STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

August 24, 2012

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Ref: 10KD-106

Kauai

Denial of Request for Contested Case Hearing Regarding BLNR Agenda Item D-3, January 13, 2012, regarding Grant of Perpetual, Non-Exclusive Easement to Eric A. Knudsen Trust for Access and Utility Purposes, Poipu, Koloa, Kauai, TMK: (4) 2-8-014:from Parcel 19 (Hapa Road)

BACKGROUND

On January 13, 2012, the Eric A. Knudsen Trust sought an easement from the Board across Hapa Road for access and utility purposes as agenda item D-3. A copy of the submittal is attached as Exhibit A. The Board granted the easement to the Eric A. Knudsen Trust. Petitioner Theodore Blake (Petitioner) requested a contested case hearing prior to the end of the meeting. Petitioner's oral request was followed up by a written request filed on January 23, 2012 with the Land Division. A copy of the petition requesting the contested case is attached as Exhibit B. After consultation with the Department of the Attorney General, the Board is recommended to deny the request for contested case, as the Petitioner is not entitled to a contested case hearing as a matter of right.

DISCUSSION

The analysis of whether Petitioner is entitled to a contested case hearing is a two-step process. First, the Board must determine if there is a right to a contested case, as defined in HRS § 91-1 (1993). Next, the Board must determine if Petitioner has standing to participate in the required contested case hearing. In this instance, there was no requirement for the Board to hold a contested case hearing in order to grant an easement over Hapa Road. Accordingly, there is no need for the Board to reach the question of whether Petitioner has standing to participate in a contested case.

A contested case is required by law if the statute or rule governing the activity in question mandates a hearing prior to the administrative agency's decision-making **or** if a hearing is mandated by due process. In this case, there is no statute or rule that mandated that a contested case hearing be held prior to the Board's decision regarding the grant of an easement to a third party applicant. In addition, the Petitioner also has not shown that that he has a due process

property interest in the award of an easement to a third party. A contested case hearing was not required by law and the denial of Petitioner's request for a contested case hearing by the Board is proper.

A hearing was not required to be held, either by applicable statutes or rules or by due process, prior to the Board granting an easement over Hapa Road. HRS § 171-13 authorizes the Board to grant an easement "by direct negotiation or otherwise for particular purposes in perpetuity on such terms as may be set by the Board." HRS § 171-13 does not provide for any type of hearing that is required to be held in connection with the grant of an easement. Furthermore, Petitioner has not cited any statute or rule that requires that an agency hearing be held or that grants a right to a contested case hearing in connection with the grant of an easement. Petitioner merely states that granting a vehicular easement to cross Hapa Road is inconsistent with several state policies. Inconsistency with state policies does not require a contested case hearing to be held.

Neither is the Petitioner entitled to a contested case hearing on the grounds of due process. In order to be entitled to a contested case hearing, the Petitioner must seek to protect a property interest as defined under the due process clauses of the federal and state constitutions. In addition, if a property interest is present, it must be determined if a contested case hearing is required to protect such an interest. Petitioner has not pointed to, and the State is not aware of, any property interest held by Petitioner that rises to the level of an entitlement and which is at issue in this matter.

It has been the position of the State that no property interest can be asserted in the Board's disposition of public property pursuant to HRS chapter 171 and as such a contested case is not available in this type of situation. The Board was addressing the custodial management of property held by the agency. If the Board may terminate a lease without a contested case hearing, it stands to reason that the Board may also grant an easement without first holding a hearing.

Petitioner's arguments regarding his potential property interests in this case do not override this determination. Petitioner states that his interests that may be affected by the Board's action are based on his traditional and customary practices, recreational interests, historic preservation interests, and environmental interests. Petitioner's claims, without more, do not rise to a level of a property interest for due process purposes. As such, Petitioner has not shown that his interest constitutes a property interest for purposes of due process.

The second prong of the inquiry as to whether a contested case hearing is required is whether the decision would determine the rights, duties, or privileges of specific parties. The decision by the Board to grant an easement to the Eric A. Knudsen Trust did not determine the rights, duties, or privileges of specific parties. The determination of the rights, duties or privileges of a party has been found to be at issue in various cases in which a decision was made on an application for a license or entitlement involving the use of the applicant's own property. In this case, the Eric A. Knudsen Trust is seeking an easement to use state land. For the same reasons that the Petitioner does not have a property interest in the disposition of state land, neither does the Eric A. Knudsen Trust. The Eric A. Knudsen Trust does not have a right to

obtain an easement from the State nor is it a privilege to which the Eric A. Knudsen Trust is entitled.

RECOMMENDATION: That the Board:

1. Deny the request for contested case hearing on the basis that the Petitioner is not entitled to a contested case hearing as a matter of right as discussed above.

Respectfully submitted,

Ian C. Hirokawa
Project Development Specialist

APPROVED FOR SUBMITTAL:

William J. Aila, Jr., Chairperson

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

January 13, 2012

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

PSF No.:10KD-106

Kauai

Grant of Perpetual, Non-Exclusive Easement to Eric A. Knudsen Trust for Access and Utility Purposes, Po'ipu, Koloa, Kauai, Tax Map Key: (4) 2-8-014: fronting Parcel 19 (Hapa Road).

APPLICANT:

Eric A. Knudsen Trust, Kalaheo, HI 96741

LEGAL REFERENCE:

Section 171-13, Hawaii Revised Statutes, as amended.

LOCATION:

Portion of Government lands of Koloa situated at Po'ipu, Koloa, Kauai, identified by Tax Map Key: (4) 2-8-014: Fronting Parcel 19, (Hapa Road) as shown on the attached map labeled Exhibit A.

AREA:

2500 Square Feet, more or less.

ZONING:

State Land Use District:	Agricultural/Rural
County of Kauai CZO:	OPEN

TRUST LAND STATUS:

EXHIBIT "A"

Section 5(b) lands of the Hawaii Admission Act

DHHL 30% entitlement lands pursuant to the Hawaii State Constitution: NO

CURRENT USE STATUS:

Vacant and unencumbered.

CHARACTER OF USE:

Right, privilege and authority to construct, use, maintain and repair a right-of-way over, under and across State-owned land for access and utility purposes.

COMMENCEMENT DATE:

To be determined by the Chairperson.

CONSIDERATION:

One-time payment to be determined by independent appraisal establishing fair market value, subject to review and approval by the Chairperson.

CHAPTER 343 - ENVIRONMENTAL ASSESSMENT:

The Final Environmental Impact Statement acceptance notice for the subject project was published in the OEQC's Environmental Notice on November 23, 2006.

DCCA VERIFICATION:

Not applicable. The Applicant as a landowner is not required to register with DCCA.

APPLICANT REQUIREMENTS:

Applicant shall be required to:

1) Pay for an appraisal to determine the fair market value to be paid as a one-time payment;

2) Provide survey maps and descriptions according to State DAGS standards and at Applicant's own cost;

3) Obtain a title report to ascertain ownership, where necessary, at Applicant's own

cost and subject to review and approval by the Department.

REMARKS:

Hapa Road (also known as Po'ipu Short Cut Road) Lot 19-B as shown on Land Court Application 956, Map 28, Certificate of Title 15826, State of Hawaii Owner. Hapa Road, with an area of 6.205 acres, was in existence in the late 1800's as a path form Koloa Town to the Poipu beach area. Hapa Road is listed on the State Inventory of Historic Places at Site Number 50-30-10-992. Its notable features are dry stacked rock walls along either side of the road. Although the walls are missing in some area, the walls are still present and visible in others.

The Eric A. Knudsen Trust is the owner of Parcel 19 identified on TMK: (4) 2-8-14, also known as the Village at Po'ipu Subdivision Phase I. The Village at Po'ipu Subdivision Phase I development would like to have vehicular access to the subdivision from the existing Kiahuna Plantation Drive.

Hapa Road is situated between the Parcel 19 and the Kiahuna Plantation Drive. This makes it necessary for the Eric Knudsen Trust to acquire an access and utility easement over a portion of Hapa Road. (See Exhibit B)

Previously, the subdivision had intended to obtain access across Hapa Road in an area that had intact rock walls and that would require a breach and removal of a portion of the walls. The location of the proposed easement has been moved to an area, that has already been breached and therefore will not require removal any of the historical walls. This location is approximately 690 feet south of the original intended easement location.

The State Historic Preservation Division has reviewed Archaeological Inventory Survey for the proposed access easement across Hapa Road and has approved the survey with their recommendations. (See Exhibit C)

The Final Environmental Impact Statement for the subject project was published in the OEQC's Environmental Notice on November 23, 2006. During the process of drafting the Environmental Impact Statement, all applicable County of Kauai and State of Hawaii agencies were requested to comment on this project.

Attached at Exhibits D and E are a letter from the Applicant's attorney and a revised draft of the State's standard form easement, respectively. The applicant requests that the draft easement language be modified to ensure that any relocation of the easement will be on State lands1, and to prevent the State from withdrawing the easement unless the State provides a substitute easement across State lands, or there exists a fully constructed road

1 If a proposed relocation of the easement would result in a breach or removal of an intact dry stacked rock wall, the Applicant must obtain the prior review and approval of the State Historic Preservation Division.

that meets county standards for vehicular and pedestrian access and fully constructed utilities that serves the benefitted property.

Given the limited amount of State land in this area, it is unlikely that this easement would be withdrawn in order to use the land for an alternative public purpose. However, in the past, the Board has approved the withdrawal of lands from leases when necessary for a greater public purpose. A notable example of this would be the recent withdrawal of lands from agricultural leases to K.K. Ranch, Inc. Schuman Carriage Company, Botheilo Hawaii Enterprises, and Parker Ranch in 2010 and 2011 for the Saddle Road improvement project and Palila Critical Habitat mitigation.

RECOMMENDATION: That the Board:

1. Authorize the subject requests to be applicable in the event of a change in the ownership of the abutting parcel described as Tax Map Key: (4) 2-8-014:019, provided the succeeding owner has not had a lease, permit, easement or other disposition of State lands terminated within the last five (5) years due to non-compliance with such terms and conditions.

2. Subject to the Applicant fulfilling all of the Applicant requirements listed above, authorize the issuance of a perpetual non-exclusive easement to Eric A. Knudsen Trust covering the subject area for access and utility purposes under the terms and conditions cited above, which are by this reference incorporated herein and further subject to the following:

   A. The standard terms and conditions of the most current perpetual easement document form, as may be amended from time to time, **or** the modified version as proposed by the Applicant;

   B. The easement shall run with the land and shall inure to the benefit of the real property described as Tax Map Key: (4) 2-8-014:019, provided however: (1) it is specifically understood and agreed that the easement shall immediately cease to run with the land upon the termination or abandonment of the easement; and (2) if and when the easement is sold, assigned, conveyed, or otherwise transferred, the Grantee shall notify the Grantee's successors or assigns of the insurance requirement in writing, separate and apart from this easement document;

   C. Review and approval by the Department of the Attorney General; and

   D. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully Submitted,

Tommy Oi
District Land Agent

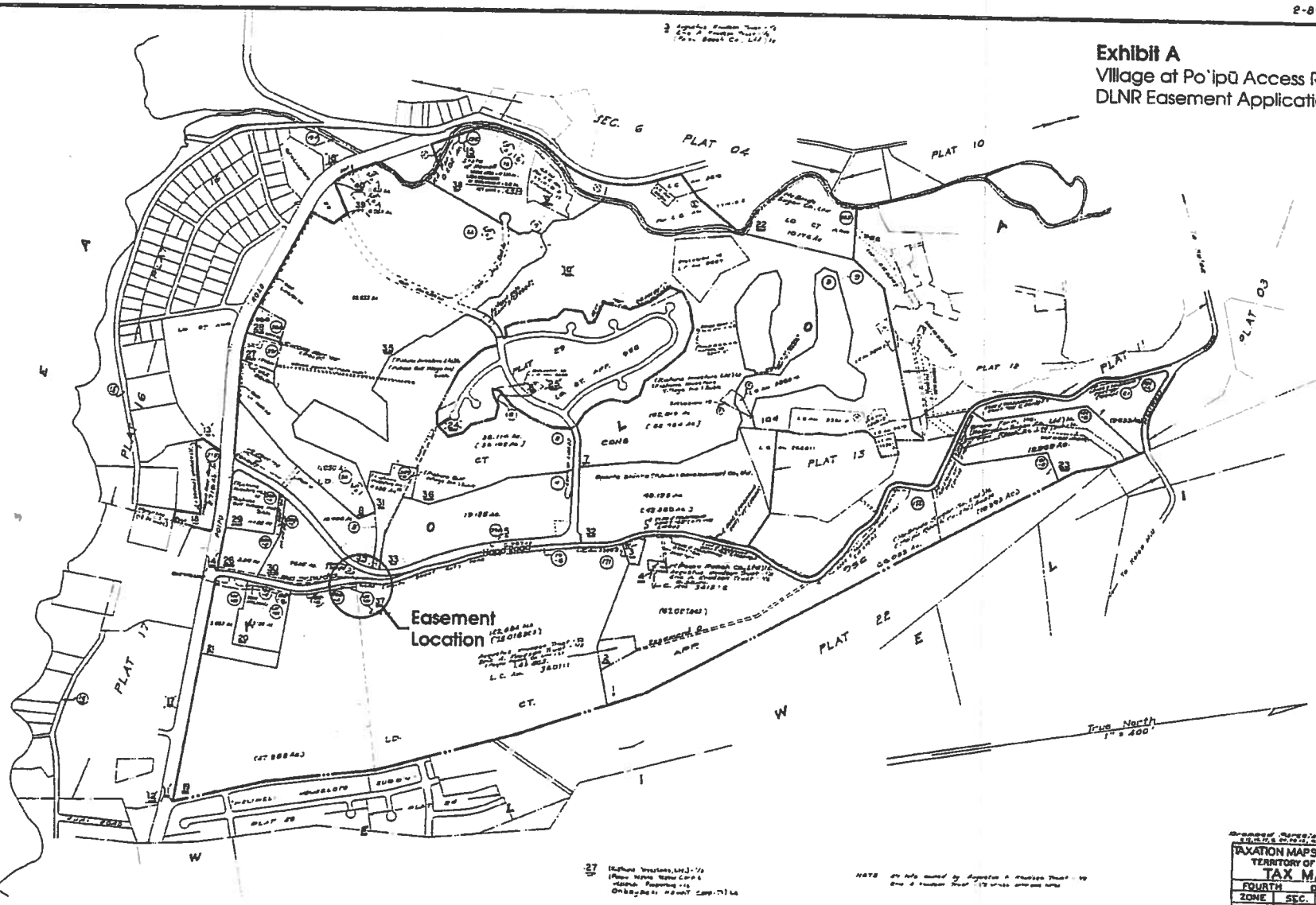
APPROVED FOR SUBMITTAL:

