right-of-Way**

The State Historic Preservation Division (SHPD) received a letter dated July 21, 2021 from the State of Hawai'i Department of Transportation (HDOT) on behalf of the Federal Highway Administration (FHWA) to initiate the Section 106 process and to request information as well as the State Historic Preservation Officer's (SHPO's) concurrence with the Area of Potential Effects for the Kawaihae Road Replacement of Waiaka Stream Bridge and Realignment Approaches project on the island of Hawai'i. The SHPD received this submittal on July 21, 2021.

HDOT's letter states that at this time the proposed project is state-funded, but that federal funding from the Federal Highways Administration (FHWA) may be received. At that time, the project would then be determined a federal undertaking as defined in 36 CFR 800.16(y) and therefore subject to compliance with Section 106 of the NHPA. At this time the proposed project is subject to historic preservation review under Hawaii Revised Statutes (HRS) §6E-8. Pursuant to the Programmatic Delegation of Authority (May 2016), the FHWA delegated Section 106 consultation to the Hawai'i Department of Transportation (HDOT).

According to HDOT, the purpose of this project is to bring Waiaka Bridge up to current standards for roadway width, load capacity, bridge railings, and bicycle and pedestrian access. This project proposes to replace the existing bridge and realign the roadway approaches toward the bridge. There are two build alternatives being considered for the project: 1) a replacement bridge with a T-Intersection and 2) a replacement bridge with a roundabout.

The proposed project is located in South Kohala at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. HDOT has defined the Area of Potential Effects (APE) to include the existing highway right-of-way that encompasses this intersection and Waiaka Bridge (Mile Post 58.88), which carries Kawaihae Road over Keanuimano Stream leaving Waimea Town. The proposed APE also includes areas for construction staging and a temporary roadway and bridge facilities. The area of the APE is approximately 7.3 acres. The APE includes the following, as measured from the center of the existing intersection:

- 450 feet along Kohala Mountain Road (roughly 130 feet wide).
- 500 feet along Kawaihae Road toward Kawaihae (roughly 105 feet wide at its widest point).
- 550 feet along Kawaihae Road, including Waiaka Stream Bridge, approaching the intersection while leaving Waimea Town (roughly 190 feet wide).
- This includes use of a privately-owned parcel, (3) 6-5-001:015 which is 13,865 square feet / 0.32 acre.
- This includes use of a Department of Hawaiian Homelands (DHHL) owned parcel, (3) 6-6-001:077 which is 31,090 square feet / 0.7 acre.
- This includes use of a DHHL-owned parcel, (3) 6-6-001:011 which is 8,544 square feet / 1.872 acres.

Based on the information received, the State Historic Preservation Officer (SHPO) has no objections to the APE as it is defined.

In response to HDOT's request for a contact list of potential consulting parties, the SHPD recommends HDOT refer to the Native Hawaiian Organization Notification List provided by the U.S. Department of the Interior and maintained by the Office of Native Hawaiian Relations. This can be referenced online at: <https://www.doi.gov/hawaiian/NHOL>. Additionally, we recommend expanding consultation to interested parties such as civic clubs and historic preservation interest groups such as Historic Hawai'i Foundation and the National Trust for Historic Preservation.

SHPD notes, there are two historic properties approximately 200 meters slightly northeast of the TMK (3) 6-5-001:015. One is State Inventory of Historic Places (SIHP) No. 50-10-06-19648, a Hawaiian habitation termed Wai'Aka. The other is SIHP No. 50-10-06-19649, also termed Wai'Aka and documented as a Hawaiian habitation and burial complex. North of these SIHP sites are a number of documented related sites assigned SIHP numbers. One can only assume this is a single cultural site assigned multiple SIHP numbers.

The SHPD looks forward to continuing the Section 106 process for the proposed project.

Please submit all forthcoming information and correspondence related to the subject project to the SHPD HICRIS system under Project 2021PR00849 using the Project Supplement option.

The HDOT and the FHWA are the offices of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at Stephanie.Hacker@hawaii.gov or at (808) 692-8046 for matters regarding archaeological resources or this letter.

Aloha,

Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Meesa Otani, FHWA (Meesa.Otani@dot.gov)

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
BRIDGE DESIGN SECTION, ROOM 611
CADASTRAL DESIGN SECTION, ROOM 600
ENVIRONMENTAL DESIGN SECTION, ROOM 688A
HIGHWAY DESIGN SECTION, ROOM 609
HYDRAULIC DESIGN SECTION, ROOM 636
TECHNICAL DESIGN SECTION, ROOM 688



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

JADE T. BUTAY
DIRECTOR

Deputy Directors
ROSS M. HIGASHI
EDUARDO P. MANGLALLAN
PATRICK H. MCCAIN
EDWIN H. SNIFFEN

IN REPLY REFER TO:
HWY-DS 2.7423

February 3, 2022

VIA EMAIL: dlmr.intake.shpd@hawaii.gov

TO: ALAN DOWNER, Ph.D.
ADMINISTRATOR AND DEPUTY STATE HISTORIC
PRESERVATION DIVISION
DEPARTMENT OF LAND OF NATURAL RESOURCES

FROM: KAREN CHUN *Karen Chun*
ENGINEERING PROGRAM MANAGER
DESIGN BRANCH, HIGHWAYS DIVISION

SUBJECT: NATIONAL HISTORIC PRESERVATION ACT (NHPA)
SECTION 106 CONSULTATION
KAWAIHAE ROAD, REPLACEMENT OF WAIKA BRIDGE AND
REALIGNMENT OF APPROACHES AHUPUAA OF
LALAMILO AND KEANUIOMANO, DISTRICT (MOKU) OF KOHALA,
ISLAND OF HAWAII, STATE OF HAWAII
PROJECT NO. 19D-01-19
TAX MAP KEYS: (3) 6-5-001:015, :033; (3) 6-6-001:011, :077;
(3) 6-6-004:001; KAWAIHAE ROAD RIGHT-OF-WAY (ROW) AND
KOHALA MOUNTAIN ROAD ROW

On behalf of the Federal Highway Administration (FHWA), the State of Hawaii Department of Transportation (HDOT) is hereby notifying you that on July 21, 2021, Section 106 of the NHPA of 1966 (amended, 2006), was initiated with the Department of Land and Natural Resources, State Historic Preservation Office (SHPO) for the subject bridge replacement project.

This proposed project is currently state funded, but there is the potential for federal funds to be used, which would result in the project being a federal action and undertaking, as defined in Title 36 of the *Code of Federal Regulations (CFR)*, Part 800.16(y). Effective May 1, 2016, FHWA has issued a Delegation of Authority allowing the HDOT and local public agencies to conduct NHPA Section 106 consultations with the SHPO, Native Hawaiian Organizations (NHO), and other consulting parties per 36 *CFR*, Part 800.2 (c) (4). The FHWA will remain responsible for all findings and determinations charged to the agency during the Section 106 process.

Overview of the Undertaking

The purpose of this project is to bring Waiaka Bridge up to current standards for roadway width, load capacity, bridge railings, and bicycle and pedestrian access. This project proposes to replace the existing bridge and realign the roadway approaches toward the bridge. There are two build alternatives being considered for the project: 1) a replacement bridge with a T-Intersection and 2) a replacement bridge with a roundabout.

Consultations

Consulting parties during the Section 106 process include the Advisory Council on Historic Preservation, SHPO, NHOs, and if applicable, local governments and applicants for federal assistance, permits, licenses and other approvals.

NHO and/or Native Hawaiian Descendants

NHO and Native Hawaiian descendants with ancestral, lineal or cultural ties to, cultural and historical property knowledge of and/or concerns for, and cultural or religious attachment to the proposed Area of Potential Effect (APE) are asked to provide a response to this letter within 30 days of notification.

Other Individuals and Organizations

Individuals and organizations with legal, economic, or historic preservation interest are requested to respond within 30 days of notification and demonstrate your interest in the proposed undertaking and provide intent to participate in the Section 106 process. Your participation is subject to FHWA approval.

Request for Comment on the Area of Potential Effect

We would like to invite you to comment on the proposed APE.

The proposed project is located in South Kohala, at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. The proposed APE includes the existing highway ROW that encompasses this intersection and Waiaka Bridge (Mile Post 58.88), which carries Kawaihae Road over Keanuimano Stream leaving Waimea Town.

The proposed APE encompasses those areas that would be directly and indirectly affected by the project. In addition to the locations where construction would occur, the APE includes the areas needed for construction staging, as well as the temporary roadway and bridge facility. Please refer to the enclosed APE map.

In all, the APE is approximately 6.6 acres. As measured from the center of the existing intersection, it includes:

- 450 feet along Kohala Mountain Road (roughly 130 feet wide).
- 500 feet along Kawaihae Road toward Kawaihae (roughly 105 feet wide at its widest point).

- 550 feet along Kawaihae Road, including Waiaka Bridge, approaching the intersection while leaving Waimea Town (roughly 190 feet wide).
- Privately-owned parcel, (3)6-5-001:015 – 13,865 square feet / 0.32 acre.

Identification of Historic Properties within the APE

We welcome any information you may have on historical and cultural sites that have been recorded or which you may have knowledge of within the proposed APE. In addition, if you are acquainted with any persons or organization that is knowledgeable about the proposed APE, or any descendants with ancestral, lineal or cultural ties to or cultural knowledge and/or historical properties information of or concerns for, and cultural or religious attachment to the proposed project area, we would appreciate receiving their names and contact information within 30 days of notice.

Conclusion

On behalf of FHWA, the HDOT, by way of this letter is notifying you of the proposed Kawaihae Road, Replacement of Waiaka Bridge and Realignment of Approaches Project. Should you want to participate in the Section 106 process, we request your written intent. In addition, please include your comments on the proposed APE. We also request any information you may have on the historic and cultural sites that have been recorded within the APE or any other historic or cultural sites nearby about which you may have knowledge. Lastly, should you know of any persons or organizations who may have cultural affiliations to the project area, we would appreciate receiving their names and contact information.

We would appreciate a written response within 30 days from date of receipt, to the HDOT Project Manager, Mr. Andrew Hirano, via email at andrew.j.hirano@hawaii.gov, Technical Design Services Section, Design Branch, Highways Division. We look forward to working with you on this needed project.

Enclosure



Overall APE: 316,143 square feet / 7.3 acres

Staging Area - Within HDOT Right-of-Way:

17,360 square feet - 0.4 acre

Temporary Use Area - Within Private Property (Steven Kittell Trust):

13,865 square feet / 0.32 acre

(TMK (3)6-5-001:015) - portion

Temporary Use Area - Within Private Property

(Hawaii Preparatory Academy):

48,309 square feet / 1.11 acres

(TMK (3)6-5-001:033)

Potential Staging Area - Within DHHL Property:

81,544 square feet / 1.872 acres

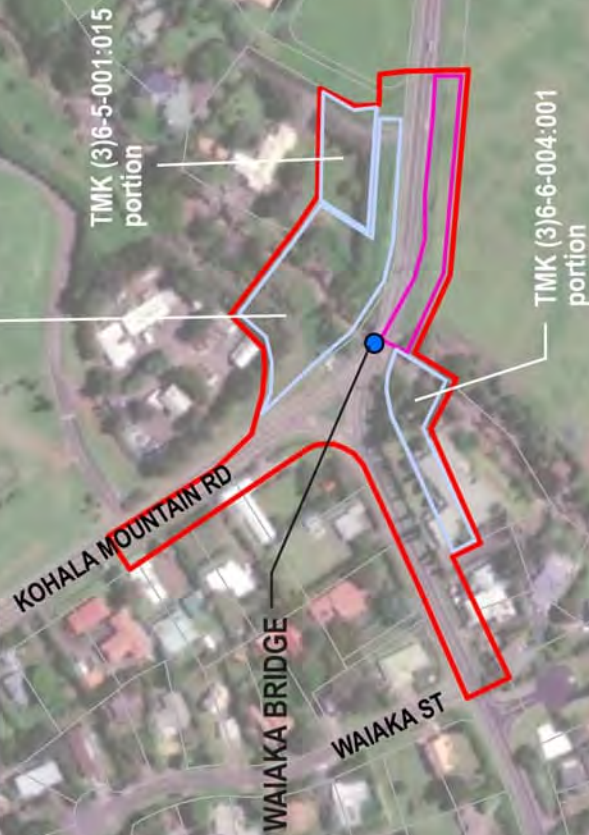
(TMK (3)6-6-001:011)

Temporary Use Area* - Within Private Property: (Big Buck Trust)

14,952 square feet / 0.34 acre

(TMK (3)6-6-004:001) - portion

*Depending on the Build Alternative selected, there may be permanent acquisition of portions of these parcels.



LEGEND

- Area of Potential Effects
- Staging Area - Within HDOT Right-of-Way
- Temporary Use Area
- Potential Staging Area
- Property Lines

DAVID Y. IGE
GOVERNOR

HIGHWAY DESIGN BRANCH, ROOM 688A
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PATRICK H. MCCAIN
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IN REPLY REFER TO:
HWY-DS 2.7423

February 9, 2022

Subject: National Historic Preservation Act (NHPA) Section 106 Consultation
Kawaihae Road, Replacement of Waiaka Bridge and
Realignment of Approaches Ahupuaa of Lalamilo and Keanuiomano
District (Moku) of Kohala, Island of Hawaii, State of Hawaii
Project No. 19D-01-19
Tax Map Keys: (3) 6-5-001:015, :033; (3) 6-6-001:011, :077; (3) 6-6-004:001;
Kawaihae Road Right-of-Way (ROW) and Kohala Mountain Road ROW

On behalf of the Federal Highway Administration (FHWA), the State of Hawaii Department of Transportation (HDOT) is hereby notifying you that on July 21, 2021, Section 106 of the NHPA of 1966 (amended, 2006), was initiated with the Department of Land and Natural Resources, State Historic Preservation Office (SHPO) for the subject bridge replacement project.