William J. Aila, Jr., Chairperson

2-8-14

Exhibit A

Village at Po'ipū Access Road
DLNR Easement Application



TAXATION MAPS BUREAU
TERRITORY OF HAWAII
TAX MAP

FOURTH DIVISION		
ZONE	SEC.	PLAT
2	8	14

CONTAINING PARCELS
SCALE: 1 in. = 400 ft.
DRAWN

EXHIBIT "A"

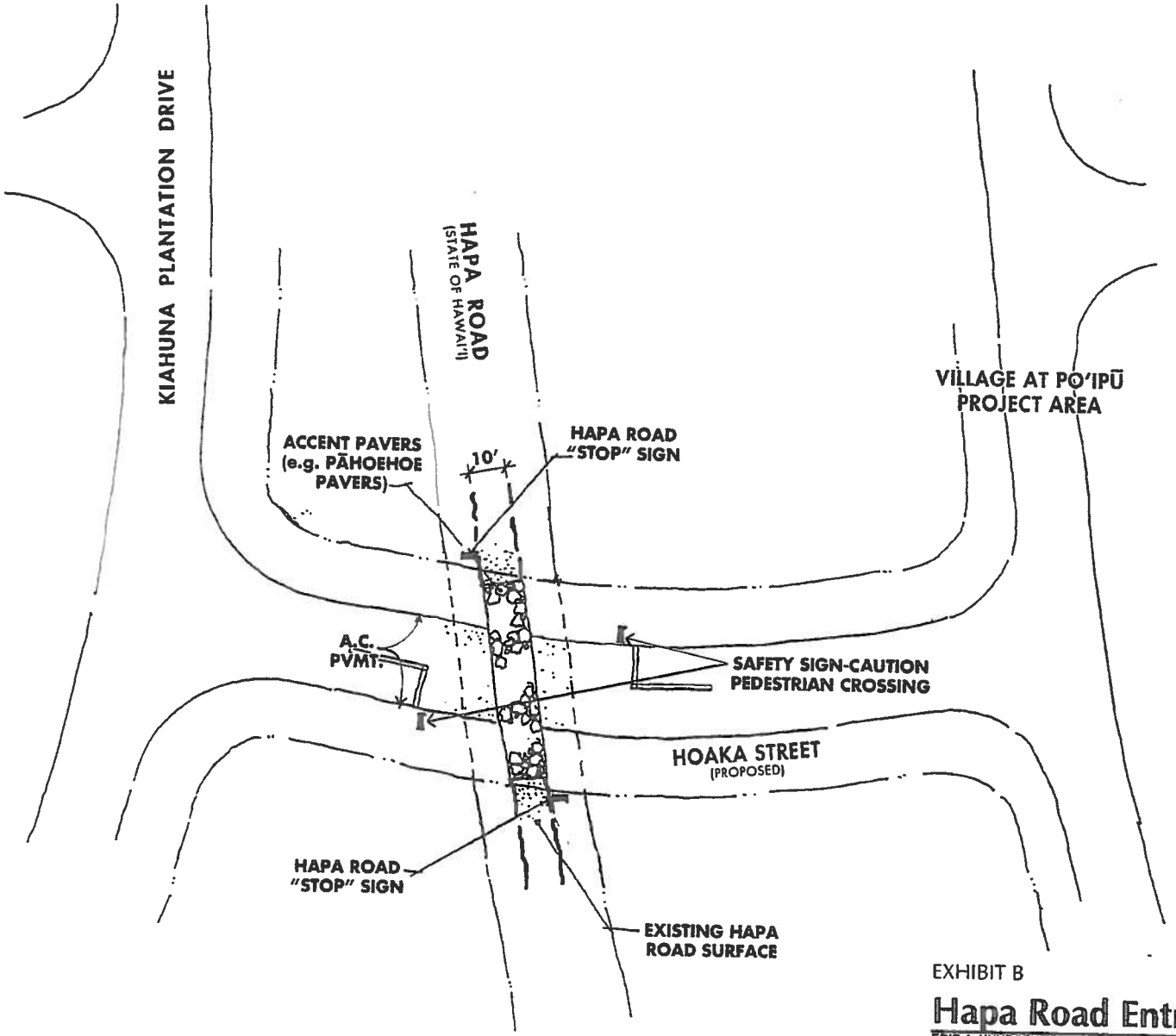


EXHIBIT B

Hapa Road Entry Easement

ERIC A. KNUDSEN TRUST — ISLAND OF KAUA'I

NORTH

LINEAL SCALE (FEET)
0 10 20 40

PBR HAWAII

EXHIBIT "A-1"

4/20/11

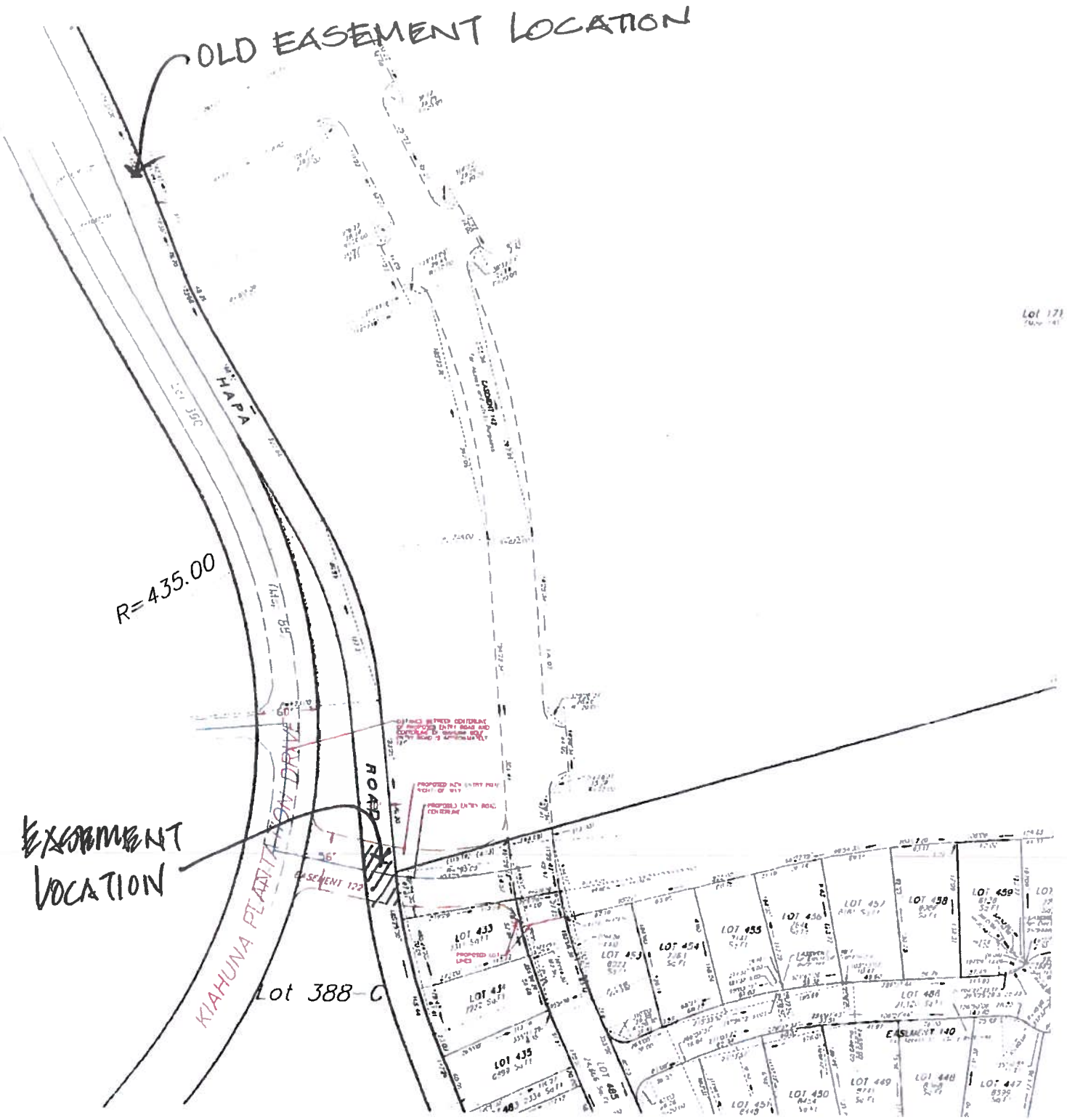

OLD EASEMENT LOCATION
HAPA
R=435.00
KIAHUNA PLANTATION DRIVE
ROAD
EASEMENT LOCATION
Lot 388-C
Lot 171
LOT 433
LOT 434
LOT 435
LOT 454
LOT 455
LOT 456
LOT 457
LOT 458
LOT 459
LOT 484
EASEMENT 140
LOT 449
LOT 448
LOT 447
LOT 450

EXHIBIT "B"

NEIL ABERCROMBIE
GOVERNOR OF HAWAII

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

GUY KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

October 6, 2011

Hallett H. Hammett, Ph.D.
Cultural Surveys Hawai'i, Inc.
PO Box 1114
Kailua, Hawaii 96734

LOG NO: 2011.1774
DOC NO: 1110MD01
Archaeology

Dear Dr. Hammatt:

SUBJECT: **Chapter 6E-8 and 42 Historic Preservation Review –**
Archaeological Inventory Survey of One Acre with No New Sites
Kōloa Ahupua'a, Kōloa District, Island of Kaua'i
TMK: (4) 2-8-014:001 (por.)

This letter summarizes our review of the aforementioned report (Altizer and Hammatt April 2011; *An Archaeological Inventory Survey for a Proposed Access Road into Po'ipū Subdivision, Kōloa Ahupua'a, Kōloa District, Kaua'i Island, TMK: [4] 2-8-014:001 por./CSH Job Code: Koloa 46*), which we received on June 28, 2011. We apologize for the delay in our reply.

This report documents an archaeological inventory survey prepared in preparation for a proposed access road into the Villages at Po'ipū Subdivision. Fieldwork was conducted in March 2011, and included pedestrian survey and documentation of the previously-breached location of the wall currently being proposed for the new subdivision access road. The wall is the remnant of a section of a previously-documented site, State Inventory of Historic Places number 50-30-10-992, Hapa Road. The road as a whole has been determined to be significant under criteria "c" and "d." However, the portion of it proposed for the new road crossing was previously partially bulldozed during installation of water lines.

Because there will be an effect to the existing historic property by the planned road crossing, archaeological monitoring has been proposed for mitigation. While we agree that this recommendation is valid, we would also like to recommend that the proposed road design consider some sort of indication that Hapa Road is being traversed in the area where it existed.

This report is accepted as final pursuant to HAR §13-279-4. Upon receipt of this letter please submit one paper copy of your report marked Final to our Kapolei office along with a CD containing a searchable pdf version of the final report and a copy of this approval letter, marked to the attention of the Kapolei Library. If you have questions about this letter please contact me at (808) 243-5169 or via email to: morgan.e.davis@hawaii.gov.

Aloha,

Morgan E. Davis
Lead Archaeologist, Maui Island Section
State Historic Preservation Division

EXHIBIT "C"

BELLES GRAHAM PROUDFOOT WILSON & CHUN, LLP

ATTORNEYS AT LAW

MICHAEL J. BELLES
MAX W.J. GRAHAM, JR.
DONALD H. WILSON
JONATHAN J. CHUN

Federal I.D No. 99-0317663

WATUMULL PLAZA
4334 RICE STREET, SUITE 202
LIHUE, KAUAI, HAWAII 96766-1388

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E-MAIL: mail@kauai-law.com

OF COUNSEL
DAVID W. PROUDFOOT

COUNSEL
LORNA A. NISHIMITSU

December 8, 2011

Mr. Russell Y. Tsuji, Administrator
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl Street, Room 220
Honolulu, Hawaii 96813

VIA EMAIL ONLY

Re: **Grant of Perpetual Non-exclusive Easement to Eric A. Knudsen Trust for Access and Utility Purposes over Portion Hapa Road**
Poipu, Koloa, Kauai
Kauai TMK No. (4) 2-8-14:Abutting Parcel 19
PSF: 10KD-106

Dear Mr. Tsuji:

I am writing to you on behalf of Stacey T. J. Wong, Successor Trustee of the Eric A. Knudsen Trust ("Knudsen Trust"), concerning the draft Grant Of Non-Exclusive Easement ("GOE"). I very much appreciated your willingness to discuss this matter with Michael D. Tom, Esq. and me, and to explain the State's position and concerns.

As you know, the Hapa Road easement is intended to run in favor of the lots in the Village At Poipu ("VAP") Subdivision, and the two large lots surrounding or adjacent to the VAP Subdivision, for access and utility purposes. Paragraph 7 of this GOE allows the State to require the relocation of the easement even if there are no other lands of the State available for a substitute easement. Paragraph 15 of this GOE reserves to the State the right to withdraw the easement *"for public use or purposes, at any time"* (without compensation). Although these are standard provisions (and, as you explained, unlikely to be exercised), these paragraphs have the potential of turning a perpetual easement into an easement at will. As I explained, the easement will be the sole source of access and utilities to the VAP Subdivision. As a result, these provisions will create disclosure problems which, in my opinion, will make future financing for, or sales of, the VAP project difficult or impossible.

EXHIBIT "D"

I have attempted to address both the State's needs and concerns with those of the Knudsen Trust, pursuant to certain revisions to Paragraphs 7 and 15 of the GOE. In summary, I have provided that (as long as the VAP project has no alternative access) the State will not relocate or withdraw the easement unless: the State provides a substitute easement across State lands; or an alternative access has otherwise been constructed to service the VAP project. I have enclosed a clean and redlined draft of the GOE which contains these proposed revisions.

Thank you very much for your cooperation and assistance in this matter.

Sincerely yours,

BELLES GRAHAM PROUDFOOT
WILSON & CHUN, LLP

Max W. J. Graham, Jr.

MWJG:jgm
Enclosures
cc: Stacey T. J. Wong, Successor Trustee, w/encls. (via email only)
Michael D. Tom, Esq., w/encls. (via email only)

Grant of Non-Exclusive Easement)
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LAND COURT SYSTEM) REGULAR SYSTEM
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Total Number of Pages:
LOD No. Tax Map Key No. ( )

GRANT OF NON-EXCLUSIVE EASEMENT

THIS INDENTURE, made and entered into this _____ day of _____, 20____, by and between the STATE OF HAWAII, by its Board of Land and Natural Resources, hereinafter referred to as the "Grantor," and _____, ~~whose address is~~ _____, STACEY T. J. WONG, Successor Trustee of the Eric A. Knudsen Trust under Deed of Trust dated April 30, 1922, recorded in the Bureau of Conveyances of the State of Hawaii in Liber 639, Page 326, and also filed in the Office of the Assistant Registrar of the Land Court of the State of Hawaii as Document No. 27057, as amended, the principal place of business of which is Koloa, Kauai, Hawaii, and the mailing address of which is _____ Kalaheo, Kauai, Hawaii 96741, hereinafter referred to as the "Grantee."

WITNESSETH THAT:

The Grantor, pursuant to section 171-13, Hawaii Revised Statutes or Section 171-95(a)(3), Hawaii Revised Statutes, for and

EXHIBIT "E"

in consideration of the sum of _____, ($_____), the receipt of which is hereby acknowledged, and of the terms, conditions, and covenants herein contained, and on the part of the Grantee to be observed and performed, does hereby grant unto the Grantee, ~~the following~~a non-exclusive and perpetual easement ~~rights:~~

_____

_____

_____

for access purposes (including vehicular and pedestrian) and utility purposes in, over, under and across that certain parcel of land ("easement area") situate at _____Poipu, Koloa, Kauai, Hawaii, being identified as _____a portion of Hapa Road, containing an area of _____, more particularly described in Exhibit "A" and delineated on Exhibit "B," both of which are attached hereto and made parts hereof, said exhibits being respectively , a survey description and survey map prepared by the Survey Division, Department of Accounting and General Services, State of Hawaii, designated C.S.F. No. _____ and dated _____~~, TOGETHER WITH the rights of ingress and egress to and from the easement area for all purposes in connection with the rights hereby granted~~.

TO HAVE AND TO HOLD the easement rights unto the Grantee, its successors and assigns, in perpetuity, SUBJECT, HOWEVER, to the following terms, and conditions and covenants:

1. The Grantee shall at all times with respect to the easement area use due care for public safety ~~**[~~and agrees to indemnify, defend, and hold the Grantor harmless from and against any claim or demand for loss, liability, or damage, including claims for bodily injury, wrongful death, or property damage, arising out of or resulting from: 1) any act or omission on the part of the Grantee relating to the Grantee's use, occupancy, maintenance, or enjoyment of the easement area; 2) any failure on the part of the Grantee to maintain the easement area and sidewalks, roadways and parking areas adjacent thereto in the Grantee's use and control, and including any accident, fire or nuisance, growing out of or caused by any failure on the part of the Grantee to maintain the easement area in a safe condition; and 3) from and against all actions, suits, damages, and claims by whomsoever brought or made by reason of the Grantee's

non-observance or non-performance of any of the terms, covenants, and conditions of this grant of non-exclusive easement or the rules, regulations, ordinances, and laws of the federal, state, municipal or county governments.

2. The Grantor reserves unto itself, its successors and assigns, the full use and enjoyment of the easement area and the right to grant to others rights and privileges for any and all purposes affecting the easement area, provided, however, that the rights herein reserved shall not be exercised by the Grantor and similar grantee(s) in any manner which interferes unreasonably with the herein Grantee in the use of the easement area for the purposes for which this easement is granted.

3. All improvements placed in or upon the easement area by the Grantee shall be done without cost or expense to the Grantor and shall remain the property of the Grantee and may be removed or otherwise disposed of by the Grantee at any time; provided, that the removal shall be accomplished with minimum disturbance to the easement area which shall be restored to its original condition, or as close thereto as possible, within a reasonable time after removal.

4. Upon completion of any work performed in or upon the easement area, the Grantee shall remove therefrom all equipment and unused or surplus materials, if any, and shall leave the easement area in a clean and sanitary condition satisfactory to the Grantor.

5. This easement shall run with the land and shall inure to the benefit of the real property described as tax map key no. _____ *[Lot 171 (Map 8) and Lot 490 (Map 121) of Land Court Application 956, both of which are located in Poipu, Koloa, Kauai, Hawaii, and which are identified by Kauai Tax Map Key No. (4) 2-8-014:019, and Lots 433 through 489 (Map 121) of Land Court Application 956, all of which are located in Poipu, Koloa, Kauai, Hawaii, and which are identified by Kauai Tax Map Key Nos. (4) 2-8-032:001 through 057, respectively (collectively, the "Benefitted Lots"), providing that the Grantee shall be required to carry liability insurance covering the easement area and comply with all other terms and conditions as provided herein, and that the Grantee, or authorized representative of the Grantee's estate, when this easement is sold, assigned, conveyed, or otherwise transferred, shall notify the Grantee's successors or assigns of the insurance requirement in writing, separate and apart from this easement document]. *delete the bracketed language if issuance to the counties.

6. The Grantee shall keep the easement area and the improvements thereon in a safe, clean, sanitary, and orderly condition, and shall not make, permit or suffer, any waste, strip, spoil, nuisance or unlawful, improper, or offensive use of the easement area.

7. Should future development or circumstances necessitate a relocation of the easement granted herein, or any portion thereof, to other lands of the Grantor, the relocation shall be accomplished at the Grantee's own cost and expense~~, provided, however, that if other lands of the Grantor are available~~. In such a case, the Grantor will grant to the Grantee, without payment of any monetary consideration, a substitute easement of similar width within the reasonable vicinity of the original alignment, which substitute easement shall be subject to the same terms and conditions as that herein granted and as required by law.

8. The Grantee covenants, for itself, its successors and assigns, that the use and enjoyment of the land herein granted shall not be in support of any policy which discriminates against anyone based upon race, creed, sex, color, national origin, religion, marital status, familial status, ancestry, physical handicap, disability, age or HIV (human immunodeficiency virus) infection.

9. The Grantee, in the exercise of the rights granted herein, shall comply with all of the requirements of the federal, state, and county authorities and shall observe all county ordinances and state and federal laws, rules and regulations, now in force or which may hereinafter be in force.

10. These easement rights shall cease and terminate, and the easement area shall automatically be forfeited to the Grantor, without any action on the part of the Grantor, in the event of non-use or abandonment by the Grantee of the easement area, or any portion thereof, for a consecutive period of one (1) year.

11. The Grantee shall, upon termination or revocation of this easement peaceably deliver unto the Grantor possession of the premises, together with all improvements existing or constructed thereon or Grantee shall remove such improvements and shall restore the premises to its original state, or as close thereto as possible, within a reasonable time and at the expense of the Grantee, at the option of the Grantor. If the Grantee does not remove the improvements or restore the premises to the satisfaction of the Grantor, the Grantor may effect such action and the Grantee agrees to pay all costs and expenses for such action. Furthermore,

upon the termination or revocation of this easement, should the Grantee fail to remove any and all of Grantee's personal property from the premises, after notice thereof, the Grantor may remove any and all of Grantee's personal property from the premises, and either deem the property abandoned and dispose of the property or place the property in storage at the cost and expense of Grantee and the Grantee does agree to pay all costs and expenses for disposal, removal, or storage of the personal property. This provision shall survive the termination of the easement.

12. **[In case the Grantor shall, without any fault on its part, be made a party to any litigation commenced by or against the Grantee as a result of this grant of non-exclusive easement (other than condemnation proceedings), the Grantee shall pay all costs, including reasonable attorney's fees and expenses incurred by or imposed on the Grantor; furthermore, the Grantee shall pay all costs, including reasonable attorney's fees and expenses, which may be incurred by or paid by the Grantor in enforcing the covenants and conditions of this grant of non-exclusive easement, or in the collection of delinquent rental, fees, taxes, and any and all other applicable charges attributed to said easement area.]

13. The Grantee shall not cause or permit the escape, disposal or release of any hazardous materials except as permitted by law. Grantee shall not allow the storage or use of such materials in any manner not sanctioned by law or by the highest standards prevailing in the industry for the storage and use of such materials, nor allow to be brought onto the easement area any such materials except to use in the ordinary course of Grantee's business, and then only after written notice is given to Grantor of the identity of such materials and upon Grantor's consent which consent may be withheld at Grantor's sole and absolute discretion. If any lender or governmental agency shall ever require testing to ascertain whether or not there has been any release of hazardous materials by Grantee, then the Grantee shall be responsible for the reasonable costs thereof. In addition, Grantee shall execute affidavits, representations and the like from time to time at Grantor's request concerning Grantee's best knowledge and belief regarding the presence of hazardous materials on the easement area placed or released by Grantee.

**[The Grantee agrees to indemnify, defend, and hold Grantor harmless, from any damages and claims resulting from the release of hazardous materials on the easement area occurring while Grantee is in possession, or elsewhere if caused by Grantee or persons acting under Grantee.] These covenants shall survive the expiration or earlier termination of this easement.

For the purpose of this easement "hazardous material" shall mean any pollutant, toxic substance, hazardous waste, hazardous material, hazardous substance, or oil as defined in or pursuant to the Resource Conservation and Recovery Act, as amended, the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, the Federal Clean Water Act, or any other federal, state, or local environmental law, regulation, ordinance, rule, or bylaw, whether existing as of the date hereof, previously enforced, or subsequently enacted.

14. Time is of the essence in this agreement and if the Grantee shall abandon the premises, or if this easement and premises shall be attached or taken by operation of law, or if any assignment is made of the Grantee's property for the benefit of creditors, or if Grantee shall fail to observe and perform any of the covenants, terms, and conditions contained in this easement and on its part to be observed and performed, and this failure shall continue for a period of more than sixty (60) calendar days after delivery by the Grantor of a written notice of breach or default, by personal service, registered mail or certified mail to the Grantee at its last known address and to each mortgagee or holder of record having a security interest in the premises, the Grantor may, subject to the provisions of ~~section~~Section 171-21, Hawaii Revised Statutes, at once re-enter the premises, or any part, and upon or without the entry, at its option, terminate this easement without prejudice to any other remedy or right of action for any preceding or other breach of contract; and in the event of termination, at the option of Grantor, all improvements shall remain and become the property of the Grantor or shall be removed by Grantee.

15. The Grantor reserves the right to withdraw the easement for public use or purposes, at any time during this grant of easement upon the giving of reasonable notice by the Grantor and without compensation. Provided, however, that the Grantor shall have no right to withdraw the easement unless and until: the Grantor provides a substitute easement as described in Paragraph 7, herein; or there is in existence a fully constructed road (which meets applicable County of Kauai standards) for vehicular and pedestrian access purposes servicing the Benefitted Lots and fully constructed utilities serving the Benefitted Lots.

16. The Grantee shall not mortgage or pledge the premises, any portion, or any interest in this easement without the prior written approval of the Chairperson of the Board of Land and Natural Resources and any mortgage or pledge without such approval shall be null and void.

17. In the event the Grantor seeks to forfeit the privilege, interest, or estate created by this easement, each recorded holder of a security interest may, at its option, cure or remedy the default or breach within sixty (60) calendar days, from the date of receipt of the Grantor's notice, or within an additional period allowed by Grantor for good cause, and add the cost to the mortgage debt and the lien of the mortgage. Upon failure of the holder to exercise its option, the Grantor may: (a) pay to the holder from any moneys at its disposal, including the special land and development fund, the amount of the mortgage debt, together with interest and penalties, and secure an assignment of the debt and mortgage from the holder or if ownership of the privilege, interest, or estate shall have vested in the holder by way of foreclosure, or action in lieu thereof, the Grantor shall be entitled to the conveyance of the privilege, interest, or estate upon payment to the holder of the amount of the mortgage debt, including interest and penalties, and all reasonable expenses incurred by the holder in connection with the foreclosure and preservation of its security interest, less appropriate credits, including income received from the privilege, interest, or estate subsequent to the foreclosure; or (b) if the property cannot be reasonably reassigned without loss to the State, then terminate the outstanding privilege, interest, or estate without prejudice to any other right or remedy for any preceding or other breach or default and use its best efforts to redispose of the affected land to a qualified and responsible person free and clear of the mortgage and the debt secured; provided that a reasonable delay by the Grantor in instituting or prosecuting its rights or remedies shall not operate as a waiver of these rights or to deprive it of a remedy when it may still otherwise hope to resolve the problems created by the breach or default. The proceeds of any redisposition shall be applied, first, to reimburse the Grantor for costs and expenses in connection with the redisposition; second, to discharge in full any unpaid purchase price or other indebtedness owing the Grantor in connection with the privilege, interest, or estate terminated; third, to the mortgagee to the extent of the value received by the State upon redisposition which exceeds the fair market value of the land as previously determined by the State's appraiser; and fourth, to the owner of the privilege, interest, or estate.

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused this Indenture to be executed as of the day, month, and year first above written.

GRANTOR:

STATE OF HAWAII

Approved by the Board of Land and Natural Resources at its meeting held on _____.

By _____
Chairperson
Board of Land and
Natural Resources

~~GRANTOR~~

~~By~~ _____
~~(Name of Grantee)~~

APPROVED AS TO FORM:

~~And By~~ _____

_____
Deputy Attorney General

~~GRANTEE~~

Date: _____

~~**Current policy is to not require the indemnification of other state agencies, therefore delete bracketed language at double asterisks' at nos. 1, 12 and 13 to be renumbered and subsequent paragraphs too. The remainder of second paragraph, no. 12 as renumbered, should be added to existing paragraph 1 of no. 12 as renumbered.~~

STATE OF HAWAII)
) SS.
COUNTY OF)

On this day of , 20 , before me personally appeared to me known to be the person described in and who executed the foregoing instrument and acknowledged that executed the same as free act and deed.

Notary Public, State of Hawaii

My commission expires:

GRANTEE:

STACEY T. J. WONG, Successor Trustee of the Eric A. Knudsen Trust under Deed of Trust dated April 30, 1922, as amended

STATE OF HAWAII)
) SS.
COUNTY OF)

On this _____ day of _____, 20____, before me appeared _____ and _____, to me personally known, who, being by me duly sworn, did say that they are the _____ and _____, respectively of _____, a Hawaii corporation, and that said instrument was signed in behalf of said corporation by authority of its Board of Directors, and the said _____ and _____ acknowledged said instrument to be the free act and deed of said corporation.

_____
Notary Public, State of Hawaii

_____
My commission expires: _____

STATE OF HAWAII)
) SS:
COUNTY OF KAUAI)

~~STATE OF HAWAII)~~
~~) SS.~~
~~COUNTY OF)~~

On this ~~day of~~ day of _____, 20____, ~~before me personally appeared~~ ~~and~~ _____, before me appeared STACEY T. J. WONG, Successor Trustee of the Eric A. Knudsen Trust under Deed of Trust dated April 30, 1922, as amended, to me personally known, who, being by me duly sworn or affirmed, did say that ~~such person(s)~~he executed the foregoing ~~instrument as the~~GRANT OF NON-EXCLUSIVE EASEMENT dated _____, 20__, which document consists of _____ page(s), as his free act and deed ~~of such person(s)~~, and if applicable, in the ~~capacity~~capacities shown, having been duly authorized to execute such instrument in such ~~capacity~~capacities.

_____
Name of Notary:

Notary Public,

Fifth Judicial Circuit,
State of Hawaii.