This proposed project is currently state funded, but there is the potential for federal funds to be used, which would result in the project being a federal action and undertaking, as defined in Title 36 of the *Code of Federal Regulations (CFR)*, Part 800.16(y). Effective May 1, 2016, FHWA has issued a Delegation of Authority allowing the HDOT and local public agencies to conduct NHPA Section 106 consultations with the SHPO, Native Hawaiian Organizations (NHO), and other consulting parties per 36 *CFR*, Part 800.2 (c) (4). The FHWA will remain responsible for all findings and determinations charged to the agency during the Section 106 process.

Overview of the Undertaking

The purpose of this project is to bring Waiaka Bridge up to current standards for roadway width, load capacity, bridge railings, and bicycle and pedestrian access. This project proposes to replace the existing bridge and realign the roadway approaches toward the bridge. There are

February 9, 2022

Page 2

two build alternatives being considered for the project: 1) a replacement bridge with a T-Intersection and 2) a replacement bridge with a roundabout.

Consultations

Consulting parties during the Section 106 process include the Advisory Council on Historic Preservation, SHPO, NHOs, and if applicable, local governments and applicants for federal assistance, permits, licenses and other approvals.

NHO and/or Native Hawaiian Descendants

NHO and Native Hawaiian descendants with ancestral, lineal or cultural ties to, cultural and historical property knowledge of and/or concerns for, and cultural or religious attachment to the proposed Area of Potential Effect (APE) are asked to provide a response to this letter within 30 days of notification.

Other Individuals and Organizations

Individuals and organizations with legal, economic, or historic preservation interest are requested to respond within 30 days of notification and demonstrate your interest in the proposed undertaking and provide intent to participate in the Section 106 process. Your participation is subject to FHWA approval.

Request for Comment on the Area of Potential Effect

We would like to invite you to comment on the proposed APE.

The proposed project is located in South Kohala, at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. The proposed APE includes the existing highway ROW that encompasses this intersection and Waiaka Bridge (Mile Post 58.88), which carries Kawaihae Road over Keanuimano Stream leaving Waimea Town.

The proposed APE encompasses those areas that would be directly and indirectly affected by the project. In addition to the locations where construction would occur, the APE includes the areas needed for construction staging, as well as the temporary roadway and bridge facility. Please refer to the enclosed APE map.

In all, the APE is approximately 6.6 acres. As measured from the center of the existing intersection, it includes:

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- Privately-owned parcel, (3)6-5-001:015 – 13,865 square feet / 0.32 acre.

February 9, 2022

Page 3

Identification of Historic Properties within the APE

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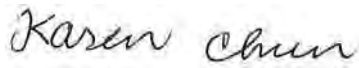
Conclusion

On behalf of FHWA, the HDOT, by way of this letter is notifying you of the proposed Kawaihae Road, Replacement of Waiaka Bridge and Realignment of Approaches Project. Should you want to participate in the Section 106 process, we request your written intent. In addition, please include your comments on the proposed APE. We also request any information you may have on the historic and cultural sites that have been recorded within the APE or any other historic or cultural sites nearby about which you may have knowledge. Lastly, should you know of any persons or organizations who may have cultural affiliations to the project area, we would appreciate receiving their names and contact information.

We would appreciate a written response within 30 days from date of receipt, to the HDOT Project Manager, Mr. Andrew Hirano, via email at andrew.j.hirano@hawaii.gov, Technical Design Services Section, Design Branch, Highways Division.

We look forward to working with you on this needed project.

Sincerely,



KAREN CHUN
Engineering Program Manager
Design Branch, Highways Division

Enclosure

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
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SUZANNE D. CASE
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AQUATIC RESOURCES
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CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

March 7, 2022

Karen Chun
Engineering Program Manager
Design Branch, Highways Division
State of Hawai'i Department of Transportation
601 Kamokila Boulevard
Kapolei, Hawai'i 96707
Email: Karen.Chun@hawaii.gov
Electronic Transmittal Only, No Hard Copy to Follow

IN REPLY REFER TO:
Project No.: 2021PR00849
Doc No.: 2203SH05
Archaeology
Architecture

Dear Karen Chun:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –
Continued Consultation, Request for Concurrence with the Revised Area of Potential Effects
Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment Approaches
Ref. No. HWY-DS 2.7423, Federal Aid Project No. 19D-01-19
Lālāmilo, Keanu'i'ōmanō Ahupua'a, Kohala District, Island of Hawai'i
TMK: (3) 6-5-001:015, (3) 6-5-001:033, (3) 6-6-001:011, (3) 6-6-001:077, (3) 6-6-004:001
Kawaihae Road Right-of-Way and Kohala Mountain Road Right-of-Way**

The State Historic Preservation Division (SHPD) received a letter dated February 3, 2022 from the State of Hawai'i Department of Transportation (HDOT) on behalf of the Federal Highway Administration (FHWA) to continue the Section 106 historic preservation process for the Replacement of Waiaka Stream Bridge and Realignment Approaches project on Kawaihae Road on the island of Hawai'i. The SHPD received this submittal on February 7, 2022 (HICRIS Submission No. 2022PR00849.002).

The proposed HDOT project is currently only state funded but *may* receive funding from FHWA. At this time, the proposed project is subject to compliance with Hawaii Revised Statutes (HRS) §6E-8; should the proposed project receive federal funding it would also be subject to compliance with Section 106 of the NHPA. Pursuant to the Programmatic Delegation of Authority (May 2016), the FHWA has delegated Section 106 consultation to the Hawai'i Department of Transportation.

HDOT states the proposed project will bring Waiaka Stream Bridge up to current standards for roadway width, load capacity, bridge railings, and bicycle and pedestrian access. This project proposes to replace the existing bridge and realign the roadway approaches toward the bridge. There are two build alternatives being considered for the project: 1) a replacement bridge with a T-Intersection or 2) a replacement bridge with a roundabout.

The proposed project is located in South Kohala at the intersection of Kawaihae Road and Kohala Mountain Road in the town of Waimea. HDOT has defined the Area of Potential Effects (APE) to include the existing highway right-of-way that encompasses this intersection and Waiaka Bridge (Mile Post 58.88), which carries Kawaihae Road over Keanuio mano Stream leaving Waimea Town. The proposed APE also includes areas for construction staging and a temporary roadway and bridge facilities.

The APE has been minimized since the start of Section 106 consultation for the proposed undertaking to avoid culturally sensitive areas (Personal Communication; March 7, 2022 Andrew Hirano [HDOT] and Stephanie Hacker

[SHPD]). The area of the APE has been revised from approximately 7.3 acres to approximately 6.6 acres. The APE includes the following, as measured from the center of the existing intersection:

- 450 feet along Kohala Mountain Road (roughly 130 feet wide);
- 500 feet along Kawaihae Road toward Kawaihae (roughly 105 feet wide at its widest point);
- 550 feet along Kawaihae Road, including Waiaka Bridge, approaching the intersection while leaving Waimea Town (roughly 190 feet wide); and
- Privately-owned parcel, (3)6-5-001:015 (13,865 square feet / 0.32 acres).

Based on the information received, the State Historic Preservation Officer (SHPO) has no objections to the revised APE as it is defined.

As stated previously in SHPD's letter dated August 18, 2021 (SHPD Doc No. 2108SH06), there are two historic properties approximately 200 meters slightly northeast of TMK: (3) 6-5-001:015. One is State Inventory of Historic Places (SIHP) Site 50-10-06-19648, a Hawaiian habitation termed Wai'Aka. The other is SIHP Site 50-10-06-19649, also termed Wai'Aka and documented as a Hawaiian habitation and burial complex. North of these sites are a number of documented related sites assigned SIHP numbers. One can only assume this is a single cultural site assigned multiple SIHP numbers. Therefore, the subsurface of this area should be treated as culturally sensitive.

Additionally, according to HDOT's 2013 Bridge Inventory Survey, the Waiaka Stream Bridge was built in 1932 and is eligible for listing in the National Register of Historic Places (NRHP) under Criterion C and is considered a good example of a 1930s reinforced concrete bridge. However, SHPD found discrepancies between the locational data provided by HDOT and the data within the 2013 Bridge Inventory Survey. The Bridge Inventory Survey states the Waiaka Stream Bridge (Bridge Number 001002500500053) is at Milepost 53 and carries Hawai'i Belt Road over Waiaka Stream, not Keanuiomano Stream as stated by HDOT. It appears from the APE map provided by HDOT and the map illustrating the location of Bridge Number 001002500500053 in the 2013 Bridge Inventory Survey that this is the same bridge, however **the SHPD requests** clarification of these discrepancies from HDOT and further points out, Hawai'i Belt Road is also considered a historic property eligible for listing in the NRHP.

Should the Waiaka Stream Bridge be a historic property, please provide HDOT's assessment of how the proposed undertaking will, or will not, impact the character defining features of the Waiaka Stream Bridge, as well as of Hawai'i Belt Road. Please provide a detailed assessment of the significance and integrity of these historic properties as well as a list of their character defining features.

In response to HDOT's request for a contact list of potential consulting parties and based on the consulting parties listed in HDOT's letter, the SHPD recommends HDOT expand consultation to interested parties such as civic clubs and historic preservation interest groups including Historic Hawai'i Foundation and the National Trust for Historic Preservation. Contact information for Historic Hawai'i Foundation and the National Trust for Historic Preservation are copied with this letter.

Per HDOT's request, the SHPD is confirming its intent to participate in the Section 106 process for this project. The SHPD looks forward to continuing the Section 106 process for the proposed project.

Please submit all forthcoming information and correspondence related to the subject project to SHPD HICRIS Project No 2021PR00849 using the Project Supplement option.

The HDOT and FHWA are the offices of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at Stephanie.Hacker@hawaii.gov or at (808) 692-8046 for matters regarding archaeological resources or this letter.

Karen Chun
March 7, 2022
Page 3

Aloha,

Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

cc: Andrew Hirano, HDOT (Andrew.j.Hirano@hawaii.gov)
Meesa Otani, FHWA (Meesa.Otani@dot.gov)
Julia Flauaus, SHPD (Julia.Flauaus@hawaii.gov)
Darin Chinen, WSP USA Inc. (Darin.Chinen@wsp.com)
Kiersten Faulkner, Historic Hawai'i Foundation (Kiersten@historichawaii.org)
Elizabeth Merritt, National Trust for Historic Preservation (emerritt@savingplaces.org)

Section 106 Consultation Comment Letters with Summary

Summary of Section 106 Consultation Comments

Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches

Hawaii Preparatory Academy

Mr. Fred Wawner, representing Hawaii Preparatory Academy (HPA), responded via email on March 3, 2022. HPA indicated several people provided information regarding burial sites, building foundations, and other important artifacts and noted the presence of a historical rock wall enclosure, homestead with gravesites, possible burials in areas, possible historical sites, caves, and the former location of the 1860 Catholic church on the HPA parcel near the APE.

HDOT response: HPA is a Section 106 consulting party. Additional consultation regarding the historical rock wall enclosure, homestead with gravesites, possible burials in areas, possible historical sites, caves, and the former location of the 1860 Catholic church on the HPA parcel was conducted with other parties. See summaries of consultation with Barbara Robertson, Kuulei Keakealani, Nicole Lui, and Momi Naughton.

Larry Kimura / Ka Haka Ula O Keelikolani (University of Hawaii Hilo, College of Hawaiian Language)

Mr. Larry Kimura responded via email dated April 1, 2022. He expressed support of the project and stated, “The only concern I have is the location of this site can likely uncover archaeological remains of earlier human habitation or use that can be contributive to Waimea’s cultural history and that perhaps there will be present qualified personnel to be watchful for such finds.”

HDOT response: An SOI qualified archaeologist determined that no archaeological features are located within the APE. However, HDOT plans to conduct archaeological monitoring during construction, as described below in Avoidance, Minimization, and Mitigation Measures.

Dr. Billy Bergin

Dr. Billy Bergin spoke to ASM Affiliates staff via phone on August 19, 2021, and in March 2022 over a series of email correspondence for Section 106 consultation. Concerning the APE, Dr. Bergin shared three places of interest in the vicinity: the location of the first Catholic church in Waimea; the evolution of the Hawaii Preparatory Academy (HPA); and the history of the Kamuela Museum.

Dr. Bergin shared that the first Catholic church in Waimea was built in the vicinity of the APE with assistance from Saint Damien, also known as Father Damien, who is known for his missionary efforts with the leper colony at Kalaupapa, Molokai. Dr. Bergin also discussed Kamuela Museum, which at the time of his comment was located within the APE boundaries (now superseded) and immediately southwest of the Waiaka Stream Bridge. Regarding cultural sites, Dr. Bergin knows of the pohaku (stone, rock) called Manaua being in the vicinity of the (superseded) APE. Dr. Bergin suggested speaking to Kuulei Keakealani, Pua Case, and/or Ms. Robertson for more details on Manaua.

Concerning the historic properties within the APE including Site 22632 (large agricultural complex with 700-features), Site 23312 (irrigation ditch), Site 23313 (concrete foundation within Keanuimano Stream), and Site 29221 (Waiaka Bridge), Dr. Bergin stated that Site 22632, Site 23312, and Site 23313 are approximately one to two miles makai of the APE.

HDOT response: Additional consultation and research into the Waiaka Catholic Church was conducted (see summaries of consultation with Barbara Robertson, Kuulei Keakealani, Nicole Lui, and Momi Naughton). The Kamuela Museum and surrounding parcel has been removed from the APE. The pohaku Manua is not located in the APE. Features of the Waimea Field System have been documented to the south of the APE (Haun et al. 2003; Thompson and Rosendahl 1992) and to the north of the APE (Athens et al. 1981; Corbin 2005, 2007b; Franklin et al. 1994). The archaeological fieldwork conducted for the current study confirmed that none of these features are located within the APE.

Leningrad Elarionoff

The late Mr. Leningrad Elarionoff responded to HDOT's Section 106 consultation letter on February 10, 2022, and February 13, 2022. ASM Affiliates also consulted with Mr. Elarionoff in August 2021 and March 2022 during the preparation of the CIA.

Regarding the historic properties found within the APE, he recalled walking through the large agricultural complex (SIHP 50-10-06-22632) south of the APE and mentioned that the complex is south-southwest of the APE. Other than the complex, Mr. Elarionoff could not recall SIHP 50-10-06-23312 (irrigation ditch, no longer in the APE) or SIHP 50-10-06-23313 (concrete foundation within Keanuimano Stream).

Concerning sites and/or information outside of the APE, Mr. Elarionoff shared that he knew of a burial cave with a canoe (SIHP 50-10-06-25873) located to the north of Kawaihae Road outside of the APE.

HDOT response: The burial cave containing the canoe (SIHP 50-10-06-25873) mentioned by the late Mr. Elarionoff is not located in the APE (see Figure 25). The large agricultural complex (SIHP 50-10-06-22632) is located south of the APE.

Kuulei Keakealani

ASM Affiliates interviewed Kuulei Keakealani via phone on August 30, 2021.

Ms. Keakealani confirmed that cultural practices still occur within and along the entire Waiaka Stream corridor. These traditional cultural practices include ceremonies along the stream and ceremonial baths within the stream.

Ms. Keakealani retold a traditional account of a moo wahine (female water spirit) named Manua who resides throughout the Waiaka Stream corridor.

Concerning water sources, Ms. Keakealani pointed out that many of the traditional settlement patterns in Waimea were prominent along the stream and riverbanks. An important feature she pointed out was that the stream changes its name based on the land section it is in. According to Ms. Keakealani, as the water flows down makai (towards the ocean) the stream is called

Kohakohau then Waiauaia, Waiaka, Keanuimano (also known as Keanu‘i‘omanō), and Waiulaula before it drains into the ocean.

In October 2021, Ms. Keakealani contacted ASM Affiliates and shared her knowledge of burials in the vicinity of the Waiaka Stream Bridge APE. After she had spoken with her aunt, Barbara Robertson, who lives near the APE, she mentioned a graveyard in the southeastern corner of the HPA property.

Regarding cultural impacts, Ms. Keakealani does not believe there would be any impacts to cultural practices at or in the vicinity of the Waiaka Bridge as there are easier access points to the stream. She pointed out that they exercise their cultural practices either much more mauka or makai from the Waiaka Stream Bridge project area.

Regarding recommendations, Ms. Keakealani does not want the stream altered in any way, which also includes the pohaku of the stream, streambanks, and especially the water as it is waiola a Kane—the lifegiving waters of Kane.

HDOT response: Since the time of the initial consultation with Ms. Keakealani, the APE has been revised and the graveyard is not located within the APE. The rain rock Mana Ua is located outside of the APE.

Nicole Keaka Lui

Ms. Nicole Keaka Lui responded to ASM Affiliates’ request to consult during the preparation of the CIA via email on August 30, 2021. She explained that her Uncle Kehau built the Kamuela Museum (located adjacent to the western end of the APE) including the home and the wall that surrounds the property.

She shared the moolelo of a rain rock located east of the APE near the Jacaranda Inn that was guarded by a moo. Both the rock and moo are known as Mana Ua, Ms. Lui stated that Pua Case and her family continue as the caretakers of the rain rock of Mana Ua.

Ms. Lui also responded to the DOT’s Section 106 consultation letter on March 1, 2022 and stated:

I am also concerned that TMK: (3) 6-6-001:011 DHHL is deemed to be the staging area. Was an AIS ever done on the property? Has it been previously impacted by machinery or is it pasture land? This is Hawaiian land. I know makai of that area are burials and a burial cemetery for the Vredenburg ohana. Uncle Keawe Vredenburg is a descendant of those burials. There is also makai side a reinternment site. We reinterred iwi kupuna with Halealoha Ayau. Halealoha was instrumental in forming some of the laws that govern inadvertent burials and previously known burials. I am just stating this because I just want to make sure that the property is in the clear and we make a concerted effort to do it right the first time.

HDOT response: When consultation with Ms. Lui was begun, the APE included a portion of the parcel containing the Kamuela Museum; since that time, the APE has been adjusted and no longer includes any portion of that parcel or the Kamuela Museum (see APE map; see response to Big Buck Trust below). The rain rock Mana Ua is located outside of the APE. The Department of Hawaiian Home Lands (DHHL) parcel (TMK: (3) 6-6-001:011) that is proposed to be a

staging area was included in an AIS conducted by Sinoto (1998), who reported no archaeological features or cultural material on the previously disturbed parcel. Parcel 011 was also visually inspected during the current study by ASM Affiliates, who reached the same conclusion. The Vredenburg family cemetery discussed by Ms. Lui is located makai (west) of the APE in the DHHL Residential Development at Lalamilo project area (see Haun et al. 2003).

Momi Naughton, Ph.D.

Momi Naughton, Ph.D., responded to a request for consultation via email on February 14, 2022. A researcher familiar with the history of Waiaka, Dr. Naughton made general observations about the historic importance of the area, stating, “With the stream and multiple ‘auwai in the Wai‘aka region, it is obvious that it was an area where agricultural [sic] thrived in ancient times.... It does not appear that there were heiau in the immediate region in question.” Dr. Naughton also identified a historic home, the Edwin Lindsey (1883-1952) house, sometimes called the William (1848-1905) and Kaluna Lindsey home, that she understood to be in the vicinity of the project. Additionally, she stated that the former site of the St. John the Evangelist Catholic Church may also be in the vicinity of the project. The St. John the Evangelist Catholic Church is associated with Father Damien, who is known for going to Kalaupapa, Molokai to minister to Hansen’s Disease patients. The following is an abridged version of Dr. Naughton’s comments regarding this potentially significant historic site:

However, my main concern about this section of the Wai‘aka area has to do with it being the possible site of the Catholic Church, St. John the Evangelist....The exact location of this church has not been discovered to my knowledge; however, one person has indicated to me that it was in the area of the maintenance facility for Hawai‘i Preparatory Academy at the lower end of the campus. There is a 1884 map that has the notation of “Cath Ch” on it that seems to indicate this area as well....

St. John the Evangelist Church in Wai‘aka burned down in 1900 and was rebuilt in 1916. In 1936 the church was relocated to the area where the Catholic Church now stands across from the Anuenue Playground on Kawaihae Road.... Although there is no church standing in this area, there may be foundations and burials associated with St. John and Evangelist Church in the TMK (3)6-5-001-033 portion that might be impacted. In walking through the area next to the maintenance facility, there are old stone walls and other features of interest. If this is the church site, there could well be burials too. I assume that some archaeology will be conducted or at least monitors will be on hand during construction.

HDOT response: ASM met with Dr. Momi Naughton at the Honokaa Heritage Center to discuss her comments on the project. Topics discussed included the locations of known and potential historic properties near the APE, including the Edwin Lindsey House, the St. John the Evangelist Church site, and family grave sites known to be on the HPA Campus. Several historic maps and photographs were examined during the conversation. The use of archaeological monitoring during construction was discussed, and Dr. Naughton agreed that doing so would be appropriate. The conversation also included discussions of place names, families with historical ties to Waimea, and other historic buildings and sites in the Waimea area.

Information obtained during this conversation, the documentary research, and other consultation conducted during the current study confirms that the Edwin Lindsay House is located outside of the APE within the Lalamilo Subdivision. During the interview with Barbara Robertson (see below), additional information concerning the church and family graves was obtained that suggests that they are most likely located north of the APE. The location shown in Figure 15 of the HPR (showing approximate location of catholic church) is probably west of the actual site, which was described as “enclosed by a stone wall” by Barbara Robertson (see below); the location of the church as it was rebuilt in 1916 was described as “outside of the stone wall” and this is also likely located north of the APE.

Barbara Robertson

ASM Affiliates contacted Mrs. Barbara Robertson after she was referred by Dr. Billy Bergin and her niece, Kuulei Keakealani (see interview summary above). She was formally interviewed for the Waiaka Bridge project on January 26, 2022.

Regarding burials within or in the vicinity of the project area, Mrs. Barbara pointed out that Father Damien built a Catholic church where the maintenance building stands today, located in the southeastern corner of the HPA property. She recalled the Catholic church and a graveyard being enclosed by a stone wall. The church burned down, and another structure was built to replace it, however, it was now on the outside of the stone wall. The church was later moved further east on Kawaihae Road across from Waimea Park. She recalled the graves not having any markers but was told that when the area was cleaned at one time, some grave markers were found. Another place she knows of with burials is a small cave located near the Waiaka Stream bank within the HPA property. She added that this cave has been sealed up and is inaccessible today.

Regarding cultural impacts, concerns, recommendations, and mitigation measures, Mrs. Robertson was concerned about the burials and project proximity to the former church site. If burials are found, Mrs. Robertson would like a plaque or marker to commemorate the site.

HDOT response: The “small cave” discussed by Mrs. Robertson is not the same burial cave (SIHP 50-10-06-25873) discussed above by Leningrad Elarianoff. During the archaeological fieldwork conducted for the current study, no caves (concealed or otherwise) were observed within the APE. Thus, the small cave was not found within the APE. The former location of the Catholic church appears to have been inside the area enclosed with a rock wall on TMK: (3) 6-5-001:033, adjacent to the north side of the APE. A review of historic maps (see Figures 14, 15, and 16) indicates that this rock wall was in place by the 1910s.

At the time of the initial consultation with Mrs. Robertson, the map depicting the APE that was included with DOT’s consultation letter appeared to include portions of the HPA campus where the former church site and graveyard she described are located. Both are known to be on the other side of a rock wall that is located outside of the actual APE boundary. A thorough visual inspection of the APE was conducted, which confirmed that the former church site and graveyard is not located within the APE, nor is the small cave located near the Waiaka Streambank within the HPA property.

Carlsmith Ball LLP, attorneys for Big Buck Trust, requested consulting party status and provided comments in a letter dated March 4, 2022. Big Buck Trust expressed concern for the project location in relation to the Kamuela Museum and its potential impacts to the property.

HDOT response: The APE has been adjusted and no longer includes any portion of the Big Buck Trust parcel or the Kamuela Museum.



March 3, 2022

Via email and USPS

State of Hawaii
Department of Transportation
Attn: Mr. Andrew Hirano, Project Manager
Technical Design Services Section, Design Branch, Highways Division
601 Kamokila Boulevard
Kapolei, Hawaii 96707

RE: HPA response to HDOT Wai'aka Bridge/Highway Project No. 19D-01-19

Dear Mr. Hirano:

Aloha and thank you for this opportunity to participate in the ongoing conversation around the best path forward for our community related to Kawaihae Road, Kohala Mountain Road and the Wai'aka bridge. This letter serves as our written intent to participate in the Section 106 process for the above referenced project.

Hawai'i Preparatory Academy is a longstanding member of our Waimea community and we care deeply about the safety and development of Hawai'i Island and our neighborhoods. We have addressed specific areas of your letter in the sections below, and we also included a historical and cultural perspective on the areas impacted and in discussion.

Current use impact

With construction and flow potentially lasting through one or more school sessions, we would like to discuss an emergency route through our campus that gives the ability to pass from Kohala Mountain Road through our campus, exiting on Kawaihae Road past the area of construction. We believe this to be necessary to support HPA and the greater Waimea and Kohala community should emergency passage be needed.

Areas of Potential Effect

- TMK (3)6-5-001:033
 - Historical rock wall enclosure - homestead with gravesites
 - Utility service - electrical, communications (phone/internet), water
 - Possible burials in areas
 - Possible historical sites, caves and cultural significance mentioned in affected areas

Safety Concerns

There are potential safety concerns related to this project and its location. Our Upper School morning drop off and afternoon pick up will back traffic up and that will impact travel times and create potential irritation for the Waimea community. We also see potential safety concerns with our student drivers trying to maneuver through any construction areas as inexperienced drivers.

Since faculty, students, staff, families, and sporting teams continuously traverse through this intersection, these are questions about alignment that have surfaced:

- What is the safest route / alignment for peak hour traffic?
- What alignment at this particular location, considering a stream crossing, an angled approach, an intersection, and a sloped terrain, will provide all users of the road (buses, cars, trucks, pedestrians, cyclists) a safe transit?
- As we encourage more walking and biking to school, how can we improve bike and walking lanes?
- Which alignment provides the best access onto Kawaihae road from Kohala Mtn. Rd.?
- The current iteration has well-known and established visibility issues.
- There are too many potential points of contact in the current state. With the number of young drivers utilizing the road, how can we provide them the safest option for merging onto a busy thoroughfare?

Some additional questions about process are:

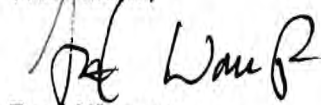
- What is the expected length of construction?
- Projected dates?
- Will work be carried out only during the day?

Historical and Cultural

We know of several people who have information regarding burial sites, building foundations and other important artifacts that will better inform decisions about potential construction. Our property is at the base of (3) unique land locked Ahupua'a and an enormous area that had great cultivation. We are aware of multiple burial sites (ancient and modern). We have been in contact with Mrs. Barbara Robertson of the Phillips and Ka'apuni 'ohana, lineal descendants of the Wai'aka ahupua'a. HPA's land stewardship and administration teams are working with this 'ohana to ensure protection in perpetuity of their family graves located near our maintenance building. In 1868, Father Damien built the first Catholic wooden church in Wai'aka which later burned in a fire. Mrs. Robertson notified our leadership of the remains of the foundation of this historic structure located near her family gravesite. In our conversations with Mrs. Robertson and other lineal descendants of the Wai'aka and Hale'aha ahupua'a we have learned of many burial caves located in the banks of the Wai'aka stream. To our knowledge, these burial caves hold ancestral remains and moepū (artifacts of the deceased). A few decades ago they were sealed off to ensure safekeeping and protection as residents of the area were seen entering these sacred spaces. As the current stewards of this land, HPA will continue to collaborate with the lineal descendants and native residents to establish appropriate protocols and planning of campus development and maintenance. We strongly recommend that your esteemed department also works with these Wai'aka families in the planning and reconstruction of this historic bridge on celebrated land.

We are grateful to participate in this conversation. We are committed to moving forward together honoring the land, those that came before us, and building room for the future plans and aspirations for our school and island community.

With aloha,



Fred Wawner
Interim Head of School

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Sent: Friday, April 1, 2022 12:03 PM
To: Larry Kimura <[REDACTED]>
Subject: RE: [EXTERNAL] Waiaka Bridge Project

Thank you Larry.

Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Larry Kimura <[REDACTED]>
Sent: Friday, April 1, 2022 12:01 PM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] Waiaka Bridge Project

Hello Andrew,

I am in receipt of a letter from your office regarding any concerns for the Waiaka Bridge Project. I am support this project as necessary. The only concern I have is the location of this site can likely uncover archaeological remains of earlier human habitation or use that can be contributive to Waimea's cultural history and that perhaps there will be present qualified personnel to be watchful for such finds.

Mahalo. Larry Kimura

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>

Sent: Friday, February 11, 2022 6:33 AM

To: Chinen, Darin N. <Darin.Chinen@wsp.com>

Cc: Ramos, Kate S <kate.s.amos@hawaii.gov>

Subject: FW: [EXTERNAL] Re: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuimano 19D-01-19

Darin,

There was a typo in the letter and email. It was addressed to Mr. but in the salutation and body of the email it said Ms. Your spreadsheet had Mr.

Darin,

He provides an interesting story, but it is not an archaeological feature we would impact. He is talking about Hawaiian artifacts that have been poached.

Thanks,
Andy

From: Leningrad Elarionoff [REDACTED] >

Sent: Thursday, February 10, 2022 9:16 PM

To: Ramos, Kate S <kate.s.amos@hawaii.gov>

Cc: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>

Subject: [EXTERNAL] Re: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuimano 19D-01-19

Hi to all involved, Especially Ms. Kate and Mr. Hirano,

First of all, at 83 years old, I have no doubt as to what my sexual gender identification may be so please don't refer to me as Ms, I am not confused and hope that you are not confused also. In your letter to me, you referred to me as both Ms and Mr. Someone is confused and it is not me!

Now in reference to the replacement of the Waiaka Bridge in So. Kohala. Approximately 42 years ago, I sat with the community organization, as a cop, trying to get the Bridge replaced. Nothing has been done besides there are those who are now working for the State with multiple sexual I.Ds. Hope that this progression (?) will expedite the project.

In all of that time we met as a community group with the goal of getting the State to do something about replacing the bridge, we had numerous local seniors come forward talking about preserving segments of the area. There are only two things that I remember to be interesting.

One incident took place as I was a Police Officer but was off duty when it took place. An HPA student heard about a canoe that was buried in a cave someplace up hill from the Waiaka Bridge. The canoe was removed from the cave by the student and replaced by the cops now long deceased.

The second incident I recall involved the burying of a rock beneath the home of A. K. Solomon. The rock had a history of being a strength factor between the Parker Ranch Cowboys and an ornery Irish Blacksmith who lived besides the road to Kohala. A. K. Solomon related the story to me when he heard that my mother was an Awaa descendent. According to Mr. Solomon, The Irish Black Smith daily harassed the Parker Ranch employees until the day that my mother's 17 year brother rode in the Wagon with the crew that went past the Black Smith's shop. The Black Smith immediately harassed the cowboys who talked my mothers 17 year old brother to challenge the Black Smith. with little effort, my mothers' brother picked up the rock by the metal ring and tossed it into the pasture to the dismay of the Black Smith.

A. K. Solomon owns the house next to the Waiaka Bridge with the concrete wall. Mr. Solomon was a cave thief taking all Hawaiian Artifacts he could from burial caves to be added to his museum Collection. He told me that he recovered the boulder from the Black Smith shop and buried under the floor of his newly built Museum believing that it would give him good luck.

I am sorry to say that other stories told about the area along with materials I once had access to have long been disposed of or forgotten.

I hope to see the bridge replaced in my life time,

Leningrad Elarionoff
Kamuela, Hawaii

-----Original Message-----

From: Ramos, Kate S <kate.s.amos@hawaii.gov>

To: [REDACTED]

Cc: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>

Sent: Thu, Feb 10, 2022 12:01 pm

Subject: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuiomano 19D-01-19

Aloha Ms. Elarionoff,

Please see attached letter.

Thank you,
Kate Ramos
Office Assistant
Technical Design
Design Branch - Highways Division
State of Hawaii - Department of Transportation

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>

Sent: Monday, February 14, 2022 7:43 AM

To: Leningrad Elarionoff <[REDACTED]>

Cc: Ramos, Kate S <kate.s.amos@hawaii.gov>

Subject: RE: [EXTERNAL] My aggressiveness

Thank you Leningrad. You have quite a knowledge of the Hawaiian history.

Andy Hirano

From: Leningrad Elarionoff <[REDACTED]>

Sent: Sunday, February 13, 2022 6:14 PM

To: Ramos, Kate S <kate.s.amos@hawaii.gov>; Hirano, Andrew J <andrew.j.hirano@hawaii.gov>

Subject: [EXTERNAL] My aggressiveness

Aloha Ms Ramos and Mr. Hirano,

After reading your response to my somewhat aggressive letter, I feel that I may owe you an apology so instead, I am sending you some local information not available in books. You need not read it.

In today's world, there seems to be a change being pushed by the Government to line us up like dummies as we are told what to do, how to dress (mask) and a number of other things. In the mean time, Government has stopped teaching History, penmanship, and some other subjects that once was thought to be mandatory because we learn from our mistakes. It has become obvious that the federal Gov. never learns from their mistakes. In our schools here, government has even taught gender preference to kids then telling them not to tell their parents. When I received the response from you, it sounded like that was the direction you were heading towards and I wanted to stop you there.

Judging from my name, you may suspect that I am Russian. Correct! My dad along with his family left Russia in 1910 on the pretense they were going on vacation and left all of their valuables and belongings just to allow us, the descendants, the opportunity to live in a free country. After months of discomfort along with loss of family, they legally entered the US through New York and became legalized. They were told to go West for more opportunities and did so. In California, they were invited to come to Hawaii and do

farming on Parker Ranch and did so. They ran from a socialistic type of government and today, America (Stupid Politicians) are taking us down that same path as those in Russia in 1917.

By the way, I am a retired Police captain, District Commander, not one of these nuts.

Somehow, my mom and dad met, in Waimea, both with their own first languages. My dad with a 3rd. grade education and my mom with a 7th. grade education. They worked together as a team and my dad got promoted to be a supervisor. Making the long story short, due to synthetics, the price of wool dropped making the raising of sheep almost useless especially on a cattle ranch. In the process, the Parker Ranch violated some health laws in their effort to rid the Ranch of sheep, and my dad was blamed and terminated without cause or a hearing although all he did was follow orders from the boss.

Those days, things were different. As a child, my mom was sent to a private school where she was taught by the white man that Hawaiians were lazy because they never worked to save money and accumulate property. They never bought land or even fenced off property they lived on. The white man couldn't understand that the Hawaiian believed that when he died, the property remained so how can one own it? Why fence it off as others might want to cross through it for their convenience.

I need to explain here that my mothers last name was Awaa, inherited from her father and his father. The name refers to ridges that go from up slope to down slope. It also refers to the long muscle on canoe paddlers. The implication is that my mothers descendants were canoe paddlers. This explains why my mothers brother at age 17 was such a strong kid. (story from last e mail) I remember my mothers brothers fighting but were prohibited by their father from touching each so in their fights, they picked up one end of the others automobile and just pounded it on the ground until they got tired. I share this with you in an effort to help you understand some cultural practices and some little known Hawaiian history. Hopefully this will not be boring and it will help you have a deeper understanding while doing your job. Here is some background information from a Russian Hawaiian Story Teller.

After my dad got fired, he had no choice but to move as far away from the Parker Ranch as possible which took our family to Kau where I was born. Kau was filled with people that were from the old days. Mary Kawena Pukui was a friend of our family and being that my mother was a story teller, they became good friends and tried to include me but I refused, choosing the ways of the white man. I have kicked myself many times over for that decision.

Allow me to ask you here, what does Aloha mean to you? In Hawaiian, Aloha is comprised of two words, Alo and Ha. Alo draws a picture of two people facing each other and Ha explains that they face each other with Ha, Breath, or Life. So in the welcoming greeting or the departure salutation, it is always Aloha or "I face you with Breath". The white man greet each other with: **HELL O** and when upset with that same person, they tell each other: **GO TO HELL!**

Now, let us to back to the days when the Hawaiians first came to Hawaii. They lived on some small island that they called Kahiki. Location unknown, it is only known as a "far off land". A decision was made that the land of Kahiki was too small and the local population needed more Space, Water, to maintain Ha, life. One day they set out to search for this place where there would be more space and water to maintain life. In Hawaiian, Ha refers to life or breath and wai refers to water, a necessary element to life

Boarding their canoes, they set out in search of water (wai) where they could have (Ha) life. They traveled for weeks and soon saw the glare of a volcanic eruption which caused them to ask each other, Ha Wai I ? Or, is this the place we are searching for that will supply us with sufficient Ha Wai I ? the last I in the word turns it into a question. Eventually these people landed at South Point and named the place Kau which means "ours" or "Breast" as in a woman's breast for supplying their physical needs, their well being from infancy into the nation they became. The name Hawaii began as a question when they first saw the land they were searching for upon leaving Kahiki.

As they grew stronger, the Hawaiians explored the shoreline going east and discovered a beautiful bay. They noticed that in spite of the mauka rains, there was no streams bringing the water down hill to the ocean and named that Ahapuaa Kahawai Ole which means "no fresh water streams". In their explorations, they noticed that far out into the bay, the ocean was boiling with water and realized that this was the cause for not having any streams as the water came down hill in lava tubes then boiled into the open ocean out in the bay. The old Hawaiians then named the bay Kailua referring to the hidden water erupting from the ocean floor.

I will stop here as you may not be interested. However, I make the offer, as should either of you come to this area to check out the project, let me know and I will provide you with the history of this area that is just fascinating.

Question: Kate, are you related to a Jack Ramos who once ranched and lived in Honokaa.

Leningrad Elarionoff

----- Original message -----

From: "Hirano, Andrew J" <andrew.j.hirano@hawaii.gov>

Date: 3/2/22 9:07 AM (GMT-10:00)

To: [REDACTED]

Cc: "Ramos, Kate S" <kate.s.ramos@hawaii.gov>, "Chun, Karen" <karen.chun@hawaii.gov>, "Chinen, Darin N." <Darin.Chinen@wsp.com>

Subject: RE: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuio mano 19D-01-19

Hello Ms. Lui.

Thank you very much for your reply to our letter. I am the State's project manager for this project. You surely have a wealth of knowledge of the history of the area. We will take into consideration the Kamuela Museum property and the TMK: (3) 6-6-001:011 DHHL area you mentioned below. An AIS has not been done yet. As part of the Section 106 process, we are reaching out to the NHOs and other consulting parties regarding their knowledge of any historic resources in the area that may be impacted by the project's Area of Potential Effects (attachment to the letter).

Your reply is also being forwarded to the designer of the project for consideration.

Mahalo,
Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Ramos, Kate S <kate.s.ramos@hawaii.gov>

Sent: Wednesday, March 2, 2022 8:33 AM

To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>

Subject: FW: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuio mano 19D-01-19

Hi Andy,

Please see below response from Ms. Lui.

Thanks,
Kate

From: Nicole Lui <[REDACTED]>
Sent: Tuesday, March 1, 2022 10:01 PM
To: Ramos, Kate S <kate.s.amos@hawaii.gov>
Subject: [EXTERNAL] RE: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuimano 19D-01-19

Aloha Karen,

Thank you for reaching out to me as part of the consultation process section 106. I do have ties to that immediate area. Genealogically I am connected to South Kohala through both parents. My Mother and Father have ancestral ties to that district both North and South Kohala. The property that is the site of the old Kamuela Museum belonged to my Great Granduncle Kehau Solomon. He is the Granduncle to Senator Malama Solomon. My Great Grandmother Violet Solomon is the sister of Kehau Solomon. On my Fathers side of the Family and on his mother side are the Solomons, Raymonds, Sproats, Husseys. On my Fathers Fathers side of the family come the Stevens, Purdys, Davis, Haa, Keliwahamana. On my Mothers Fathers side come the Lincolns, Bells, Lindseys, Lims, and on her Mothers side come Kaihemakawalu. This is just the surface. Been doing genealogy for 30 + years and am related to a great many people and I know many of them. From Kona to Kohala to Ka'u and Puna and on to Hamakua.

Kamuela Museum was built by my ggranduncle with his own two hands. He did the yard and planted the trees. I don't know who owns it now but it was a great loss when his children decided to sell. They just wanted the money. He had his most beautiful artifacts hidden in his room I know this because I was in my 30's when he took me into his room and showed me his prized 12 chinese zodiac animal signs carved out of pure ivory and ancient it was and many other artifacts that he did not put out for the public. I am in my 60's now and those memories is all I have. I hope that no danger will come to the property.

Karen I am a Commissioner on the Cultural Resource Commission and the CRC can be consulted with about this project. You will have to get ahold of the County Planning Dept and ask for Kamuela Plunkett and ask to be on the agenda. His Office Personnel is Kim Tanaka. They are in the Hilo Office I believe. I could reach out but I am super busy with work and caring for my parents that I would not want to promise to do it and not do it.

I am also concerned that TMK: (3) 6-6-001:011 DHHL is deemed to be the staging area. Was an AIS ever done on the property? Has it been previously impacted by machinery or is it pasture land? This is Hawaiian land. I know makai of that area are burials and a burial cemetery for the Vredenburg ohana. Uncle Keawe Vredenburg is a descendant of those burials. There is also makai side a reinternment site. We reinterred iwi kupuna with Halealoha Ayau. Halealoha was instrumental in forming some of the laws that govern inadvertent burials and previously known burials. I am just stating this because I just want to make sure that the property is in the clear and we make a concerted effort to do it right the first time,

I think I have said too much and will end here

Please contact Nicole Ishihara of ASM Consulting firm for my consultation report that I shared with her.

Me ka ha'ha'a,

Nicole Lui

Sent from [Mail](#) for Windows

From: [Ramos, Kate S](#)

Sent: Thursday, February 10, 2022 12:08 PM

To: [REDACTED]

Cc: [Hirano, Andrew J](#)

Subject: HWY-DS 2.7423 NHPA Sec. 106 Consultation for Kawaihae Road, Replacement of Waiaka Bridge, & Realignment of Approaches Ahupuaa of Lalamilo & Keanuiomano 19D-01-19

Aloha Ms. Lui,

Please see attached letter.