_____

My commission expires:_____

Document comparison done by DeltaView on Tuesday, December 06, 2011 4:28:20 PM

Input:	
Document 1	WORLDOX://W:\DOCS\27551\2\W0120785.DOC
Document 2	WORLDOX://W:\DOCS\27551\2\W0120786.DOC
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Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
	Count
Insertions	35
Deletions	49
Moved from	1
Moved to	1
Style change	0
Format changed	0
Total changes	86

STATE OF HAWAII
BOARD OF LAND AND NATURAL RESOURCES

PETITION FOR A CONTESTED CASE HEARING

OFFICIAL USE ONLY	
Case No.	**Date Received**
Board Action Date / Item No.	**Division/Office**

INSTRUCTIONS:

1. File (deliver, mail or fax) this form within ten (10) days of the Board action date to:

   Department of Land and Natural Resources
   Administrative Proceedings Office
   1151 Punchbowl Street, Room 130
   Honolulu, Hawaii 96813
   Phone: (808) 587-1496, Fax: (808) 587-0390

2. DLNR's contested case hearing rules are listed under Chapter 13-1, HAR, and can be obtained from the DLNR Administrative Proceedings Office or at its website (http://hawaii.gov/dlnr/rules/Ch13-1-Official-Rules.pdf). Please review these rules before filing a petition.

3. If you use the electronic version of this form, note that the boxes are expandable to fit in your statements. If you use the hardcopy form and need more space, you may attach additional sheets.

4. Pursuant to §13-1-30, HAR, a petition that involves a Conservation District Use Permit must be accompanied with a $100.00 non-refundable filing fee (payable to "DLNR") unless a request for waiver of this fee. A waiver may be granted by the Chairperson based on a petitioner's financial hardship.

RECEIVED
LAND DIVISION
2018 MAR 23 A 9:17
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

A. PETITIONER (If there are multiple petitioners, use one form for each.)		
1. Name Theodore Kawahinehelelani Blake	**2. Contact Person** David Kimo Frankel Native Hawaiian Legal Corporation	
3. Address c/o 1164 Bishop St. #1205	**4. City** Honolulu	**5. State and ZIP** HI 96813
6. Email c/o dafrank@nhlchi.org	**7. Phone** 521-2302	**8. Fax** 537-4268

B. ATTORNEY (if represented)		
9. Attorney Name David Kimo Frankel	**10. Firm Name** Native Hawaiian Legal Corporation	
11. Address 1164 Bishop St. #1205	**12. City** Honolulu	**13. State and ZIP** HI 96813
14. Email dafrank@nhlchi.org	**15. Phone** 521-2302	**16. Fax** 537-4268

EXHIBIT "B"

C. SUBJECT MATTER

17. Board Action Being Contested
Grant of Perpetual, Non-Exclusive Easement to Eric A. Knudsen Trust for Access and Utility Purposes, Po'ipu, Koloa, Kauai, Tax Map Key: (4) 2-8-014: fronting Parcel 19 (Hapa Road).

18. Board Action Date	**19. Item No.**
January 13, 2012	D-3

20. Nature and Extent of Petitioner's Interest That May Be Affected by the Board Action
Blake's interests stem from his (a) traditional and customary practices; (b) recreational interests; (c) historic preservation interests; and (d) environmental interests. See his attached declaration.

21. Any Disagreement Petitioner May Have with an Application before the Board
Hapa Trail is a significant historic and cultural resource. Granting a vehicular easement to the Eric A. Knudsen Trust and/or Stacey Wong to cross Hapa Trail will adversely affect Blake's traditional and customary practices, recreational interests, historic preservation interests, and environmental interests. Granting the easement will compromise the authenticity and integrity of Hapa Trail and diminish Blake's use and enjoyment of it.

There does not appear to be an official written concurrence as required by HRS § 6E-8 and HAR Title 13 Chapter 275. Nor has there been any analysis of the effect of this easement on a significant historic site that properly satisfies HAR Title 13 Chapters 275 and 284, including HAR §§ 13-275-7(b) and 13-284-7(b), or that assesses the qualify of any mitigation.

Granting a vehicular easement to the Eric A. Knudsen Trust and/or Stacey Wong to cross Hapa Trail is inconsistent with several state policies including, but not limited to HRS §§ 226-4, 226-12, 205A-2(b)(2)(A), 205A-2(c)(2)(B) and (C), 344-3(2)(C), 344-4(4)(A) and 344-4(6).

Hapa Trail is ceded land. Prior to allowing the use of ceded lands by a private party strictly for private purposes, the BLNR -- acting as a trustee -- must determine that there are no feasible alternatives. Knudsen has several feasible alternatives to this easement. Granting the easement is not in the public interest.

There is no reason for the BLNR to reward the Eric A. Knudsen Trust with an easement to cross state land given Knudsen's failure to protect well over a dozen significant historic sites that it was obligated by law to protect.

Vehicles should be required to stop for pedestrians and bicyclists -- not the reverse.

This proposed use has not been properly reviewed pursuant to HRS Chapter 343.

22. Any Relief Petitioner Seeks or Deems Itself Entitled to
The BLNR should not grant an easement to the Eric A. Knudsen Trust. The integrity of Hapa Trail should be protected -- particularly because the Eric A. Knusen Trust has alternatives to driving across Hapa Trail to obtain access to its subdivision.

23. How Petitioner's Participation in the Proceeding Would Serve the Public Interest

Blake's participation would allow the BLNR to thoroughly consider the impacts of this project on Native Hawaiian rights as well as on the historic, cultural, recreational and environmental resource. Constitutional provisions and legislative enactments demonstrate that the proceeding (and denying the Eric A. Knudsen Trust's request for an easement) would serve the public interest.

HRS § 6E-1 provides: "The Constitution of the State of Hawaii recognizes the value of conserving and developing the historic and cultural property within the State for the public good. The legislature declares that the historic and cultural heritage of the State is among its important assets and that the rapid social and economic developments of contemporary society threaten to destroy the remaining vestiges of this heritage. The legislature further declares that it is in the public interest to engage in a comprehensive program of historic preservation at all levels of government to promote the use and conservation of such property for the education, inspiration, pleasure, and enrichment of its citizens. The legislature further declares that it shall be the public policy of this State to provide leadership in preserving, restoring, and maintaining historic and cultural property, to ensure the administration of such historic and cultural property in a spirit of stewardship and trusteeship for future generations, and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property. "

One of the legislature's objectives in enacting HRS Chapter 205 was to "[p]rotect and preserve those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian . . . history and culture." HRS § 205A-2(b)(2)(A). Additionally, the Hawai`i State Planning Act calls for enhancement of multi-cultural/historical resources. HRS § 226-12(a). Indeed, it is the policy of the State to "[p]romote the preservation and restoration of significant natural and historic resources" and to "[p]rotect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage." HRS § 226-12(b)(1) and (b)(4).

Article XII Section 4 of the Hawai`i State Constitution requires that ceded lands shall be held by the State "as a public trust for native Hawaiians and the general public."

The Hawai`i Supreme Court "has stressed that the rights of native Hawaiians are a matter of great public concern in Hawaii." Ka Pa`akai O Ka`aina v. Land Use Commission, 94 Hawai`i 31, 42, 7 P.3d 1068, 1079 (2000).

24. Any Other Information That May Assist the Board in Determining Whether Petitioner Meets the Criteria to Be a Party under Section 13-1-31, HAR

See
Exhibit 1 "Hapa Road as an Historic Property, Kōloa, Ahupua`a, Kona District, Island of Kaua`i" prepared for Eric A Knudsent Trust by Cultural Surveys of Hawai`i (September 2008)
Exhibit 2 Kaua`i County Ordinance PM-31-79
Exhibit 3 "Data Recovery and Preservation Plan for the Po`ipulani Development Area" by Cultural Surveys Hawaii (July 1991)
Exhibit 4 Archaeological Inventory Survey for the Makai Portion of Parcel 19 of the Eric A. Knudsen Trust Lands, Kōloa, Ahupua`a, Kona District, Island of Kaua`i" by Cultural Surveys Hawai`i (May 2005)
Exhibit 5 Answer and Claim of the Territory of Hawaii in L.C. Pet No. 956 (May 23, 1933)
Exhibit 6 Land Court Transfer Certificate of Title No. 15,826

Declaration of Theodore Kawahinehelelani Blake
attached.

Please note: The Attorney General's Office has historically taken an overly expansive reading of Sharma v. State, 66 Haw 632 (1983) to prohibit contested case hearings whenever the BLNR is acting in a managerial capacity. The Attorney General's interpretation is incorrect and is divorced from the facts in Sharma. Private and public rights are affected by the granting of this easement.

☒ Check this box if Petitioner is submitting supporting documents with this form.

☒ Check this box if Petitioner will submit additional supporting documents after filing this form.

David Kimo Frankel		Jan. 20, 2012
Petitioner or Representative (Print Name)	Signature	Date

EXHIBIT 1

Hapa Road as an Historic Property, Kōloa Ahupua'a, Kona District, Island of Kaua'i TMK: [4] 2-8-014

Prepared for
Eric A Knudsen Trust

Prepared by
Constance R. O'Hare, B. A.
David W. Shideler, M.A.,
and
Hallett H. Hammatt, Ph.D.

Cultural Surveys Hawai'i, Inc.
Kailua, Hawai'i
(Job Code: KOLOA 34)

September 2008

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EXHIBIT "1"

Section 1 Introduction

This report discusses the historic property called Hapa Road in Kōloa Ahupua'a, Kona District, Kaua'i Island (TMK: 4-2-8-014). The following bibliographies, histories, biographies, autobiographies, and published journal extracts were consulted for the literature search (Alexander 1937; Alexander 1991; Bates 1854; Bingham 1847; Condé and Best 1973; Cook 2003; Cooke 2000; Damon 1931; Donohugh 2001; Ecenbarger 2008; Goodell 2004; Gulick 1922; Historic Hawai'i Foundation; http://books.google.com; Hoverson 1985; Hunter 1968, Jarves 1838, 1844, Joesting 1984; Judd 1935; Kauai' Historical Society 1991; Knudsen and Noble 1999; Lai 1975; Lydgate 1991; Titcomb and Ames 1934; Townsend 1839; Wilcox 1981; and Wilkes 1845). Although these documents contained a wealth of information on the development of Kōloa from pre-contact days to the present, only a few contained any references to early roads or trails.

Hapa Road is a single-lane, unpaved *mauka-makai* (inland to the sea) road connecting Po'ipū Beach Road inland to Kōloa Town. The road is bound on each side by a stacked core-filled boulder wall. The *makai* wall section, from the junction with the beach road to 15-18 meters northward, has been reconstructed; mortar was added between the rocks when a tourist information booth was built along the road. The wall in this section is 1.3 meters high. There is a 6-meter gap in the wall for access to a parking lot. From the landscaped section around the booth and parking lot, the wall has been reduced by rock robbing to a low wall 30-40 centimeters high. In some sections, only one course of stone remains, but the original alignment can still be traced. This rough alignment continues for 30-60 meters south of the junction with Weliweli road, where the wall condition improves; the wall at the *mauka* end is 1 meter wide and 1-1.2 meters high. Because the rocky lands on either side of the road were used for cattle grazing, the walls were necessary as pasture boundaries to allow driving of cattle along the road during the early 1900s (Hammatt 1992:31-32).

Hapa Road is shown on Hawaiian Government Survey (HGS) maps as early as 1891, as seen on a map by M. D. Monsarrat (Figure 1) of "Koloa, Kauai." The road, usually not labeled, is also shown on all subsequent government maps of Kōloa, including a 1910 U.S. Geological Survey map (Figure 2). Judge Henry K. Blake, a longtime resident of Kōloa Village, drew two sketches of the Kōloa area, one as the town was in 1938, and one as he remembered it in 1888. Hapa Road, labeled as the road "To Catholic Church and Poipu" is shown on this 1888 map (Figure 3). The road is thus at least 120 years old, and probably older.

The Catholic Church referred to is Saint Raphael the Archangel (Figure 4 and Figure 5). On December 22, 1842, Father Arsenius Walsh landed at Kōloa, and was led by the Hawaiians to the house of a native named Jakopo Pehu, a possible Catholic convert (Yzendoorn 1927:175). Land Commission Awards (LCA) claimed by native Hawaiians are shown on the 1891 HGS map (see Figure 1). LCA 3415 was awarded to Pehu, who had a houselot along Hapa Road; this may be the same man. The location of Pehu's land may be why the priest chose this area to establish his church. In 1842, Father Walsh acquired three acres north of Pehu's land and in 1843, he acquired an additional 17 acres.

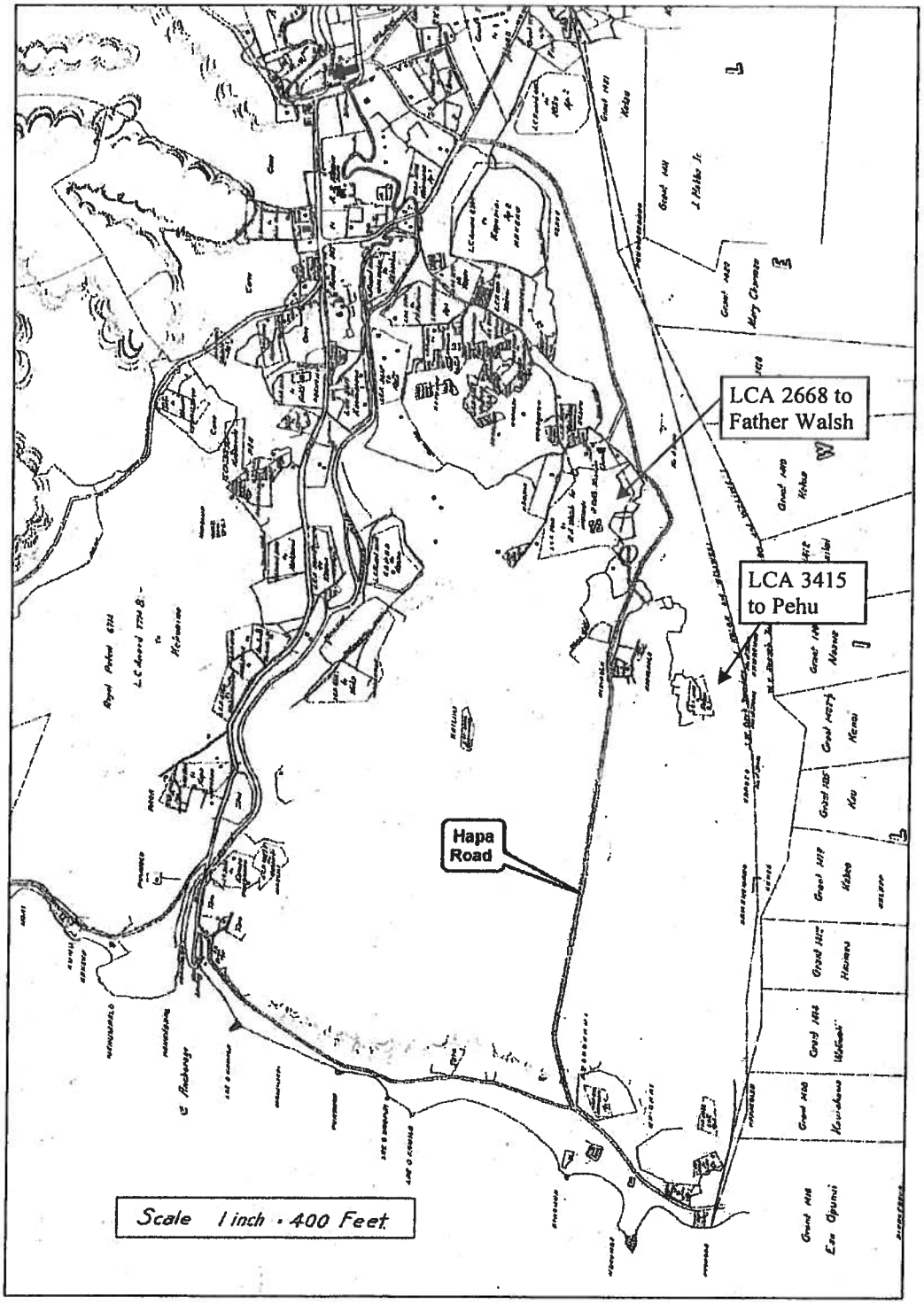

Figure 1. 1891 Hawaiian Government Survey map of Kōloa, Kauai by M. D. Monsarrat, showing location of Hapa Road, LCA 3415 to Pehu and LCA 2668 to Father Walsh of the Catholic Mission (Registered Map No. 1694, Hawai'i Land Survey Division)