Thank you,

Kate Ramos

Office Assistant

Technical Design

Design Branch - Highways Division

State of Hawaii - Department of Transportation

From: Hirano, Andrew J
Sent: Tuesday, February 22, 2022 1:00 PM
To: Momi Naughton <[REDACTED]>
Subject: RE: [EXTERNAL] Waiaka Bridge

Dr. Naughton,

Thank you very much for providing us a number of cultural and historic features which we should be aware of as we continue to proceed with this project. You certainly have a wealth of knowledge of the history of the area. I'll be forwarding your response and your contact information to our design consultant. The map surely helps.

Thanks again,
Mahalo,
Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Momi Naughton <[REDACTED]>
Sent: Tuesday, February 22, 2022 12:39 PM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] Waiaka Bridge

Aloha e Andrew,

I recently received a letter asking for my comments on the proposed replacement of the Waiaka Bridge in Waimea. Please find attached my comments and a portion of a map from 1884 showing this area.

Feel free to contact me if you have questions on my comments.

Mahalo,
Momi Naughton, Ph.D.



To: Mr. Andrew Hirano
Technical Design Services Section
Hawai'i Department of Transportation
Email: andrew.j.hirano@hawaii.gov

From: Momi Naughton, Ph.D.
P.O. Box 2364
Kamuela, Hawai'i 96743
Email: mominaughton@gmail.com
Ph. (808) 756-1910

Date: February 14, 2022

Dear Mr. Hirano:

I very much appreciate the invitation to comment on the proposed replacement of the Wai'aka Bridge and realignment of approaches to that bridge. I am currently working on a book on early Waimea history and have done quite a bit of research on the area of Wai'aka.

With the stream and multiple 'auwai in the Wai'aka region, it is obvious that it was an area where agricultural thrived in ancient times. I'm sure you are consulting archaeological studies done of the region so I'll not cite those here. From the research I've done, it does not appear that there were *heiau* in the immediate region in question. The closest one was in the ahupua'a of 'Ouli.

Because the map attached to your letter wasn't very detailed, I'm not sure if the planned construction will be near the Edwin Lindsey (1883-1952) house, sometimes called the William (1848-1905) and Kaluna Lindsey home. The earliest portions of the house were built in the late 1860s. This is a significant historic home that during the 1970s was considered for the State Historic Register.

However, my main concern about this section of the Wai'aka area has to do with it being the possible site of the Catholic Church, St. John the Evangelist. As you may be aware, prior to Father Damien going to Kalaupapa, Molokai to minister to Hansen's disease (Leprosy) patients in 1873, he served on Hawai'i Island. Initially, Father Damien was stationed in the district of Puna but in 1865 was transferred to the districts of Kohala and Hāmākua.

One of the things Father Damien was noted for while serving in the Kohala and Hāmākua districts, was building churches. A number of the churches built by Damien were simple "grass huts" but he did build more substantial ones. One such church, said to be made out of wood, was constructed at Wai'aka.

In 1868, Damien had a revelation to build a church in Wai'aka and dedicated it to St. John the Evangelist. The exact location of this church has not been discovered to my knowledge, however, one person has indicated to me that it was in the area of the maintenance facility for Hawai'i Preparatory Academy at the lower end of the campus. There is a 1884 map that has the

notation of “Cath Ch” on it that seems to indicate this area as well. Using this map to locate the church is tricky as there is what appears to be a road that is actually a trail going up towards the Kohala Road. It’s best to follow the contour of the stream on the map and match it with current maps. I’m attaching a portion of the 1884 map that we used in an exhibit.

St. John the Evangelist Church in Wai‘aka burned down in 1900 and was rebuilt in 1916. In 1936 the church was relocated to the area where the Catholic Church now stands across from the Anuenue Playground on Kawaihae Road. At that time the name of the church was changed to Immaculate Conception Church but to avoid confusion since there was another church by the same name in North Kona, the name was changed in 1965 to Church of the Annunciation. That small church is still on the grounds and the current Church of the Annunciation was completed in 2003.

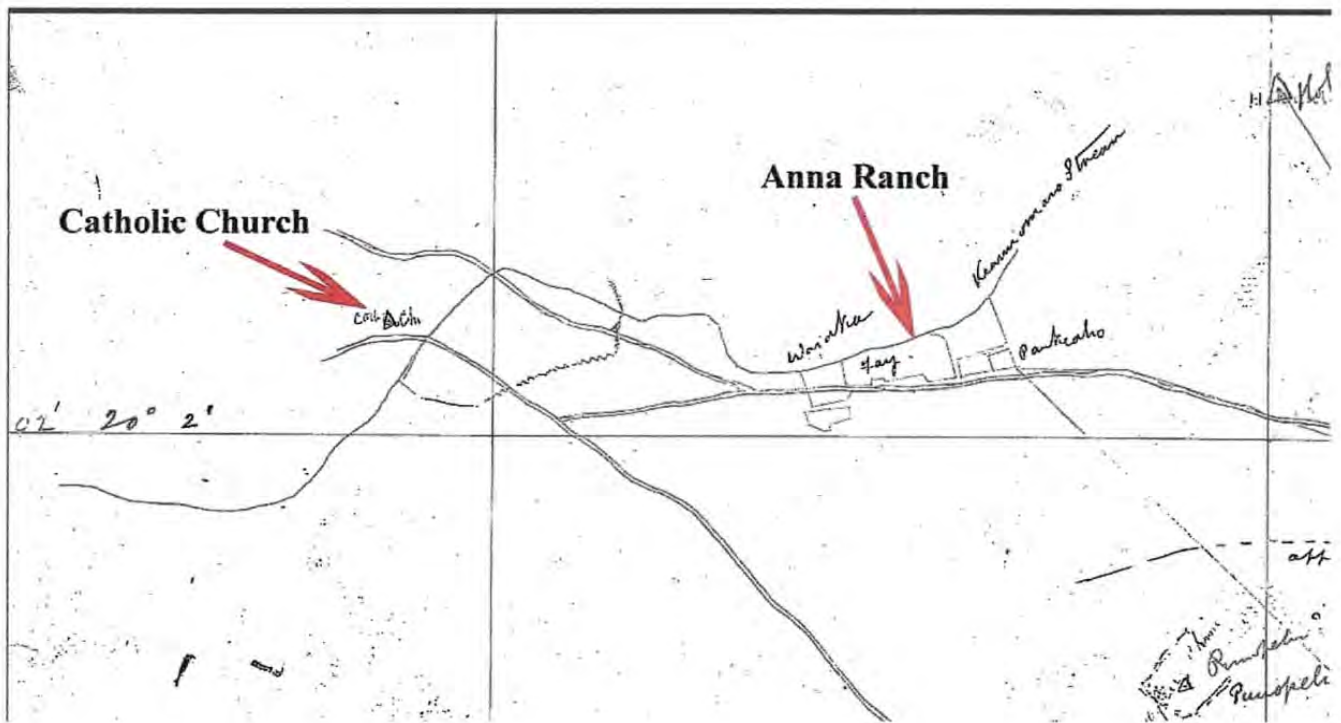
Although there is no church standing in this area, there may be foundations and burials associated with St. John and Evangelist Church in the TMK (3)6-5-001-033 portion that might be impacted. In walking through the area next to the maintenance facility, there are old stone walls and other features of interest. If this is the church site, there could well be burials too. I assume that some archaeology will be conducted or at least monitors will be on hand during construction.

As you know the Wai‘aka Bridge (built in 1932) is a historic bridge, however, it has long needed to be replaced. I do hope that careful documentation of the bridge will be done for future generations.

Mahalo again for allowing me to submit testimony on this bridge replacement project and please feel free to contact me if you have questions on what I’ve submitted.

Me Ka Aloha Pumehana,

Momi Naughton, Ph.D.



1884 map enlarged

CARLSMITH BALL LLP

A LIMITED LIABILITY LAW PARTNERSHIP

121 WAIANUENUE AVENUE

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HILO, HAWAII 96721-0686

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SLIM@CARLSMITH.COM

March 4, 2022

VIA E-MAIL ANDREW.J.HIRANO@HAWAII.GOV

State of Hawai'i Department of Transportation
Technical Design Services Section
Design Branch, Highways Division
Attn: Andrew Hirano
601 Kamokila Boulevard
Kapolei, Hawai'i 96707

Re: National Historic Preservation Act (NHPA) Section 106 Consultation
Kawaihae Road, Replacement of Waiaka Bridge & Realignment of Approaches
Ahupuaa of Lalamilo and Kanuiomano District (Moku) of Kohala, Island of
Hawai'i, State of Hawai'i
Project No. 19D-01-19
HWY-DS 2.7423

Dear Mr. Hirano:

Our firm represents Harvey Bookstein, Trustee of the Big Buck Trust dated May 3, 1996 (the "Trust"), the fee owner of the parcel of land located in Lalamilo, Waimea, District of South Kohala, Island and County of Hawai'i, State of Hawai'i, identified as Tax Map Key ("TMK") No. (3) 6-6-004:001 ("Trust's Property"). The Trust is in receipt of your letter dated February 11, 2022 inviting comment on the proposed Area of Potential Effect ("APE") for the above-referenced bridge replacement project ("Waiaka Bridge Project"). This letter shall serve as written notice of the Trust's intent to participate in the Section 106 process and provide comment on the Waiaka Bridge Project's impacts on the Trust's legal, economic, and historic preservation interests.

The Waiaka Bridge Project will significantly affect the Trust's Property, which was formerly the location of the historic Kamuela Museum. The Waiaka Bridge Project proposes to use, as a temporary use area, a 0.34 acre portion of the Trust's Property upon which the Kamuela Museum is located. It is our understanding that the Kamuela Museum structure was constructed in the early 1900s and opened to the public in 1968. Because the Kamuela Museum structure is over fifty years old, it is considered a historic property under Hawai'i law. *See* HRS §6E-2. Though the museum is no longer open to the public, numerous artifacts remain on the Trust's Property in their original display cases and the structure continues to be well-maintained. Thus,

Andrew Hirano

March 4, 2022

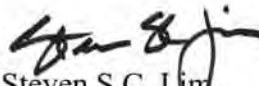
Page 2

the Waiaka Bridge Project's impacts raise significant concerns for the preservation of historical and cultural artifacts related to the Trust's Property.

Furthermore, the Waiaka Bridge Project affects the Trust's legal and economic interests. The proposed area of use as depicted on the APE map covers a portion of the Trust's Property upon which the residential structure sits and which is currently occupied by a family with a young child. Such proposed use of this area would essentially eliminate all beneficial use of the Trust's Property as a residential property. In addition, the letter notes the possibility of the State's permanent acquisition of the subject portion of Client's Property. Suffice to say, the Trust takes the position that this is unacceptable.

Should you have any questions, please feel free to contact me.

Sincerely,

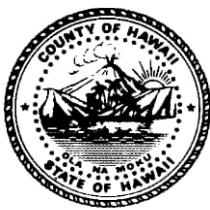


Steven S.C. Lin

cc: Harvey Bookstein, Trustee of the Big Buck Trust

4868-8258-3055.2

Mitchell D. Roth
Mayor



County of Hawai'i

PLANNING DEPARTMENT

CULTURAL RESOURCES COMMISSION

Aupuni Center • 101 Pauahi Street, Suite 3 • Hilo, Hawai'i 96720
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Aaron Spielman, Chair
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Nicole Lui
Scott Mahoney

September 22, 2023

Andrew J. Hirano, HDOT Project Manager
State of Hawaii, Dept of Transportation Highways Division
Design Branch Technical Design Section (HWY-DS)
601 Kamokila Blvd, #688
Kapolei, HI 96707
Via email: andrew.j.hirano@hawaii.gov

Dear Mr. Hirano:

SUBJECT: National Historic Preservation Act (NHPA) Section 106 Consultation for
Kawaihae Road, Replacement of Wai'aka Bridge and Realignment of Approaches.
State of Hawaii Project No. 19D- 01- 19
TMK(s): (3) 6-5-001:015 and 033; (3) 6-6-001:011 and 077
LOCATION: Ahupua'a of Lalamilo and Keanuiomano, District of South Kohala, Hawaii Island
FILE No.: PL-CRC-2023-000007

In response to your requests for consultation on the subject bridge replacement and right of way realignment project, the Cultural Resources Commission held a public hearing pursuant to Section 1-7 on September 13, 2023¹. Section 106 of the National Historic Preservation Act (NHPA) of 1966 (amended 2006) has been initiated with the State Historic Preservation Office (SHPO) for the subject project and by way of this letter, the County of Hawaii Cultural Resources Commission intends to remain a consulting party, specifically as it may relate to resolution of adverse effects (36 CFR. 800.6), mitigation (40 CFR 1508.1(s), 1505.2 and 1505.3) and mitigation commitments (HAR 13-275-7).

The project entails replacement of the existing Wai'aka Stream Bridge with a new bridge that would be approximately 53 feet wide by approximately 80 feet long to accommodate two travel lanes, one in each direction, a roadway shoulder or bike lane, and raised sidewalk. In addition, the roadway approaches to the bridge will be realigned to create a smooth transition to the replacement bridge. The intersection of Kawaihae Road and Kohala Mountain Road would be reconfigured to a roundabout.

According to the Final Environmental Assessment (FEA), the Section 106 process is currently in the consultation process, which will be completed prior to filing the NEPA CatEx. For the HRS § 6E process, although HDOT has provided preliminary assessments of archaeological historic properties, SHPD is expected to conduct its HRS §6E review responsibilities in conjunction with their Section 106

¹ Rules of Practice and Procedure for the Hawaii County Cultural Resources Commission, Rules 1-5

responsibilities. As of publishing time, the potential impacts described in the FEA should be considered cursory as they have not been coordinated with Section 106 consulting parties.