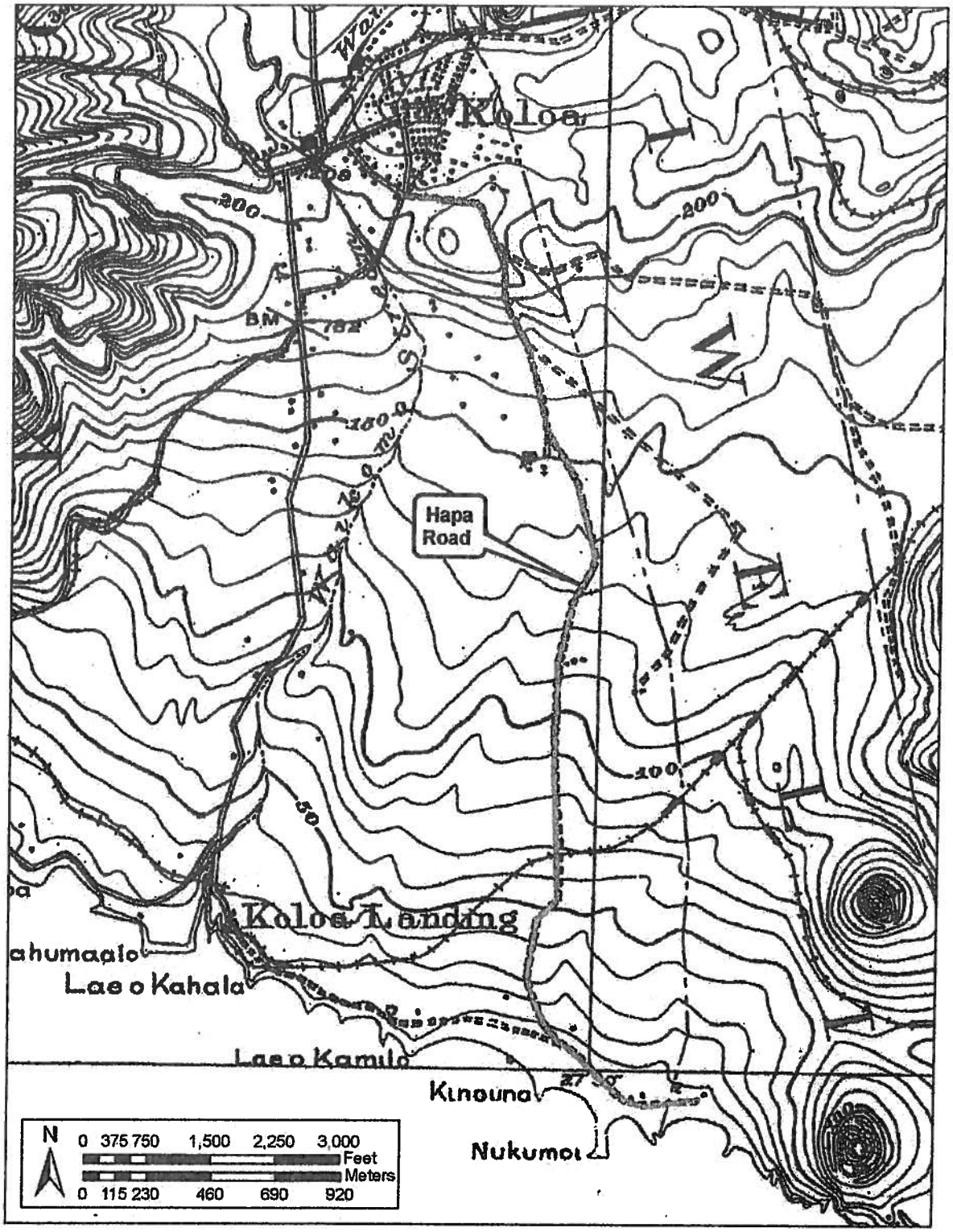

Figure 2. 1910 U.S. Geological Survey map, showing location of Hapa Road

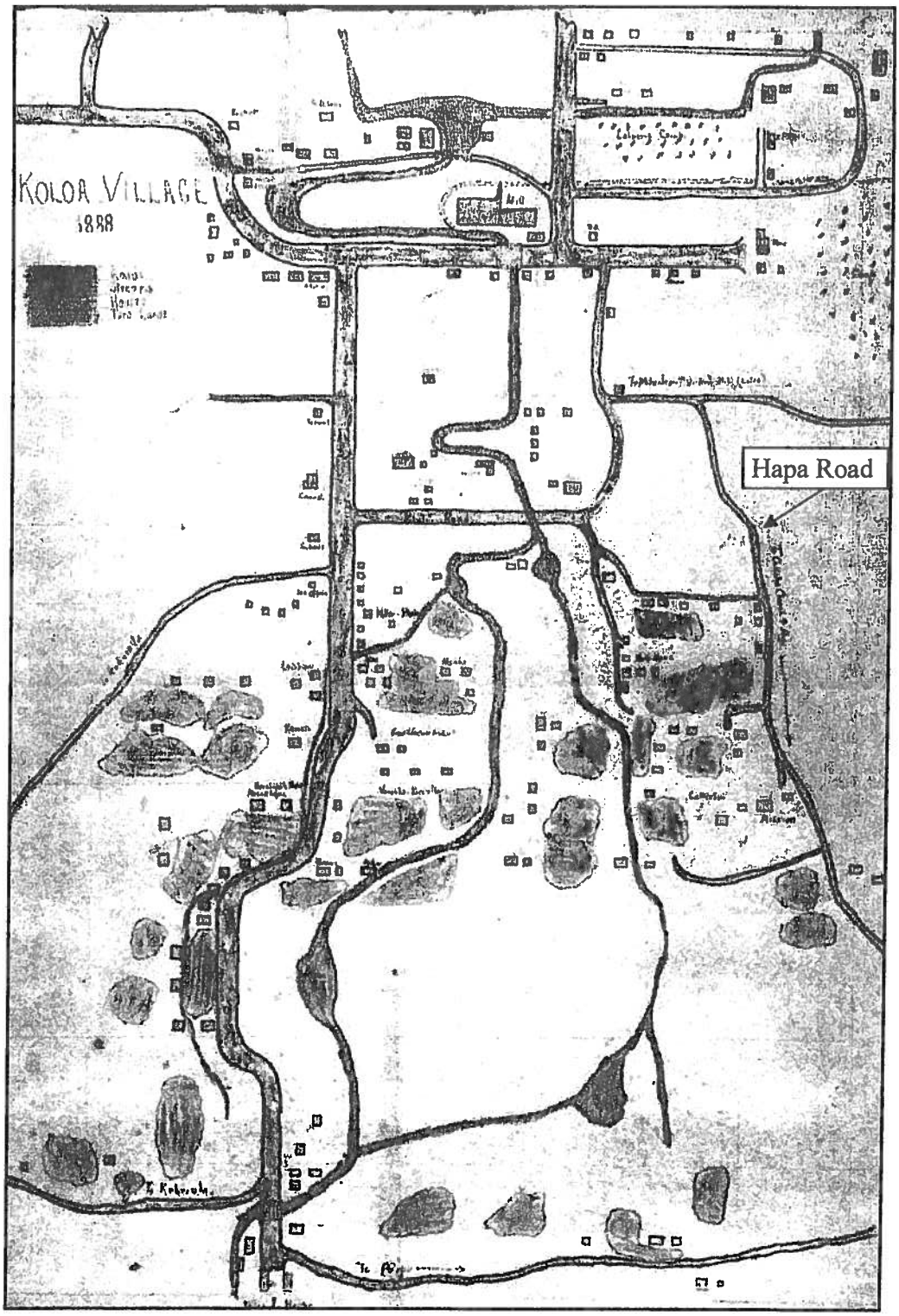

Figure 3. Sketch of Kōloa Village , 1888, by) Judge Henry K. Blake; note road at right labeled "To Catholic Church and Poipu"

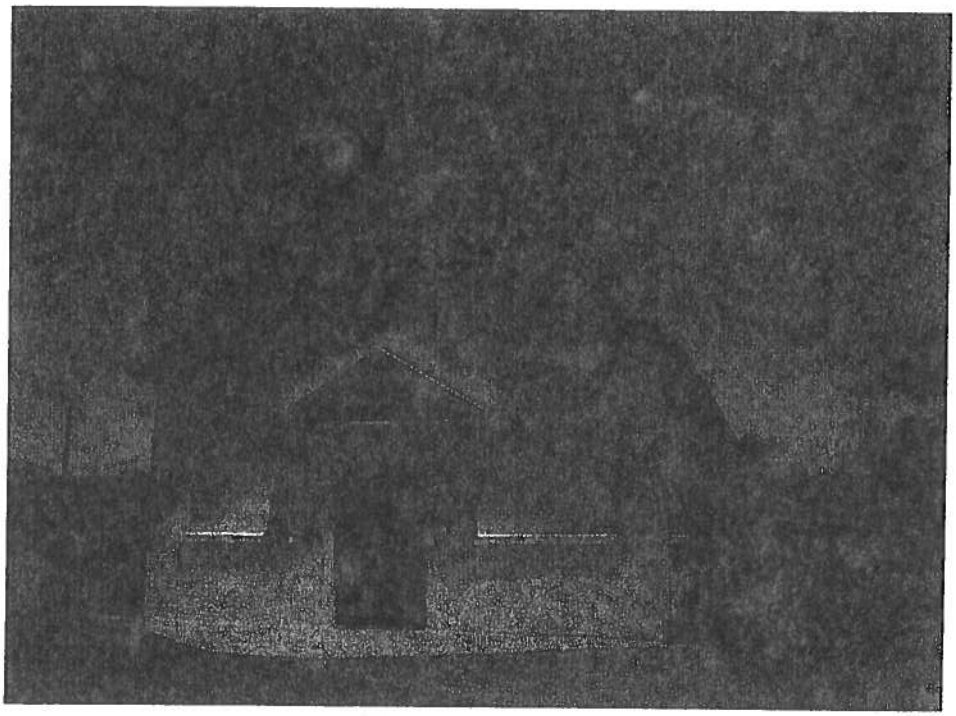

Figure 4. St. Raphael the Archangel Church, built in 1854 and renovated in the 1930s

Figure 5. Ruin of St. Raphael the Archangel Rectory; the first rectory was built in 1856

During the Māhele, the claim for the Catholic Mission land was confirmed, as Father Walsh was awarded LCA 2668, north of Pehu's land along Hapa Road. Father Walsh first established a school at Kōloa, but also set up a temporary altar to serve for mass. In his claim, he stated:

> With your permission I take the liberty of presenting through you to the Board of Commissioners a petition to confirm me, should they think fit, in the right to a small piece of land, which the King gave during his last visit to this island. His majesty then having inquired my residence and I informing him that I lived on a barren spot near the sea in a place named Poipu, he was pleased to advise to ask land from Kekauonohi, then Governess of this island, and in case of refusal to tell her to come to him. In a few days afterwards the spot where I now reside was given to me by Kahelemakule, the inspector of schools, by order he said of Kekauonohi
>
> The spot of land is in East Koloa/east of all the taro lands except mine and one other taro plot. It is bounded west, north and east by a water run, and on the south by an almost barren stoney place. In addition to the land contained in these boundaries, Kahelemakule allowed me to take a small spot on the north side of it whereon to build a chapel and schoolhouse.
>
> The land contains about 3 acres and only produces taro, sweet potatoes and grass. It has very little soil over a stratum of lava, and in many parts none at all.

The LCA testimony does not refer to a *mauka-makai* road or a long rock wall. Instead, a witness described the property as bound on the east side by "the most eastern water run of Koloa," referring to an *'auwai* (ditch) used to irrigate the taro patches. This and other *'auwai* were part of an agricultural complex, called the Kōloa Field System, which allowed pre-contact Hawaiians to irrigate a dense concentration of taro patches in an otherwise dry, shallow-soil plain. Accounts of the early history of Kōloa (Jarves 1838, 1844; Judd 1935; Townsend 1839) describe in the lands *mauka* of Kōloa Town a seemingly continuous, well-maintained, agricultural complex of taro, yams, sweet potato, and sugar cane that was irrigated by an extensive *'auwai* system siphoned off of Waikomo and Pō'ele'ele streams. It is possible that there was already an early trail adjacent to one or more of these long *'auwai*, which later developed into a road from these upland fields to the coast.

Although Father Walsh established his claim in 1834/1835, the first permanent church building was not completed until 1854. A history of the church recalls:

> Although native volcanic rock was abundant, the mortar to bind the rock together was not. This problem was solved by volunteers diving into the sea and harvesting coral rock from the coral reef. Both coral rock and sand from the beach were carried to the building site, a distance of three miles [citation in Ecenbarger 2008:24].

Hapa Road may have been built or improved during the construction of the first church, as the road is the most direct route from the sea at Po'ipū inland to the Catholic land claim. The brothers stationed at the work continued Father Walsh's work, adding a rectory and a school, and

rebuilding each time hurricanes or floods damaged the buildings. When the number of native Hawaiian members began to decrease due to mortality and out-migration, the church became a religious community center for the new Puerto Rican, Portuguese, and Filipino immigrants, brought to Kaua'i to work at the sugar plantations.