Based on previous and current documentation of the historic and archaeological resources and the impacts to Sites 29221 and 22632, the proposed project is anticipated to have “Adverse effect” under 36 CFR 800.5 and “Effect, with proposed mitigation commitments” under HAR 13-275-7. At this time, possible mitigation measures are limited to data recovery at Site 22632 (e.g., high-resolution mapping of the site using LiDAR and/or the recovery of macro- and microbotanical remains from within the fields and field ridges) and architectural recordation (HAER Level I or II) of Site 29221.

In accordance with Hawaii County Code Section 2-44 and the Rules of Practice and Procedure for the Cultural Resources Commission, the following comments and recommendations are hereby transmitted for consideration:

- The Cultural Resources Commission underscored the importance of and recommends having a cultural and archaeological monitor on site during field work and construction. The CRC makes the request of the SHPO to assign such a monitor as part of mitigative commitments.
- While the Wai‘aka bridge is not being rehabilitated in accordance with Secretary of Interior Standards, the Cultural Resource Commission finds that the proposed reconstruction of the railing design as a treatment is sympathetic to the original bridge’s railing design². The CRC also confirmed *Wai‘aka*³ is the appropriate name of the bridge.
- In addition to the proposed mitigative treatments (i.e., recovery & recordation), the Cultural Resources Commission recommends that interpretative signage be considered as a mitigative treatment within the APE. Interpretative signage content may include Hawaiian etymology, historical, cultural understanding of the Wai‘aka stream and connected water courses, the ecosystems and biocultural resources they support, the landscape(s) that a pedestrian or passerby are visiting or viewing as they traverse the bridge, or other culturally or historically appropriate content as may be received from consulting or concurring parties, Native Hawaiian Organizations (NHO) and/or Hawaiian descendants, or other individuals and organizations involved in the Section 106 process.
- The Cultural Resources Commission recommends that the internal area of the roundabout (approximately 1,520 square feet) be considered for landscaping treatment that includes native groundcover and at least one native specimen tree. The approximately 1,520 square foot area could provide root zone for several different non-invasive tree species with diameters at breast height (DBH) up to 12-14 inches.

Finally, as pertains to the above and in accordance with HRS 92-5.5, the CRC also moved and voted at the September 13, 2023, regular meeting, to form a Permitted Interaction Group (PIG) (i.e., subcommittee) for the purpose of a site visit with HDOT project team. Specifically, as related to the proximity of the temporary bridge, rights of way, existing lava stone walls, and burial areas or riparian-related cultural resources. It was agreed that a site visit can be scheduled once initial surveying and markings are completed on-site at a date and time to be determined, prior to filing the NEPA CatEx and pending right of way establishment by HDOT. Please contact Hawai‘i County Cultural Resources staff at CRC@hawaiicounty.gov to coordinate and arrange the requested site visit with the subcommittee. Subsequent to the site visit, a (site visit) report will be developed and presented at a regular CRC meeting.

² The Secretary of the Interior's Standards for the Treatment of Historic Properties: Reconstruction as a Treatment and Standards for Reconstruction

³ Hawai‘i Board on Geographic Names. Hawaiian Place Names Project - Hawai‘i Island (October 22, 2018)

Andrew J. Hirano
State of Hawaii, Dept of Transportation
Page 3
September 22, 2023

Subsequent to that meeting, the CRC will hold a third meeting and may make additional recommendation(s) to the proposing agency or person for their consideration in execution of any action.

If you have any questions concerning this matter, please contact Kevin Sullivan, Planner V, AICP at kevin.sullivan@hawaiiicounty.gov.

Sincerely,


Aaron Spielman (Sep 22, 2023 13:07 HST)

Aaron Spielman
Cultural Resources Commission Chair

KS:klt

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cc via email:

Hawai'i County Cultural Resources Commission
State Historic Preservation Office (SHPO) alan.s.downer@hawaii.gov
Darin Chinen (WSP USA, Inc.) Darin.Chinen@wsp.com

For Additional Section 106 Comments
Received via interview only from the following individuals:

Kuulei Keakealani

Barbara Robertson

Billy Bergin

See “Historic Properties Report in Support of NHPA Section 106 and HRS Chapter 6E-8 Review of the Waiaka Bridge Replacement and Roadway Realignment Project” (ASM Affiliates, March 2023)

From: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Sent: Monday, March 7, 2022 6:18 AM
To: Dr.Mike Aronowitz <[REDACTED]>
Subject: RE: [EXTERNAL] REPLACEMENT OF WAIAKA BRIDGE, WEST OF WAIMEA/KAMUELA

Dr. Aronowitz,

Thank you very much for your response. We'll correct your address as noted in your response. The purpose of the letter was to gather cultural and historic assets information from the community within the Area of Potential Effects.

The Draft Environmental Assessment (EA) for the project is expected to be published on March 23 and 30 days for comments. The Draft EA will have the recommended alternative to go forth for the project. We look forward toward receiving your comments on the Draft EA.

Mahalo,
Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Dr.Mike Aronowitz <[REDACTED]>
Sent: Sunday, March 6, 2022 12:10 PM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] REPLACEMENT OF WAIAKA BRIDGE, WEST OF WAIMEA/KAMUELA

Dear Mr. Hirano,

RE: HWY-DS 2.7423

I am responding to an e-mail I received on February 9, 2022 from the Hawaii Department of Transportation inviting my input regarding the planned replacement of the WAIAKA BRIDGE west of Waimea town. (APE).

I live at 66-1662 Waiaka Street, and my home is located 500 feet from the center of the current bridge.

I wish to express my very strong hope that the current bridge will be replaced with a ROUNDABOUT.

I believe that a roundabout would greatly mitigate the traffic noise to which my family and I will be subjected.

If cars and especially trucks (with loud air brakes) are required to come to a complete stop at a T-Intersection (alternative 1), and then start up from having been stationary, traffic noise will increase greatly, making our lives miserable.

I believe that a roundabout will also be significantly safer.

I am hereby indicating my wish and intent to participate in the Section 106 process.

Thank you for giving consideration to my request.

With aloha,

Dr. Michael Aronowitz.

From: Hirano, Andrew J
Sent: Monday, March 7, 2022 6:58 AM
To: Vivienne Aronowitz [REDACTED]
Subject: RE: [EXTERNAL] REPLACEMENT OF WAIKA BRIDGE, WEST OF WAIMEA/KAMUELA

Thank you Vivienne for your response. The Draft Environmental Assessment (EA) is anticipated to be published on March 23 with a 30 day comment period. The Draft EA will have the recommended alternative for the project. We look forward to receiving comments on the Draft EA. Yes, noise is a factor in considering the best alternative for the project.

Mahalo,
Andy Hirano
Project Manager
State of Hawaii, Dept of Transportation
Highways Division, Design Branch
Technical Design Section (HWY-DS)
email: andrew.j.hirano@hawaii.gov
Tel: (808) 692-7546

From: Vivienne Aronowitz [REDACTED]
Sent: Monday, March 7, 2022 5:45 AM
To: Hirano, Andrew J <andrew.j.hirano@hawaii.gov>
Subject: [EXTERNAL] REPLACEMENT OF WAIKA BRIDGE, WEST OF WAIMEA/KAMUELA

Dear Mr. Hirano,

I live at [66-1662 Waiaka Street](#), and my home is located 500 feet from the center of the current bridge.

I wish to express my very strong hope that the current bridge will be replaced with a ROUNDABOUT.

I believe that a roundabout would greatly mitigate the traffic noise to which my family and I will be subjected.

If cars and especially trucks (with loud air brakes) are required to come to a complete stop at a T-Intersection (alternative 1), and then start up from having been stationary, traffic noise will increase greatly, making our lives miserable.

I believe that a roundabout will also be significantly safer.

I am hereby indicating my wish and intent to participate in the Section 106 process.

Thank you for giving consideration to my request.

With aloha,

Vivienne Aronowitz

--

Vivienne Aronowitz

viviennearonowitz.com

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Vivienne Aronowitz

viviennearonowitz.com

Section 106 – Consulting Parties Mailing List

Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches

Contact Information for Section 106 Consulting Parties

Ms. Dawn N. S. Chang
Chairperson and State Historic Preservation Officer
Department of Land and Natural Resources
601 Kamokila Boulevard, Suite 555
Kapolei, HI 96707

Hawaii County Cultural Resources Commission
Aupuni Center
101 Pauahi Street
Hilo, HI 96720
Attn: Kevin.Sullivan@hawaiicounty.gov

Mr. Fred Wawner
Interim Head of School
Hawaii Preparatory Academy
65-1692 Kohala Mountain Road
Kamuela, HI 96743-8476
fwawner@hpa.edu

Mr. Steven S.C. Lim
Carlsmith Ball LLP
for Harvey Bookstein, Big Buck Trust
16060 Ventura Boulevard, Suite 110 PMB 189
Encino, CA 91436-4428
slim@carlsmith.com

Michael and Vivienne Aronowitz
65-1241 Pomaiki Place, #6
Kamuela, HI 96734
aronowitz.c@gmail.com and aronowitz@gmail.com

Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches

Attachment E: HRS 6E-8 Effect Determination

pending

Kawaihae Road – Waiaka Bridge Replacement and Realignment of Approaches

Attachment F: The Environmental Notice (July 8, 2022).



The Environmental Notice

July 8, 2022

David Y. Ige, Governor
Mary Alice Evans, Director

The Environmental Notice provides public notice for projects undergoing environmental review in Hawai'i as mandated under Section 343-3, Hawai'i Revised Statutes, the Environmental Impact Statement Law. Along with publishing Environmental Assessments and Environmental Impact Statements for projects in Hawai'i, *The Environmental Notice* also includes other items related to the shoreline, coastal zone, and federal activities.



An adaptive reuse plan for the historic Hocking Building in Chinatown will provide 40 affordable rental housing units and other features

Photo from the [project's Draft EA](#)

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STATEWIDE MAP OF NEW HRS CHAPTER 343 DOCUMENTS & DETERMINATIONS



HAWAII

Kawaihae Road, Replacement of Waiaka Stream Bridge and Realignment of Approaches--Final EA (FONSI)

HRS §343-5(a) Trigger	(1) Propose the use of state or county lands or the use of state or county funds
District(s)	South Kohala
TMK(s)	(3) 6-5-001:015, 033; 6-6-001:011, :077; and the right-of-way for Kawaihae Road and Kohala Mountain Road
Permit(s)	National Pollutant Discharge Elimination System, Community Noise Permit, Community Noise Variance, U.S. Army Corps of Engineers Section 404 and Section 10, Section 401 of the Clean Water Act, Stream Channel Alteration Permit, NEPA, Section 106 of the NHPA, Section 7 of the ESA, CZM, State of Hawai'i Disability and Communications Access Board Review / Approval, County of Hawai'i Grading, Grubbing, and Stockpiling Permit
Proposing/ Determining Agency	State of Hawai'i, Department of Transportation Andrew Hirano, (808) 692-7546, andrew.j.hirano@hawaii.gov 601 Kamokila Boulevard, #688, Kapolei, HI 96707
Consultant	WSP USA; 1001 Bishop Street, Suite 2400, Honolulu, HI 96815 Darin Chinen, (808) 566-2252, darin.chinen@wsp.com
Status	Finding of No Significant Impact (FONSI) determination

The State of Hawai'i Department of Transportation proposes to replace the existing Waiaka Stream Bridge with a new bridge that would be approximately 53 feet wide by approximately 80 feet long to accommodate two travel lanes, one in each direction, a roadway shoulder or bike lane, and raised sidewalk. In addition, the roadway approaches to the bridge will be realigned to create a smooth transition to the replacement bridge. The intersection of Kawaihae Road and Kohala Mountain Road would be reconfigured to a roundabout.

Nakoa Single-Family Residence at Honalo--Final EA (FONSI)

HRS §343-5(a) Trigger	(2) Propose any use within any land classified as a conservation district
District(s)	North Kona
TMK(s)	(3) 7-9-005:012
Permit(s)	State of Hawai'i: Conservation District Use Application (CDUA); Wastewater System Approval; and water well permit County of Hawai'i: Building Plan/Grading Permit
Approving Agency	State of Hawai'i, Department of Land and Natural Resources Rachel Beasley, (808) 798-6481, rachel.e.beasley@hawaii.gov Office of Conservation and Coastal Lands, 1151 Punchbowl Street #131, Honolulu, HI 96813
Applicant	Walter Kaleo O Kalani Nakoa; 75-170 Hualalai Road, Suite B-303, Kailua-Kona, HI 96740 c/o Roy Vitousek, Cades Schutte LLP, (808) 329-5811, rvitousek@cades.com
Consultant	Cades Schutte LLP; 75-170 Hualalai Road, Suite B-303, Kailua-Kona, HI 96740 Roy Vitousek, (808) 329-5811, rvitousek@cades.com
Status	Finding of No Significant Impact (FONSI) determination

Applicant proposes a single story, post and pier foundation that will occupy a building footprint of 1,600 sq. ft: living area; kitchen and dining area; laundry and pantry area; master bedroom; master bathroom; master closet; second bedroom; second bathroom; storage; and hallway. The accessory structures will total 245 sq. ft.: water well; two water storage tanks; a salt pan; aumakua; lele; propane tank; two split-system air conditioning condensers; and a pool. Total proposed SFR and associated improvements are 1,845 sq. ft.

This is a kuleana parcel which was designated as Land Commission Award (LCA) 8575:2. The property is not oceanfront and its makai boundary is approximately 115 feet inland from the shoreline. Access to the property is via Keauhou-Kainaliu Beach Road/Old Government Road. The subject property is an approximately .17-acre (7,405 sq. ft.) and is in the Resource subzone of the State Land Use Conservation District.