The immigrants worked in the fields of the Koloa Sugar Company. In 1835, Ladd and Company gained from the king and local chiefs the lease of about one thousand acres at Kōloa for 50 years at $300 a year and "allowed the use of the waterfall and an adjoining mill site at Maulili pool, not far from the thousand acres, together with the right to build roads, the privilege of unrestricted buying and selling and freedom from local harbor dues" (Judd 1935:57). Kōloa Town and the landing at the mouth of Waikomo Stream became major commercial centers. The landing – or "roadstead" as it was called – was a busy port during the mid-1800s (Judd 1935: 326).

In 1882, the Kōloa Sugar Co. announced the construction of a railroad system, consisting of four miles of 30-inch gauge track, forty cars 50 x 210 feet, and one locomotive (Conde and Best 1973:159). The first plantation tracks were probably laid between the cane fields and the sugar mill, although there are no records as to exactly where they were laid. The railroad crossed Hapa Road at one section. The exact date of the construction of the railroad berm in this general area is unknown, but it was certainly between 1882 and 1910, and most likely near the turn of the century.

The main road between the Kōloa Town and the coast was always the Kōloa Landing Road (now called Po'ipū Road), on the west side of Waikomo Stream, which was used to haul sugar from the mill near the town to ships anchored off Kōloa Landing. On the east side of Waikomo Stream, Hapa Road was used as a shortcut to Po'ipū Beach, and is often labeled on early maps as Po'ipū short cut road. The first automobile was bought by a resident of Kaua'i in 1908, and by the mid-1910s cars were using the main, improved Po'ipū road to travel to Po'ipū Beach. Early cars got stuck in the sand that blew on dirt roads, such as Hapa Road The upper portion of Hapa Road was still used to access a Kauai County dumping site and St. Raphael, but the lower section, which could not be used by cars, soon became overgrown and impassable. On later USGS maps, Hapa Road is shown extending only from Kōloa Town to a little past the Catholic Church Lot. In 1998, the Koloa Community Association cleared the entire road as a hiking and bicycle path (Donohugh 2001:145, 238).

Kōloa Landing was phased out around 1925 when McBryde Sugar Company and Kōloa Sugar Company began using the alternate Port Allen. Soon after this, the sugar companies ceased to use the *makai* Kōloa fields, and much of the area was converted into pastureland, used for cattle grazing by the Knudsen family. A Kōloa resident, Mr. Jacintho, stated in an oral interview (Freeman and Hammatt 2004:12) that he recalls cattle in the area and noted that most sugar plantations had cattle operations on lands where sugar could not be grown. The plantations had their own slaughterhouses and the beef was sold locally. He stated that the Kōloa Sugar Company had "lots of cattle."

Hapa Road is on the west side of the Knudsen Trust Lands. A long-time resident of the Kōloa area, Mrs. Bukoski said that the road "divided" her family's land and the Knudsen Trust Lands. This may be where the modern name of the road originated. The Hawaiian word *hapa,* means "portion, half." The road may have divided some larger land division or it could have been a

"half-way point" on some type of route. Mrs. Bukowski (Mitchell et al. 2005:42) spoke of the road she called Po'ipū Road:

> That [Hapa Road] is the first road they had and it was not paved. The County put in a dumping ground near where the St. Raphael Church is today. My husband later worked for the county and took care of the dumping grounds. Hapa Road was the only road in the early days. During the early Kōloa days we used to have an annual parade starting from Kōloa town down to here using the old road. That was a big event in those days. Everyone would come together and cook different kinds of food, I do not recall any other trails in this area other then the old road.

Mrs. Masako Sugawa, who was born in Kaua'i in 1911, spoke of the roads around Koloa during her childhood. She stated that the roads were not given names until the 1960s and 1970s when large subdivisions began to be developed. If someone asked her how to get to her home, she would simply tell then "Come to the highway and then turn" (UH 1988:1285-1286). Therefore, it is uncertain if Hapa Road is an old name, or a late twentieth century name, chosen after the addition of many new roads required all roads to be named to avoid confusion.

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EXHIBIT 2

ORDINANCE NO. PM-31-79

BILL NO. 585 Draft 1 (as amended)

AN ORDINANCE AMENDING ORDINANCE NO. 16
COMPREHENSIVE ZONING ORDINANCE OF THE
COUNTY OF KAUAI
(Moana Corporation)

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAI, STATE OF HAWAII:

SECTION 1. That the Zoning Map ZM-KO & PO 300 is hereby amended by changing the present "Open District (O)" to "Neighborhood Commercial District (C-N) and Residential Districts (R-20), (R-10), (R-6), (R-4)" for TMK: 2-8-14; Por. 1, 5, 6; 2-8-13: Por. 5, Poipu, Koloa, as recommended by the Planning Commission subject to the following conditions:

1. For the purpose of relieving the housing impact which will result from the proposed development, and in lieu of the 140 home sites to be provided by the Applicant, the Applicant will contribute the sum of $2,000,000 to the County of Kauai to be used for the implementation of a County housing program. The sum will be paid as single family residential lots are sold on the basis of $10,000 per lot sold in the development, but no later than 5 years from the date construction commences in this development. At the end of 5 years, the balance of the $2,000,000 shall be due and payable to the County in one lump sum, unless the Applicant is unable to perform due to economic conditions beyond its control, in which event the Applicant shall seek an extension from the Council.

   This condition shall be subject to the withdrawal by the Land Use Commission of the State of Hawaii of its conditions numbered 1, 2, 3 and 4, relating to housing and the amending of condition No. 9 relating to performance time to provide housing as contained in its Decision and Order in Docket No. A-76-418, dated July 7, 1977.

   The County of Kauai will assist the Applicant in petitioning the Land Use Commission to delete the aforesaid housing conditions from its Decision and Order in the aforesaid Docket No. A-76-418.

2. In order to satisfy the need for employee housing, the Applicant shall make available to employees:

   a) Rental housing at a reasonable cost, which would be based on ability to pay.

   Because not all employees will need housing, the Applicant shall establish qualifying criteria to determine what employees are in need of housing and how many units will be needed.

3. The Applicant shall make the recreational and other amenities of the development such as golf course, golf clubhouse, swimming facilities, tennis courts, and theater and cultural center available for public use at reasonable usage fees.

001806

EXHIBIT "2"

4. That the Applicant dedicate to the County of Kauai approximately 20 acres of land makai of Poipu Beach Road and abutting Poipu Beach Park for expansion of the park.

With respect to this condition, the dedication shall occur as soon as Applicant may reasonably obtain a subdivision of said property, but shall not be required to make the dedication in less than 2 years from the date of zoning approval but not more than 5 years from that date hereof.

The Applicant shall further sign an agreement with the County to this effect; such agreement shall give the County the right to occupy and improve the property if necessary.

5. The Applicant shall preserve:

a) the five (5) archaeological sites identified in the archaeological and biological report and shall cause no construction or alteration or other land disturbances on said sites except for preservation and restoration of the sites.

b) the two lava tubes containing the habitat of the eyeless big-eyed hunting spider and protect these from man-made encroachments. Permission to re-survey three (3) other caves that are potential habitats, shall be granted for scientific purposes, before these caves are destroyed.

6. No site identified in the report, "Archaeological and Biological Survey of the Proposed Kiahuna Golf Course Village Area, Koloa, Kona, Kauai Island, Hawaii" shall be graded, grubbed, bulldozed, or in any way destroyed unless in accordance with a plan, mutually agreed upon by the Applicant and the archaeologist that has been prepared whereby the archaeological salvage will be accomplished by means of coordinating any grading, grubbing or similar work by the Applicant with the archaeological salvage.

7. That to whatever extent possible within the confines of union requirements and applicable legal prohibitions against the discrimination in employment the Applicant, as represented, shall hire Kauai contractors as long as they are reasonably competitive with other contractors, and employ residents of Kauai in the temporary construction and permanent hotel related jobs. The Applicant may have to employ non-Kauai residents for particular skilled jobs when no Kauai resident possess such skills. However, the Applicant shall cooperate with, and utilize, whatever government training program may be available so that Kauai residents can be trained to fill such jobs. For the purposes of this condition, the Commission relieves the Applicant of this requirement if he is subjected to anti-competitive restraints on trade or other monopolistic practices.

8. The Applicant shall provide a minimum 6 feet wide public pedestrian access from the commercial area to the beach site. Public restrooms and showers shall also be provided and maintained by the Applicant in the vicinity

001807

of the existing beach right-of-way. The Applicant shall further provide alternative parking plans for additional parking stalls for beach-goers in the vicinity of the Hoone Street cul-de-sac. The public parking area proposed by the commercial area shall be used for back-up parking needs for beach goers.

9. When the final route for the by-pass roadway from Poipu to Koloa is determined, the Applicant shall participate in his pro rata share of the cost of the by-pass road. If the alignment of the roadway traverses over the owner's property, then the portion of property required for the roadway shall be dedicated to the County by the owner. The pro rata share will be established in a manner agreed upon by the Applicant and the Department of Planning and Public Works.

Furthermore, should the by-pass road occur along the East boundary of the project, the owner shall be required to dedicate a 40 feet strip of land abutting Weliweli Subdivision for roadway purposes, and the Applicant shall participate in his pro rata share of the cost of the by-pass road. Until the final by-pass route is determined, no development shall be allowed within this 40 feet strip. Should the by-pass road not occur along the East boundary of the project, the 40 feet strip shall be kept as a buffer zone between the project and the abutting Weliweli Subdivision. The Applicant shall be entitled to use the land area comprising the 40 feet strip in the calculation of the permissible number of lots in the abutting rezoned area.

Furthermore, should funds not become immediately available to construct the by-pass road, the Applicant shall work with the Planning and Public Works Departments to consider providing an interim alternate road through the site connecting Poipu to Koloa, to resolve potential traffic congestion that would occur on Poipu Road.

10. All interior roadways shall comply with the County standards. Direct lot access to Poipu Road shall not be permitted. Lot accesses shall be from the interior roads.

11. The drainage diversion channels shall be reviewed and approved by the Public Works Department, and settling basins shall be provided if required.

12. The grading of the subject development shall comply with Grading Ordinance No. 262. The maximum area of land that may be opened for grading or grubbing is 20 acres. Additional area shall not be opened for grading or grubbing until measures to prevent dust or erosion problems in the area already graded or grubbed have been satisfactorily completed.

13. The Applicant shall be required to tie in its efforts in providing sewage facilities for the project with County Planning for sewage facilities, and shall work with the Department of Health and Department of Public Works towards the development of a regional sewage treatment plant.

001808

14. If Applicant is to use water provided by the Department of Water, Applicant shall be required to contribute to the Department of Water its pro rata share of the cost to provide domestic water to the subject parcel.

15. The proposed amphitheatre site shall be kept and reviewed for possible relocation, if necessary, to minimize noise impacts to Weliweli Subdivision. Site location, stage orientation, facility design, landscaped berms, limitations on uses, and other means of reducing noise impacts shall be utilized in the planning of this facility.

16. All access roads shall be provided to within 250 feet to all sections of all building structures and shall not be less than 20 feet wide. Fire extinguishers installed as required by the NFPA 10, Installation of Fire Extinguishers. Fire hydrants complying with water department standards shall be located within 250 feet and not to exceed 500 feet from the protected buildings.

17. A landscaped buffer zone shall be provided along Poipu Road. Open vistas from Poipu Road to the golf course shall be, however, provided to create a feeling of openness along the Poipu Road.

18. The Applicant shall meet with the Planning Department and Public Works Department relative to the future improvements to Hapa Road, and its relationship to the traffic circulation.

19. Prior to the approval of any subdivision or zoning permit, the Applicant shall provide the following:

a) Qualifying criteria for employee housing and preferential rates or purchase prices for employees;

b) Alternative plans for additional parking areas for beachgoers located in the vicinity of Hoonani Road cul-de-sac;

c) Amphitheatre design criteria, use restrictions and alternative site if relocation is necessary.

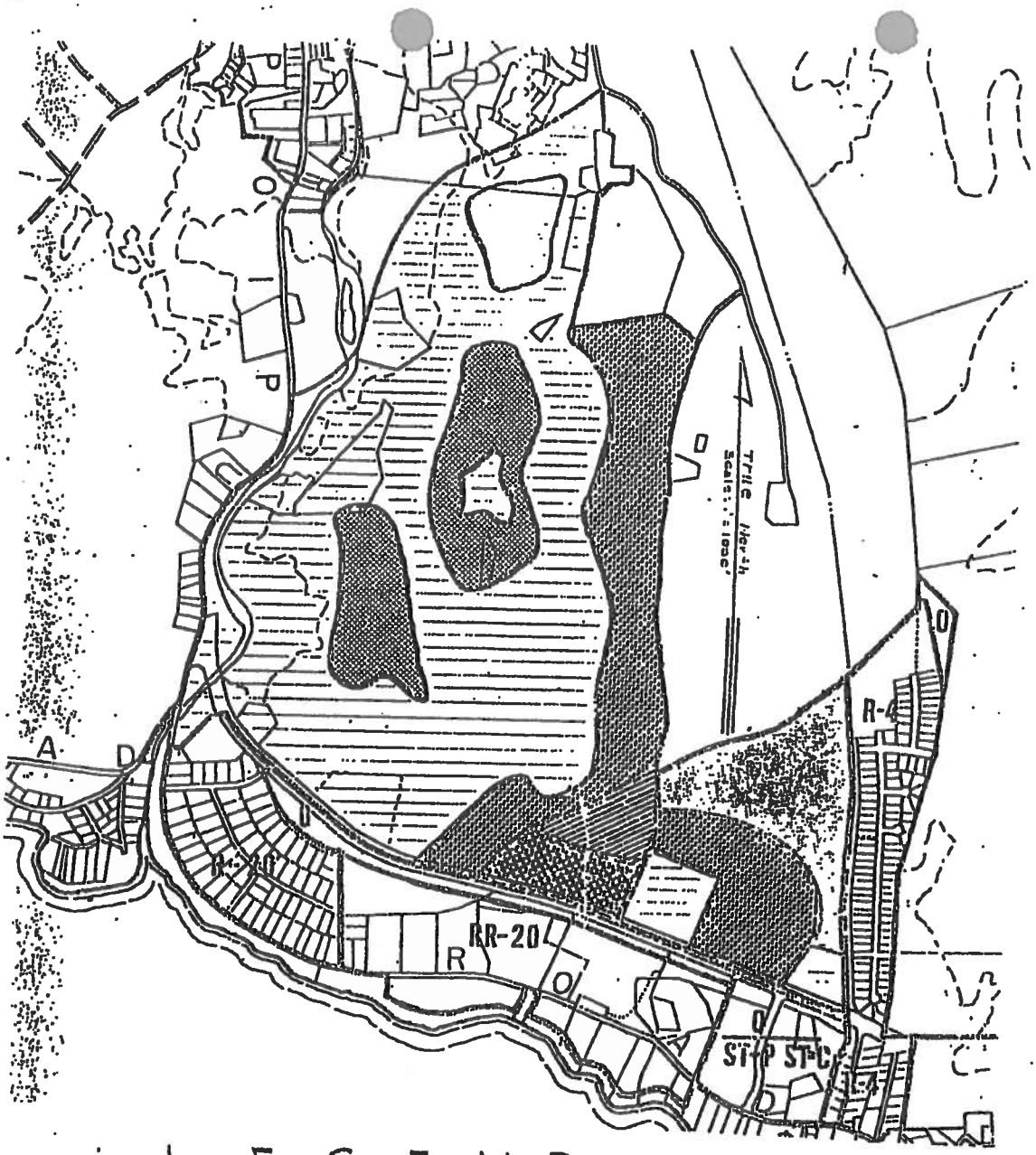
20. Applicant shall obtain building permits, electrical permits and plumbing permits prior to starting construction of any structures to be erected on the property.