MAUI

Waiehu Residential Community--Final EA (FONSI)

HRS §343-5(a) Trigger	(1) Propose the use of state or county lands or the use of state or county funds (6) Propose any amendments to existing county general plans...
District(s)	Wailuku
TMK(s)	(2) 3-3-002:031
Permit(s)	Community Plan Amendment, others (see document)
Approving Agency	County of Maui, Department of Housing and Human Concerns Buddy Almeida, (808) 270-7351, Buddy.Almeida@co.maui.hi.us 2200 Main Street, Suite 546, Wailuku, HI 96793
Applicant	Genova Construction Development; 555 Corporate Drive, Suite 120, Ladera Ranch, CA 92694 Brad Cook, (949) 306-2943, brad@genovacd.com
Consultant	Chris Hart & Partners, Inc.; 2200 Main Street, Suite 527, Wailuku, HI 96793 Brett Davis, (808) 242-1955, Bdavis@chpmaui.com
Status	Finding of No Significant Impact (FONSI) determination

The proposed action is to develop a portion of the existing undeveloped 238-acre land situated west of Kahekili Highway. Approximately 158 acres of land will be developed as a new 100% affordable, 752-unit residential community along with associated infrastructure, roadways, and amenities such as park space, walking trails, and landscaping. All units within the proposed community are for sale at prices determined by the Housing and Urban Development (HUD) annual price guidelines.

Out of the proposed 752 dwelling units, 184 will be multi-family units and 568 will be single-family units. The proposed plan includes six (6) different types of single-family development to provide a variety of housing options to future residents. The proposed project also includes a retail space of an approximately 17,400 square feet and three (3) parks totaling 6.3 acres.

O'AHU

The Hocking Building Adaptive Reuse--Draft EA (AFNSI)

HRS §343-5(a) Trigger	(4) Propose any use within any historic site as designated in the National Register or Hawai'i Register
District(s)	Honolulu
TMK(s)	(1) 1-7-003:001
Permit(s)	Chinatown Special District Permit, Building Permits
Approving Agency	City and County of Honolulu, Department of Planning and Permitting Janet Meinke-Lau, (808) 768-8033, j.meinkelau@honolulu.gov 650 South King Street, 7th floor, Honolulu, HI 96813
Applicant	The Hocking Building LLC; 1600 Ala Moana Boulevard, Suite 103, Honolulu, HI 96815 Mark Hashem, (808) 388-7693, mhashme@sofoserealty.com
Consultant	Environmental Communications, Inc.; P.O. Box 236097, Honolulu, HI 96823 Taeyong Kim, (808) 528-4661, tkim@environcom.com
Status	Statutory 30-day public review and comment period starts. Comments are due by August 8, 2022. Please send comments to the approving agency and copy the applicant and the consultant.

The Project consists of an adaptive reuse Project for affordable rental housing in downtown Honolulu. This Project will be restricted to qualified households within the 30 percent to 50 percent Area Median Income level. Adaptive reuse of the building involves converting the commercial office space building into an affordable rental housing Project with 40 units. 25 units will be studio units, six units will be one bedroom units, and nine units will be two-bedroom units. Tenant storage will be located in the basement.

A community room, gym, laundry room, computer room and existing courtyard will be located on the ground floor. The building will retain its historic appearance and efforts have been made to restore the building close to its original exterior design. The proposed Project will involve the use of Federal Historic Tax Credits, State Low Income Housing Tax Credits, and Rental Housing Revolving Fund administered by the Hawai'i Housing Finance and Development Corporation.

O'AHU (CONTINUED)

Hale Lauula--Final EA (FONSI)

HRS §343-5(a) Trigger	(5) Propose any use within the Waikiki area of O'ahu
District(s)	Honolulu
TMK(s)	(1) 2-6-018:049
Permit(s)	Waikiki Special District Permit, other various permits (see document)
Approving Agency	City and County of Honolulu, Department of Planning and Permitting Janet Meinke-Lau, (808) 768-8033, j.meinkelau@honolulu.gov 650 South King Street, 7th floor, Honolulu, HI 96813
Applicant	Waikiki Bazaar Inc.; 1288 Kapi'olani Boulevard, Apartment I-4603. Honolulu, HI 96814 John Shimizu, (808) 599-3800, jbs@vcshawaii.com
Consultant	R.M. Towill Corporation; 2024 North King Street, Suite 200, Honolulu, HI 96819-3494 Isaiah Sato, (808) 842-1133, isaiahs@rmtowill.com
Status	Finding of No Significant Impact (FONSI) determination

Waikiki Bazaar Inc. (WB) proposes to develop Hale Lauula, a six-story structure with a 16-unit, 28-bed boutique hotel or apartment building, on a 5,355-square-foot parcel. The Project site is approximately 120 feet deep and 50 feet wide.

WB will replace the existing surface commercial parking lot with a six-story, 16-unit, 28-bed boutique hotel or apartment building. The first level includes the lobby, vehicle parking stalls, bicycle racks, loading spaces, and landscaping. Level 2 will include a prep-kitchen, indoor and outdoor seating, a lounge area, mailboxes, front desk, unisex bathroom, vending machines, office, laundry room, janitor's closet, storage, mechanical room, two decks, and a landscaped recreation area. Levels 3 through 6 will include four units per floor for a total of 16 units.

Waimānalo Research Station Master Plan--Final EA (FONSI)

HRS §343-5(a) Trigger	(1) Propose the use of state or county lands or the use of state or county funds
District(s)	Ko'olaupoko
TMK(s)	(1) 4-1-008:103 and 4-1-008:005
Permit(s)	Section 6E-8 Historic preservation review; building, grading, stockpiling, grubbing, trenching permits
Proposing/ Determining Agency	State of Hawai'i, University of Hawai'i at Mānoa Thomas Lim, (808) 956-7429, tlim@hawaii.edu 3050 Maile Way, Gilmore 214B, Honolulu, HI 96822
Consultant	HHF Planners; 733 Bishop Street, Suite 2590, Honolulu, HI 96813 Leslie Kurisaki, (808) 457-3182, lkurisaki@hhf.com
Status	Finding of No Significant Impact (FONSI) determination

The UH College of Tropical Agriculture and Human Resources (CTAHR) has prepared a master plan for 283 acres in Waimānalo, located adjacent to the existing Waimānalo Research Station (WRS). The property is the site of the former Meadow Gold Dairies and will be leased from the State Department of Land and Natural Resources. The master plan represents CTAHR's 20+ year vision for the property.

The Project Area will be an extension of the existing WRS, and be used to support CTAHR's Cooperative Extension, research, and educational activities. There will be 3 primary land uses: 1) Animals/livestock; 2) Plants; and 3) Forestry. Other uses may include an Education Center near the Waikupanaha Street entry. An archaeological/cultural preserve will be designated around Pueo Heiau and will include a publically accessible area for community-driven and sponsored projects. The location and acreage of the master plan uses are flexible and may be modified in response to future needs and priorities

PREVIOUSLY PUBLISHED DOCUMENTS OPEN FOR COMMENT

Status: The comment period for these documents began previously. Please click on the links below to read a document, then send comments to the relevant agency and copy any relevant applicant and/or consultant as identified in the submission form that follows the initial agency letter.

COMMENTS DUE JULY 8, 2022

O'AHU

[University of Hawai'i, Mānoa Campus, Long Range Development Plan Update--Draft EA \(AFNSI\)](#)

KAUA'I

[Kaua'i Island Utility Cooperative Habitat Conservation Plan \(EISPN\)](#)

COMMENTS DUE JULY 25, 2022

HAWAII

[Pastorek Single-Family Residences in the Conservation District at Maku'u--Draft EA \(AFNSI\)](#)

O'AHU

[Two SFRs at 10 Kamani Kai Place--Draft EA \(AFNSI\)](#) (ROH Chapter 25)

[Hawaiian Cement Sand Shed--Draft EA \(AFNSI\)](#) (ROH Chapter 25)

LISTS OF EXEMPTION NOTICES

Pursuant to [HAR § 11-200.1-17](#), State and county agencies that have determined specific actions to be exempt from the requirement to prepare an EA are required to submit a listing of such exemptions made during the previous month. Following are Lists of Exemption Notices submitted by various agencies for June 2022; contact the identified agency contact on each list for additional information about any specific exemption:

County of Hawai'i

[Department of Public Works](#)

City and County of Honolulu

[Department of Design and Construction](#)

State of Hawai'i

[Department of Accounting and General Services](#)

[Department of Land and Natural Resources](#)

[Department of Transportation](#)

County of Maui

[Department of Parks and Recreation](#)

[Department of Public Works](#)

PRIOR DETERMINATION

The University of Hawai'i, Community Colleges (UHCC) [has determined](#) that additional environmental review is not required for the construction of a multi-purpose outdoor classroom at the piko, future multi-purpose classroom, and additional parking for the Hawai'i Community College-Palamananui campus. [A Final Supplemental Environmental Impact Statement \(FSEIS\) for the University of Hawai'i Center-West Hawai'i 2009 Revision and Update](#) was prepared for the campus in 2010 to address potential direct, indirect and cumulative impacts associated with the project. The UHCC has conducted their review of the 2010 FSEIS and has determined that the proposed action is a component of, or is substantially similar to, actions that were identified in the 2010 FSEIS; is anticipated to have direct, indirect and cumulative effects similar to those analyzed in the 2010 FSEIS; and was analyzed within the range of alternatives in the 2010 FSEIS.

SHORELINE NOTICES

APPLICATIONS FOR SHORELINE CERTIFICATION

The shoreline certification applications below are available for review and comment at the Department of Land and Natural Resources offices on Kaua'i, Hawai'i, Maui, and Honolulu, 1151 Punchbowl Street, Room 220 ([HRS § 205A-42](#) and [HAR § 13-222-12](#)). **Maps and photos of each application file can be viewed [here](#). All comments shall be submitted in writing to the State Land Surveyor, 1151 Punchbowl Street, Room 210, Honolulu, HI 96813 and postmarked no later than 15 calendar days from the date of this public notice of the application.** For more information, call Ian Hirokawa at (808) 587-0420.

File No.	Location	TMK	Applicant	Owner
OA-1993	57-335 Pahipahialua Street, O'ahu 96731	(1) 5-7-003: 058	Gil P. Bumanglag	Lance and Rocheel Blaisdell
OA-1994	91-329, 91-333, 91-335, and 91-335a Papipi Road, O'ahu 96706	(1) 9-1-134: 007 & 078	R.M. Towill Corporation	Haseko (Ewa) Inc.
OA-1995	91-329, 91-333, 91-335, and 91-335a Papipi Road, O'ahu 96706	(1) 9-1-134: 045 & 046	R.M. Towill Corporation	Haseko (Ewa) Inc.
MA-785	200 Nohea Kai Drive, Maui 96761	(2) 4-4-013: 013	R. T. Tanaka Engineers, Inc.	Maui Timeshare Venture LLC
MA-786	Off Stable Road, Maui	(2) 3-8-095: 020 & 3-8-002: 010	Action Survey LLC	E Paepae Ku Pukoa Association
MA-787	4420 Makena Road, Maui 96753	(2) 2-1-011: 005 & 028	Warren S. Unemori Engineering Inc.	C.H. Makena Holdings Ltd.
HA-627	15-1859 Beach Road, Hawai'i	(3) 1-5-032: 049	Daniel Berg, dlb & associates, LLC	Patricia Sather, Stephen Else
KA-469	Kaua'i	(4) 3-5-001: 005,008,009, 109,111,128,159,160; 3-7-002: 999	Esaki Surveying and Mapping, Inc.	State of Hawai'i, Department of Transportation, Airports Division

PROPOSED SHORELINE CERTIFICATIONS AND REJECTIONS

The shoreline notices below have been proposed for certification or rejection by the Department of Land and Natural Resources ([HRS § 205A-42](#) and [HAR § 13-222-26](#)). Any person or agency who wants to appeal shall file a notice of appeal in writing with DLNR no later than 20 calendar days from the date of this public notice. Send the appeal to the Board of Land and Natural Resources, 1151 Punchbowl Street, Room 220, Honolulu, Hawai'i 96813.

File No.	Status	Location	TMK	Applicant	Owner
MA-769	Proposed	2780 Keka'a Drive, Maui 96761	(2) 4-4-008:007	Warren S. Unemori Engineering Inc.	Pleasant Travel Service
MA-779	Proposed	1772 Halama Street, Maui 96753	(2) 3-9-012:006	Action Survey LLC	Surf & Ski LLC
HA-626	Proposed	Queen Ka'ahumanu Highway, Hawai'i	(3) 7-2-004:001	R.M. Towill Corporation	B.P. Bishop Estate TTEES, Kamehameha Schools
KA-467	Proposed	5520 Ka Haku Road, Kaua'i 96722	(4) 5-4-011:004 and 5-4-004:035	Honua Engineering, Inc.	SOF-XI Kauai P.V. Hotel, L.P.

COASTAL ZONE MANAGEMENT NOTICES

SPECIAL MANAGEMENT AREA (SMA) MINOR PERMITS

The SMA Minor permits below have been approved ([HRS § 205A-30](#)). For more information, contact the relevant county/state planning agency: Honolulu [(808) 768-8015]; Hawai'i [East (808) 961-8288], [West (808) 323-4770]; Kaua'i [(808) 241-4050]; Maui [(808) 270-7735]; Kaka'ako or Kalaeloa Community Development District [(808) 587-2846]

Location (TMK)	Description (File No.)	Applicant/Agent
Kaua'i: Kapa'a (5-5-004: 040)	Concrete Masonry Unit, IPE Wood Fence, and Gate (SMA(M)-2022-12)	Andi and Robert Ferguson/Adam Brown
Kaua'i: Wainiha (5-8-011: 001)	Storage Shed (SMA(M)-2022-13)	Jaro Volny
Maui: Kihei (2-2-002: 043)	Reconstruct Areas of Campus to be ADA Compliant: Walkway Landings at Buildings E, G, H, I, Cafeteria & Main Corridor & Portables, New Parking Area (SM2 2022-00021)	Department of Education – Kihei School
Maui: Lahaina (4-6-008: 006)	Fourth of July Music Event from 5 pm – 8 pm, Setup 8 am to Noon, Breakdown 8 pm – 10 pm (SM2 2022-00023)	Lahaina Restoration Foundation
Maui: Kahului (3-8-103: 022)	Grub Lot; Lay Gravel; Install Fence; Construct Driveway Apron (SM2 2022-00026)	John Kim West Maui Construction Inc.
Maui: Kahului (3-8-103: 023)	Grub Lot; Lay Gravel; Install Fence; Install Driveway Apron (SM2 2022-00027)	John Kim West Maui Construction Inc.
Maui: Kahului (3-8-103: 026)	Grub Lot; Lay Gravel; Install Fence; Construct Driveway Apron (SM2 2022-00028)	John Kim West Maui Construction Inc.
O'ahu: Wailupe (3-6-001: 017)	Additions to Single-Family Dwelling (2022/SMA-24)	Armstrong Design Group

CONSERVATION DISTRICT USE APPLICATIONS

Persons interested in commenting on the following Conservation District Use Application(s) or receiving notification of determinations on Conservation District Use Applications must submit comments and requests to the Department of Land and Natural Resources. Notification requests must include the following information: 1) Name and address of the requestor; 2) The application for which the requestor would like to receive notice of determination; and 3) The date the notice was initially published in *The Environmental Notice*. Send comments and requests to: Department of Land and Natural Resources, Office of Conservation and Coastal Lands, P.O. Box 621, Honolulu, HI, 96809. DLNR will make every effort to notify those interested in the subject CDUAs. However, DLNR is not obligated to notify any person not strictly complying with the above requirements. For more information, please contact the Office of Conservation and Coastal Lands staff listed for each project. CDUAs can be found via the hyperlinked File No. below or on the OCCL website at dlnr.hawaii.gov/occl.