21. Prior to and during any development or construction, all applicable State and County laws, codes, ordinances, rules and regulations be complied with.

SECTION 2. The Planning Commission is directed to note the change on the official Zoning Map ZM-KO & PO-300 on file with the Commission. All applicable provisions of the Comprehensive Zoning Ordinance shall apply to the district as amended.

SECTION 3. This ordinance shall take effect upon its approval.

001809



L E G E N D

- Proposed Amendment To Zoning Map From Ag. District To R-4 District
- " " " " " " " " " R-6 "
- " " " " " " " " " R-10 "
- " " " " " " " " " R-20 "
- " " " " " " " " " C-N "
- Open District

LOCATION SHOWING
PROPOSED AMENDMENT TO ZONING MAP ZM-KO & PO-300
FROM
OPEN DISTRICT (O) TO R-4, R-6, R-10, R-20, C-N DISTRICTS
KOLOA, POIPU, KAUAI

ZA-79-8

EXHIBIT 3

Data Recovery and Preservation Plan for the Po'ipulani Development Area

Prepared by

Hallett H. Hammatt, Ph.D.

Prepared for

Po'ipulani Development Corporation

by
Cultural Surveys Hawaii
January 1991
Revised July 1991

EXHIBIT "3"

Table of Contents

I. Introduction 1

Development Plans 1

II. Archaeological Sites and Significance 2

A. Significant Sites 2

B. Age of Sites and Depth of Subsurface Cultural Deposits 12

III. Plans for Preservation 14

A. Introduction 14

B. Preservation Plans 14

C. Preservation of Burial Sites 15

D. Interim Preservation 15

E. Buffer Zones 16

F. Long-Term Preservation 17

IV. Data Recovery 18

A. Introduction 18

B. Permanent Habitation Sites 18

C. Temporary Habitation Sites 18

D. Agricultural Sites 19

E. Burial Sites 20

F. Caves 20

G. Miscellaneous Sites 20

V. Research Goals and Methods 22

A. Chronology 22

B. Origin and Development of Irrigated Agriculture in Kōloa 22

C. Post Contact Acculturation and Economic Change 23

D. Coordination with Other On-going Projects .. 24

VI. Field and Laboratory Methods 25

A. Sampling of Sites 25

B. Agricultural Sites and Features 25

C. Habitation Sites 26

D. Burial Sites 26

E. Caves 27

F. Excavation Methods 27

G. Laboratory Methods and Report Preparation .. 28

H. Report Preparation 28

I. Report Review Procedures 29

J. Report Dissemination 30

K. Disposition of Finds and Documentary Data .. 30

L. End of Fieldwork Report 30

VII. Summary of Recommendations for Preservation and Data Recovery 31

A. Preservation 31

B. Data Recovery 32

VIII. References Cited 33

Appendix:

I. Preliminary Archaeology Reconnaissance Report Regarding the Proposed Golf Course and Residential Development Located at Po'ipu, Kaua'i, by Mr. Joseph Kennedy

List of Tables

Table 1 Summary List of Archaeological Sites 4

Table 2 Po'ipulani Sites by Functional Categories and Age 9

I. Introduction

This Data Recovery Plan was prepared to follow the recently completed Archaeological Inventory Survey of the proposed Golf Course and Residential Development (Hammatt et al., 1990, revised Jan. 1991). The information on archaeological is extracted from the Survey Report with input from Mr. Loren Baxter of Po'ipulani Development Co. as to developments plans - which specific areas are to be impacted and to what extent. As recommended in the 1990 Survey Report mitigation of impact should be handled by preservation of selected archaeological sites with data recovery of those to be impacted by the development construction. This plan details the recommended steps for data recovery and site preservation.

A. Development Plans

The site is planned to be developed as an 18-hole golf course with 92 single family residential lots. Such a development leaves the developer with some latitude in design. Numerous modifications have been made to the original plans as additional sites and information have been discovered. Although it would be desirable to preserve all sites, design and economic criteria dictate the destruction and/or partial demolition of some of the sites.

The disposition of each site as recommended in this plan has taken into consideration the significance assessments and general treatment recommendations as presented in the Inventory Survey Report.

II. Archaeological Sites and Significance

A. Significant Sites

Table 1 contains a summary list of archaeological sites with significance assessments. Of a total of 75 archaeological sites identified, 12 are classified as no longer significant (NSL) or not significant (NS) because they are not considered worthy of preservation and information valuable to history or prehistory has already be collected. This leaves 63 significant archaeological sites on the property. As to specific criteria for significance 61 sites are designated significant under Criterion D (likely to yield information important to prehistory or history) and 10 are classified under Criterion C (Excellent examples of site types). A total of 8 sites are classified as probable burials and are grouped under Criterion E. Table 2 shows the sites listed by presumed functional categories and age.

Table 1

SUMMARY LIST OF ARCHAEOLOGICAL SITES

Field No	State No	Description	Work Done	Signifi-cance	Preliminary Mitigation	Work To Do
CSH135	86	(Bennett) Habitation Platform	Surveyed& Mapped 1985	C, D	Pres D	None
CSH4	900	Habitation Platform	Surveyed	C, D	Pres, Int.	Possible Test for C14
CSH5	901	Ag.mounds,wall	Surveyed 1985	D	Data Rec.	Map
CSH6	902	C-shaped shelter	Surveyed 1985, Tested 1985, C14 samples collected	D	Data Rec.	No Excavation No Mapping Date C14 Sample
CSH7	903	C-shaped shelter	Surveyed collapsed	D	Data Rec. 1985	Map
CSH8	904	C-shaped shelter small	Surveyed 1985	D	Data Rec.	Map
CSH9	905	C-shaped shelter	Surveyed 1985	D	Data Rec.	Map
CSH101	906	Ag.features, walls mounds	Surveyed 1990	NLS	None	None
CSH102	907	L-shaped wall	Surveyed 1990	NLS	None	None
CSH103	908	Modified Outcrop	Surveyed mapped 1990	D	Data Rec.	Map Test
CSH104	909	Modified Outcrop	Surveyed mapped 1990	D	Data Rec.	Map Test
CSH105	910	C-shaped shelter	Surveyed 1990	NLS	None	None
CSH106	911	C-shaped shelter remnant	Surveyed 1990	NLS	None	None
CSH107	912	C-shaped shelter remnant	Surveyed 1990	NLS	None	None
CSH108		(field # not assigned)				

Field No	State No	Description	Work Done	Signifi-cance	Preliminary Mitigation	Work To Do
CSH109	913	Ag/Habitational Complex w/ assoc. 'auwai & platform	Surveyed mapped 1990	C,D	Pres. Int.	Test for C14
CSH110	914	Ag.mound	Surveyed mapped 1990	NLS	None	None
CSH111	915	L-shaped terrace	Surveyed mapped 1990	D	Data Rec.	Test
CSH112	916	Mound	Surveyed mapped 1990	NLS	None	None
CSH113	917	U-shaped mound	Surveyed mapped 1990	D	Data Rec.	Test
CSH114	918	Habitation platform	Surveyed mapped 1990	D	Data Rec.	Test Possibly Expanded Excavation
CSH115	919	Large mound, inter-nal features	Surveyed mapped 1990	D,E*	Data Rec. Pres.Burial?	Test for burial
CSH116	920	'Auwai	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench
CSH117	921	'Auwai section	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench
CSH118 (Part of 929)						
CSH125	922	'Auwai section	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench
CSH119A-C	923A-C	Ag.walls,shel-ter	Surveyed mapped 1990	D	Data Rec.	Map
CSH119D	924	C-shape, shelter	Surveyed mapped 1990	D	Data Rec.	Map Test
CSH119E	925	Enclosure	Surveyed mapped 1990	D	Data Rec.	Map Test
CSH120	926	Ag.fields & ranching complex	Surveyed mapped 1990	C, D E* (E* Fea. D)	Fea.E test forPres.Burial? Data Rec.	Test for Burial
CSH121A	927	Mound	Surveyed mapped 1990	D,E*	Data Rec. Pres.Burial?	Test for Burial

Field No	State No	Description	Work Done	Signifi-cance	Preliminary Mitigation	Work To Do
CSH121B	928	Mound	Surveyed mapped 1990	D	Data Rec.	Test
CSH122	929	'Auwai section	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench
CSH123	930	'Auwai section	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench
CSH124	931	'Auwai section	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench
CSH125	932	Walls, enclosure	Surveyed mapped 1990	D	Data Rec.	Test
CSH126	933	Wall	Surveyed mapped 1990	NLS	None	None
CSH127A	934	Wall	Surveyed mapped 1990	C	Pres. Int.	None
CSH127B	935	Mound	Surveyed mapped 1990	NLS	None	None
CSH128	936	Mound with paving	Surveyed mapped 1990	D,E*	Data Rec. Pres.Burial?	Test
CSH129	937	Wall	Surveyed mapped 1990	NLS	None	None
CSH130	938	Wall & 'auwai	Surveyed mapped 1990	C,D	Pres. Int.	None
CSH131	939	Lava tube shelter	Surveyed mapped 1990	D,E*	Pres.Burial	Test Deposits
CSH132A	940	Mound, shelter & wall	Survey mapped 1990	D,E*	Data Rec. Pres. Burial?	Test
CSH132B (See 940)						
ARCH421	941	'Auwai	Surveyed 1986 mapped 1990	D	None	None
CSH133	942	Wall & habitation-al enclosure	Surveyed mapped 1990	D	Data Rec.	Test Possible Expanded Excavation
CSH134	943	'Auwai section	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench

Field No	State No	Description	Work Done	Signifi-cance	Preliminary Mitigation	Work To Do
CSH6	944	Ag mounds & modified outcrops	Surveyed mapped 1990	NLS	None	None
CSH136	945	Corral & 'auwai Ag walls	Surveyed mapped 1990	D	Data Rec.	Cross-Section Trench
CSH137	946	Lava tube	Surveyed mapped 1990	C,D,E	Pres.Burial Test deposits	Test
CSH138	947	Railroad berm	Surveyed mapped 1990	C,D	Pres. Int.	None
ARCH420	948	Walled Complex	Surveyed 1978 Resurveyed 1990	C,D	Data Rec.	Test
ARCH420A	949	Enclosure	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Test
ARCH420B	950	Enclosure	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map, Inspect for Deposits
ARCH420C	951	Enclosure	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map, Inspect for Deposits
ARCH421	952	Platform	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Test, Possible Expanded Excavation
ARCH422	953	Platform	Surveyed 1978 Resurveyed 1990	D,E*	Pres.Burial	Map Test
ARCH423	954	Enclosure	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map Test
ARCH423A	955	Mound	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map Test
ARCH424A	956	C-shaped shelter	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map
ARCH424B	957	C-shaped shelter & Platform	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map, Test?
ARCH424C	958	Enclosure	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map Test

Field No	State No	Description	Work Done	Signifi-cance	Preliminary Mitigation	Work To Do
ARCH424D	959	C-shaped shelters	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map Test
ARCH425A	960	Shelters & low wall	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map Test?
ARCH425B	961	Shelters & cupboard	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map Test?
ARCH426	962	Enclosure	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map
ARCH427	963	Ag. enclosure & low mounds	Surveyed 1978 Resurveyed 1990	NLS	None	None
ARCH428	964	C-shaped shelter	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map
ARCH429	965	2 adjoining C-shaped shelters & wall	Surveyed 1978 Resurveyed 1990	D	Data Rec.	Map Test?
ARCH430A	966	Ag. Complex, walls lo'i	Surveyed 1978 Resurveyed 1990	C,D	Pres. Int.	None
ARCH430B	967	C-shaped shelter	Surveyed 1978 Resurveyed 1990	D	Pres. D.	None
ARCH836	968	C-shaped shelters enclosure & wall	Surveyed 1978 Resurveyed 1985 Tested 1985 (C14 collected)	D	Data Rec.	Map Date C14 Sample
CSH103	969	'Auwai	Surveyed Mapped 1990	D	Data Rec.	Cross-Section Trench
CSH104	970	Rocky Ag area	Surveyed mapped 1990	NLS	None	None
ARCH423	971	'Auwai	Surveyed 1978	D	Data Rec.	Cross-Section Trench
-	972	'Auwai	Surveyed 1978 mapped 1990	D	Data Rec.	Cross-Section Trench
ARCH430A	973	'Auwai	Surveyed 1978 mapped 1990	D	Data Rec.	Cross-Section Trench

CODES FOR CRITERIA FOR SITE SIGNIFICANCE

NS	Not Significant
NLS	No Longer Significant
A	Site reflects major trends or events in the history of the state or nation
B	Site is associated with the lives of persons significant in our past
C	Site is an excellent example of a site type.
D	Site may be likely to yield information important in prehistory or history.
E	Site has cultural significance; probable religious structures (shrines, heiau) and/or burials present

* Signifies site is only a possible burial or religious feature.