File No.: [CDUA OA-3898](#) ([Department's Acceptance Letter](#))
Ch 343, Determination: Exempt per HAR, Chapter 11-200.1-16
Name of Applicant: City and County of Honolulu Board of Water Supply
Agent: R.M. Towill
Location: 1691 Mokapu Boulevard, Portion of Kailua, O'ahu
TMK: (1) 4-2-017:016
Proposed Action: [BWS Kapa'a 272 Reservoir Replacement project](#)
Agent's Contact: Brain Takeda, (808) 842-1133, BrainT@rmtowill.com
OCCL Staff Contact: Trevor Fitzpatrick, (808) 798-6660, trevor.j.fitzpatrick@hawaii.gov

FEDERAL NOTICES

As a courtesy, listed below are some relevant entries from the Federal Register published since the last issue of *The Environmental Notice*. For more information, click on the title link, also available at www.federalregister.gov

Notice: [Marine Mammals; File No. 21476](#) (published by the National Oceanic and Atmospheric Administration on 06/30/2022)

Notice is hereby given that Lars Bejder, Ph.D., University of Hawai'i at Mānoa, 46-007 Lilipuna Road, Kane'ohe, HI 96744, has applied for an amendment to scientific research Permit No. 21476-01. **Comments must be received on or before August 1, 2022.**

FEDERAL NOTICES (CONTINUED)

Rule: [Endangered and Threatened Wildlife and Plants; Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat](#) (published by the Fish and Wildlife Service and the National Oceanic and Atmospheric Administration on 06/24/2022)

We, the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (hereafter collectively referred to as the “Services” or “we”), rescind the final rule titled “Regulations for Listing Endangered and Threatened Species and Designating Critical Habitat” that was published on December 16, 2020, and became effective on January 15, 2021. This rescission removes the regulatory definition of “habitat” established by that rule. **This final rule is effective July 25, 2022.**

On January 20, 2021, the President issued Executive Order (E.O.) 13990, which, in section 2, required all executive departments and agencies to review Federal regulations and actions taken between January 20, 2017, and January 20, 2021. In support of E.O. 13990, a “Fact Sheet” was issued that set forth a non-exhaustive list of specific agency actions that agencies are required to review to determine consistency with the policy considerations articulated in section 1 of the E.O. (See www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/fact-sheet-list-of-agency-actions-for-review/). Among the agency actions listed on the Fact Sheet was our December 16, 2020, final rule promulgating a regulatory definition for the term “habitat” (85 FR 81411) under the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq. (hereafter, “the Act”). Following our review of this rule (the “habitat definition rule”), we determined it was unclear and confusing and inconsistent with the conservation purposes of the Act, and we subsequently published a proposed rule to rescind it (86 FR 59353, October 27, 2021). We solicited public comments on the proposed rule through November 26, 2021. In response to several requests, we extended the deadline for submission of public comments to December 13, 2021 (86 FR 67013, November 24, 2021). Following consideration of all public comments received in response to our proposed rule to rescind the habitat definition, and for reasons outlined both in our proposed rule (86 FR 59353, October 27, 2021) and this document, we have decided to rescind the regulatory definition of “habitat.” We acknowledge that, in coming to this final decision to rescind the regulatory definition of “habitat,” we are changing our position on some aspects of the rationale underpinning the definition's adoption; accordingly, we have provided explanations for why rescission of the definition is appropriate. *Please click on the title link above for further information.*

Notice: [Programmatic Environmental Assessment of Multi-Domain Task Force Stationing](#) (published by the Army Department on 06/22/2022)

The Department of the Army (Army) completed a programmatic environmental assessment (PEA) regarding the impacts of stationing a Multi-Domain Task Force (MDTF) at 13 existing Army garrisons and joint bases including U.S. Army Garrison (US-AG)-Hawai'i (Schofield Barracks and Helemano Military Reservation), and is encouraging community participation in this process. The Army is making the PEA and a draft finding of no significant impact (FONSI) available for public comment. The PEA determined the environmental and socioeconomic impacts that would result from the Proposed Action would be either less than significant or significant but mitigable at all of the considered locations. The draft FONSI concluded that an environmental impact statement (EIS) is not required. Unless other significant impacts are brought to the Army's attention during public review of the PEA, the Army will finalize the PEA and FONSI and will not prepare an EIS. **Comments must be received by July 22, 2022 to be considered in the PEA process.** *Please click on the title link above for further information.*

Notice: [Western Pacific Fishery Management Council; Public Meetings](#) (published by the National Oceanic and Atmospheric Administration on 06/28/2022)

The Western Pacific Fishery Management Council (Council) and NMFS will convene a Western Pacific Stock Assessment Review (WPSAR) of Level 1 and Level 2 Essential Fish Habitat (EFH) models for the Main Hawaiian Islands gray jobfish, or uku (*Aprion virescens*). **The WPSAR meeting will be held July 12, 2022 through July 14, 2022.** For specific times and agendas, please click on the title link above. The meeting will be held in a hybrid format with in-person and remote participation (Webex) options available for WPSAR Panelists and participants, with public attendance limited to web conference via Webex. Specific information on joining the meeting, connecting to the web conference and providing oral public comments will be posted on the Council website at www.wpcouncil.org

Notice: [National Register of Historic Places; Notification of Pending Nominations and Related Actions](#) (published by the National Park Service on 07/05/2022)

The National Park Service is soliciting electronic **comments by July 20, 2022** on the significance of properties nominated for listing or related actions in the National Register of Historic Places, including in Honolulu: Marek, Col. C.S. and Berlinda Ku'ulei, House, 2441 Pacific Heights Rd., Honolulu, SG100007974. *Please click on the title link above for further information.*

GLOSSARY OF TERMS AND DEFINITIONS

Agency Actions

Projects or programs proposed by any department, office, board, or commission of the state or county government which is part of the executive branch of that government per [HRS 343-2](#).

Applicant Actions

Projects or programs proposed by any person who, pursuant to statute, ordinance, or rule, requests approval for a proposed action per [HRS 343-2](#).

Draft Environmental Assessment

When an Agency or Applicant proposes an action that [triggers](#) HRS 343, an Environmental Assessment shall be prepared at the earliest practicable time to determine whether the action's environmental impact will be significant, and thus whether an environmental impact statement shall be required per [HRS 343-5\(b\)](#), for Agency actions and [HRS 343-5\(e\)](#), for Applicant actions. For actions for which the proposing or approving agency anticipates a Finding of No Significant Impact (AFNSI), a Draft EA (DEA) shall be made available for public review and comment for 30 days and public notice is published in this periodic bulletin.

Final Environmental Assessment and Finding of No Significant Impact

The action's proponent shall respond in writing to comments on a DEA received during the 30-day review period and prepare a Final EA (FEA) that includes those responses to determine whether an environmental impact statement shall be required. If there are no significant impacts, then the Agency will issue a Finding of No Significant Impact (FONSI). An Environmental Impact Statement (EIS) will not be required and the project has cleared HRS 343 requirements. The public has 30 days from the notice of a FONSI in this bulletin to challenge the FONSI in the Environmental Court and seek a ruling to require the preparation of an EIS.

Final Environmental Assessment and Environmental Impact Statement Preparation Notice

An EIS shall be required if the Agency finds that the proposed action may have a significant effect on the environment. The Agency shall file notice of such determination with OPSD called an EIS Preparation Notice (EISPN) along with the supporting Final EA. After the notice of the FEA-EISPN is published in this bulletin, the public has 30 days to request to become a consulted party and to make written comments. The public (including the Applicant) has 60 days from the notice of the EISPN in this bulletin to ask a court to not require the preparation of an EIS.

Act 172-2012, Direct-to-EIS, Environmental Impact Statement Preparation Notice (with no EA)

Act 172 in 2012 amended HRS 343 by providing for an agency to bypass the preparation of an environmental assessment for various actions that in the experience of the agency would clearly require the preparation of an EIS. The agency must submit its determination that an EIS is required for an action (Act 172-2012, EISPN) with a completed publication form detailing the specifics of the action. This starts a 30-day scoping period in which the agency or applicant must hold a public scoping meeting for the preparation of the Draft EIS. Written comments and responses on the EISPN must be incorporated into the subsequent Draft EIS and oral comments from the public scoping meeting must be recorded and submitted to OPSD with the Draft EIS.

HEPA

While technically there is no "Hawai'i Environmental Policy Act," HRS 343 is often referred to by this term.

Act 312-2012, Secondary Actions in the Highway or Public Right Of Way

Act 312-2012, amended HRS 343, by adding a new section (HRS 343-5.5., entitled "Exception to applicability of chapter"). HEPA allows for a statutory exception for "secondary actions" (those that involve infrastructure in the highway or public right-of-way) provided that the permit or approval of the related "primary action" (those outside of the highway or public-right-of-way and on private property) is not subject to discretionary consent and further provided that the applicant for the primary action submits documentation from the appropriate agency confirming that no further discretionary approvals are required. An aid to understanding this is to visualize residential driveway improvements in the public right-of-way, versus, retail outlet driveway improvements in the public right-of-way.

Draft Environmental Impact Statement

After receiving the comments on the EISPN, the Agency or Applicant must prepare a Draft Environmental Impact Statement (DEIS). The content requirements of the DEIS shall contain an explanation of the environmental consequences of the proposed action including the direct, indirect and cumulative impacts and their mitigation measures. The public has 45 days from the first publication date in this bulletin to comment on a DEIS.

Final Environmental Impact Statement

After considering all public comments filed during the DEIS stage, the Agency or Applicant must prepare a Final EIS (FEIS). The FEIS must respond in a point-by-point manner to all comments from the draft and must be included in the FEIS. For Applicant projects, the Approving Agency is the Accepting Authority and must make a determination within 30 days or the FEIS is deemed accepted as a matter of law. For an Agency project, the Governor or the Mayor (or their designated representative) is the Accepting Authority, and unlike applicant actions, there is no time limit on the accepting authority reviewing the FEIS. Only after the FEIS is accepted may the project be implemented.

Acceptability

The Accepting Authority must be satisfied that the FEIS meets three criteria (process, content, response to comments) to accept it. Whether the FEIS is accepted or not accepted, notice of the Acceptance Determination is published in this bulletin. The public has 60 days from publication to legally challenge the acceptance of a FEIS. For both Applicant and Agency actions, the Applicant or the proposing Agency can prepare a Revised DEIS after a non-acceptance determination.



Maui sunset

Photo by [Thomas Hawk](#)

National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires federal projects to prepare a Federal EA or EIS. In many ways it is similar to Hawai'i's law. Some projects require both a State and Federal EIS and the public comment procedure should be coordinated. Upon request by a federal agency, OPSD publishes NEPA notices in this bulletin to help keep the public informed of important federal actions.

Conservation District

Proposed uses of land in the State Conservation District require a Conservation District Use Application (CDUA). These applications are reviewed and approved/denied by the Department or Board of Land and Natural Resources. Members of the public may intervene in the permit process. This bulletin will include EAs & EISs for actions proposed within the Conservation District.

Special Management Area and Shoreline Setback Area

The Special Management Area (SMA) is along the coastline of all islands; development in this area is generally regulated by [HRS 205A](#), and county ordinance. A portion of the SMA that is addressed by HRS 343 is the [Shoreline Area](#), which includes land between the State-certified shoreline and the county-determined shoreline setback line. This bulletin will include EAs & EISs for actions proposed within the Shoreline Setback Area. Some projects going through the SMA permit process on O'ahu are also required to go through an environmental review process that mirrors HRS 343; these "ROH Chapter 25" EAs/EISs are included in this bulletin.

Shoreline Certifications

State law requires that Hawai'i shorelines be surveyed and certified when necessary to clearly establish the shoreline setback from the certified shoreline. The public may participate in the process to help assure accurate regulatory boundaries. Private land owners often petition to have their shoreline certified by the State surveyor prior to construction. This bulletin publishes notice from the Department of Land and Natural Resources of shoreline certification applicants and final certifications or rejections.

Environmental Advisory Council

The [Environmental Advisory Council](#) is a 15-member citizen board appointed by the Governor. They serve as a liaison between the Director of OPSD and the general public concerning ecology and environmental quality. Agendas of their regular meetings are posted on the Internet and the public is invited to attend.

Agency Exemption Lists

Government agencies may keep a list describing the minor activities they regularly perform that are exempt from the environmental review process. These lists and any amendments shall be submitted to the Council for review and concurrence (HAR 11-200.1-16). This bulletin will publish an agency's draft exemption list for public comment prior to Council decision making, as well as notice of the Council's decision on the list.

Endangered Species

This bulletin is required by [HRS 343-3\(c\)](#), to publish notice of public comment periods or public hearings for Habitat Conservation Plans (HCP), Safe Harbor Agreements (SHA), or Incidental Take Licenses (ITL) under the federal Endangered Species Act, as well as availability for public inspection of a proposed HCP or SHA, or a proposed ITL (as a part of an HCP or SHA).