CODES FOR PRELIMINARY MITIGATION

Pres. Int. = Preservation with Interpretation

Pres. Burial = Preservation of Burial

Pres. D = Preservation for information content

Data Rec. = Site to be data recovered (may or may not be chosen for actual testing or excavation - depending on research strategy)

Table 2: Po'ipulani S by Functional Categories and Age

State Site No.	Description	PH	TH	'Auwai	Ag site	Burial	Cave	Other	Pre-hist.	Post Contact	Comments
50-30-10 86	Habitation Platform	x							x	x	
50-30-10 900	Habitation Platform	x							x		
50-30-10 901	Ag. mounds, wall				x				x		
50-30-10 902	C-shaped shelter		x						x		
50-30-10 903	C-shaped shelter collapsed		x						x		
50-30-10 904	C-shaped shelter small		x						x		
50-30-10 905	C-shaped shelter		x						x		
50-30-10 906	Ag. features, walls, mounds		x		x				x		
50-30-10 907	L-shaped wall		x		x				x		
50-30-10 908	Modified outcrop		x						x		
50-30-10 909	Modified outcrop		x						x		
50-30-10 910	C-shaped shelter		x						x		
50-30-10 911	C-shaped shelter remnant		x						x		
50-30-10 912	C-shaped shelter remnant		x						x		
50-30-10 913	Ag/Habitation Site w/ 'auwai & platform		x	x	x				x		
50-30-10 914	Ag. mound				x				x		
50-30-10 915	L-shaped terrace		x						x		
50-30-10 916	Mound				x				x		
50-30-10 917	U-shaped mound				x				x		
50-30-10 918	Habitation Platform	x							x	x	
50-30-10 919	Large mound, internal features		x			x(?)			x		
50-30-10 920	'Auwai			x					x	x	
50-30-10 921	'Auwai section			x					x	x	
50-30-10 922	'Auwai section			x					x	x	
50-30-10 923	Ag. walls, shelter		x		x				x	x	
50-30-10 924	C-shape, shelter		x						x		
50-30-10 925	Enclosure		x						x		
50-30-10 926	Ag. fields & ranching complex		x(G)	x(F)		x(D)			x	x	
50-30-10 927	Mound				x	x(?)			x		
50-30-10 928	Mound				x				x		
50-30-10 929	'Auwai section			x					x	x	
50-30-10 930	'Auwai section			x					x	x	
50-30-10 931	'Auwai section			x					x	x	
50-30-10 932	Walls, enclosure		x		x				x		

PH - Permanent Habitation TH - Temporary Habitation

Table 2: Po'ipulani S. ›y Functional Categories and Age

State Site No.	Description	PH	TH	'Auwai	Ag site	Burial	Cave	Other	Pre-historic	Post Contact	Comments
50-30-10 933	Wall				x				x	x	
50-30-10 934	Wall				x					x	
50-30-10 935	Mound				x				x		
50-30-10 936	Mound w/ paving				x	x?			x		
50-30-10 937	Wall				x						
50-30-10 938	Wall & 'auwai			x	x				x	x	
50-30-10 939	Lava tube shelter		x			x	x		x	x	
50-30-10 940	Mound shelter & wall				x	x?			x		
50-30-10 941	'Auwai			x					x	x	
50-30-10 942	Wall & habitation enclosure	x			x					x	
50-30-10 943	'Auwai section			x					x	x	
50-30-10 944	Ag mounds & modified outcrops				x				x		
50-30-10 945	Ag. walls & 'auwai			x	x				x	x	
50-30-10 946	Lava tube	x				x	x		x		
50-30-10 947	Railroad berm							x		x	
50-30-10 948	Walled complex		x		x				x	x	
50-30-10 949	Enclosure		x						x		
50-30-10 950	Enclosure				x					x	
50-30-10 951	Enclosure		x							x	
50-30-10 952	Platform	x							x		
50-30-10 953	Platform	x				x			x		
50-30-10 954	Enclosure	x							x		
50-30-10 955	Mound								x		
50-30-10 956	C-shaped shelter		x						x		
50-30-10 957	C-shaped shelter & platform		x						x		
50-30-10 958	Enclosure		x						x		
50-30-10 959	C-shaped shelters		x						x		
50-30-10 960	Shelters & low wall		x						x		
50-30-10 961	Shelters & cupboard		x						x		
50-30-10 962	Enclosure			x					x		
50-30-10 963	Ag. enclosure & low mounds				x				x		
50-30-10 964	C-shaped shelter			x					x		
50-30-10 965	'2 adjoining C-shaped shelters & wall			x	x				x		

Table 2: Po'ipulani S1 oy Functional Categories and Age

State Site No.	Description	PH	TH	'Auwai	Ag site	Burial	Cave	Other	Pre-his toric	Post Contact	Comments
50-30-10 966	Ag. complex, walls, lo'i				x				x		
50-30-10 967	C-shaped shelter		x						x	x	
50-30-10 968	C-shaped shelters, enclosure & wall		x						x		
50-30-10 969	'Auwai			x					x		
50-30-10 970	Rocky Ag. area				x				x		
50-30-10 971	'Auwai			x					x	x	
50-30-10 972	'Auwai			x					x	x	
50-30-10 973	'Auwai			x					x	x	

B. Age of Sites and Depth of Subsurface Cultural Deposits

There is some comparative information on which to base an estimate of time range for the Po'ipulani sites. Excavations were conducted in the Kīahuna area west of the Po'ipulani project area and east of Waikomo Stream. Some dating results are available for this project. The age range for the Po'ipulani sites can be based on what we know of broad prehistoric early historic patterns on Kaua'i and in Hawai'i in general. To date, the earliest C14 dated occupation on the south coast of Kaua'i is from cultural layers at Keoneloa Bay in Pa'a with age ranged from as early as A.D. 220 - 690 representing intermittent short-term beach occupation (Rosendahl & Walker: 1990:313). Intensive development of irrigated lo'i came after A.D. 1100-1200 A.D. and the non-flood plain, pahoehoe terrain of Kōloa would have been one of the later systems in the sequence. The earliest irrigated agriculture here probably post-dates A.D. 1400 and the system was probably not intensified until the late prehistoric period and continued in use to supply whaling ships in the Post-European Contact Period. The caves probably contain older cultural deposits, but most of the prehistoric surface features will post-date 1400 and will probably cluster around the A.D. 1700-1770 range.

A series of 18 C14 dates from Kīahuna reinforces this interpretation. The cave sites show nearly continuous occupation from 1,000 A.D. onwards. And the surface sites associated with agricultural development post date 1400-1500 A.D. There is,

however, one early date for a habitation platform A.D. 890±170 but this is considered too early for the development of intensive irrigated agriculture. So far at Kīahuna there is one dated 'auwai with an age range of 1325-1430 A.D. This age appears to mark an early construction phase of the 'auwai and is considered a reasonable age for the onset of irrigated planting.

We expect the Po'ipulani portion of this agricultural complex to be slightly later, given its greater distance from Waikomo Stream - the course of water for virtually all of this ancient enterprise.

As for the depth of deposits under sites (except for caves), based on the similar sites in the Kīahuna and Kukuiula, maximum depth to bedrock will probably be in the range of 30-60 cm. Cultural deposits within caves are expected to be one meter or deeper depending on the amount of historic illuviation.

III. Plans for Preservation

A. Introduction

Because of the nature of the development it is possible to preserve a number of archaeological sites from direct development impact. In terms of numbers - of the total of 63 significant sites, eleven will be completely preserved and 1 will be partially preserved (Railroad berm Site 947). In addition, the disposition of 6 of the sites is not determined at this time pending archaeological testing to determine if human burials occur within them. If burials are found then these sites will be preserved.

B. Preservation Plans

The following preservation measures will be taken

1. Physical Preservation of all or parts of the most well-preserved agricultural/habitation complexes which best represent former Hawaiian use of the land. These complexes are Sites 913 and 966.
2. Physical Preservation of well-preserved, excellent examples of habitation sites. Included in this category is Site 86, recorded by Bennett in the late 1920s, and Site 900, another habitation platform.
3. Physical Preservation of both lava tube cave sites, Sites 939 and 936, not only because of their archaeological significance but because they almost certainly contain burials. All areas above the tube chambers should be kept as open space.
4. Physical Preservation of all other sites which are likely to

contain burials or which testing shows to contain burials. Site 953 should definitely be preserved. This site will be tested to establish if there is a burial in the rock fill of the platform.

5. Physical Preservation of portions of Site 947, the railroad berm. The berm is best preserved at its western end.
6. Physical Preservation of some of the well-preserved walls. The best examples are found at Sites 934 and 938. These walls are representative of the past use of the land and reflect the unique character of the traditional Kōloa landscape.
7. Physical Preservation of any other sites which can possibly be incorporated into the development landscaping and designated as open space.

C. Preservation of Burial Sites

There are 8 sites designated as possible or probable burial sites as mentioned in the Inventory Survey. Three of the five probable burial sites will be preserved. Included in this list is Site 939 which shows exposed human bone and is therefore a confirmed burial site. Site 953 is a highly probable monument platform burial and will be tested to establish if it is a burial site. The Site 926 lava tube is also a probable burial site which will be preserved. The remaining 5 probable burial sites will be tested. If burials are located in them then they will be preserved.

D. Interim Preservation

All sites designated for preservation will be marked with a fence or highly visible barrier to make them visible for avoidance by mechanical equipment during construction. The location of these barriers should be approved by State and County Agencies. An archaeologist will be present during fencing to insure appropriate location of the fences. One or more archaeologists will be on site during all grading, grubbing or other construction activities in the vicinity of the preserve areas which are likely to pose potential impact to them. Immediate steps should be taken to prevent vandalism to all existing sites, particularly rock robbing. Signs should be posted at all vehicle access points expressly forbidding rock collecting except by authorized parties.

E. Buffer Zones

Included in these flagged areas will be buffer zones of at least 50 feet. The exact width of the buffer zone beyond 50 feet will depend on the nature of the site and its cultural or scientific importance.

F. Long-Term Preservation

At the completion of construction the exotic vegetation should be cleared from the site with hand tools. Any further steps of improvement stabilization, interpretation, etc. should proceed according to a long-term preservation plan approved by

F. Long-Term Preservation

At the completion of construction the exotic vegetation should be cleared from the site with hand tools. Any further steps of improvement stabilization, interpretation, etc. should proceed according to a long-term preservation plan approved by State and County agencies. At this point, we would envisage at least vegetation clearing, planting around some of the sites (agricultural walls for example), and signs explaining the significance of some of the sites. Access to the 2 lava tube sites should be limited by protective fencing or grates at the entrances. At this point 5 of the sites designated for preservation are considered appropriate for interpretation. These interpretive programs which may include signs, brochures etc. will be detailed in the long-term preservation plan.

IV. Data Recovery

A. Introduction

Clearly, no extensive data recovery is appropriate for the sites to be completely preserved although some will be tested. Those sites which cannot be saved in their entirety will be subjected to data recovery.

Of the total 63 significant sites, ten sites are to be preserved and do not require more than testing to address specific questions. This leaves 53 sites to be the subject of a data recovery program more than testing to address specific questions.

The sites destined for data recovery are summarized according to site types as follows:

B. Permanent Habitation Sites

Four of the permanent habitation sites are included in the list for data recovery. Included are Sites 918, 942, 952 and 954. Site 942 corresponds to a historic land court award and is quite likely to have a historic era component which may provide significant information on early trade and economic patterns.

C. Temporary Habitation Sites

Temporary habitation sites in the lower Kōloa irrigated fields are typically C-shaped structures and curved wall shelters which are dispersed around agricultural areas, particularly in rocky unusable topography. There are 26 such sites. In most

cases 1-2-meter excavation trenches would be sufficient to recover all associated cultural material. Since most of these shelters are in rocky areas soil deposits are expected to be thin (less than 20 cm. in depth). Sites with thin or non-existent cultural deposits will not be excavated but will be closely examined and a detailed scaled map will be made. This mapping and examination will constitute data recovery. Some of these sites contain hearth deposits and emphasis would be placed on sampling sites likely to contain hearths and associated soil deposits, and collecting charcoal for C14 dating. Given the general lack of charcoal deposits in the agricultural features themselves, a chronology of use of the nearby field shelters may be the best way of dating agricultural usage in specific areas.

D. Agricultural Sites

These include mounds, walls, terraces and most importantly, ʻauwai. Intact ʻauwai should be cross-sectioned at various localities to expose bank and ditch deposits for stratigraphic study and collection of datable material. The depth and stratigraphic variation of the deposits which were removed from the auwai(s) during construction and clearing and piled on the adjacent bank, can give clues to the length of use and perhaps the changing nature of the sediments carried by the ʻauwai. There is also a chance of finding datable charcoal in the deposits which provide excellent chronology for irrigated agriculture. In a testing program of ʻauwai(s) in the nearby Kukuiula

area, buried stone linings have been found in some examples. These, and other buried features, can indicate sequences of construction and improvement through time. All ʻauwai sections to be impacted will be cross-section trenched by hand or backhoe unless they are sitting directly on bedrock with no soil deposits.

To a lesser extent these same information can be gained through cross sectioning of agricultural walls and terraces. The primary focus would be to recover datable material and to document construction technique and sequences (if present).

E. Burial Sites

There are 6 possible burial sites which will be tested (Sites 919, 926D, 927, 936, 940, and 953). If burials are found, the remains will be left in place, the trenches backfilled and the sites preserved.

F. Lava Tube Sites

Both lava tube sites (939 and 946) are to be preserved. However, it is considered important to collect at least minimal data from these deposits before development because of the value of these archaeological sediments for chronological and paleoenvironmental interpretations.

G. Miscellaneous Sites

Portions of Site 947 - the historic era sugar train bed are

to be impacted by development. Demolition of portions of this structure would be an excellent opportunity to document the construction method. Given the late age of this berm (1890s), nevertheless, little is known of the details of construction. A simple cross section of the one or more sections would allow documentation of the methods used. This information would compliment a continuing search of historical sources. The cross section will be performed by backhoe during the <u>'auwai</u> trenching.

V. Research Goals and Methods

What emerges as important research questions which apply to the Po'ipulani data recovery efforts are as follows (A-C):

A. Chronology

At the present time, there are no quantitative dates available for the project area. However, a series of 18 C14 dates have been obtained for the adjacent Kīahuna project which contains a similar pattern of land use and habitation. Kīahuna dates show cave occupation at or after 1000 A.D. and surface permanent habitation sites dating to 1500 or after. One surface site now destroyed was dated to 890-1170 A.D. from a sample collected in 1979. This date is considered anomalously early for surface sites in the area. An 'auwai cross-section trench, excavated in 1979, yielded charcoal from the base dating 1325-1430 A.D. The general pattern appears to be early occupation of caves and the beginning of irrigated agriculture around 1400 A.D. Chronological information from habitation and agricultural features in the Po'ipulani area could help expand and refine this tentative chronology. This chronology could be refined at the upper end through dating of historical debris, bottles, nails, ceramics, coins, etc., within historic sites associated with agricultural activities.

B. Origin and Development of Irrigated Agriculture in Kōloa

It is probable that the development of the field systems

occurred over a considerable span of time and a certain amount of evolution of design and configuration took place. This would affect subsistence and settlement patterns. Information related to this question would be obtained not only from dated materials but the study of stratigraphic relations of agricultural and habitation features. Although soil deposits are fairly thin in many areas it should be possible to locate superimposed agricultural features indicating different phases of development, i.e. stone terraces under earthen terraces, terraces under walls or habitation sites over fields. Through interpretation of these data, it may be possible to reconstruct construction sequences and to infer patterns from these sequences. Field work to address this question would involve backhoe trenching of auwai sections and other agricultural features as well as hand excavation in selected areas.

C. Post Contact Acculturation and Economic Change

This question particularly applies to the modification of the agricultural system to produce cash crops for the merchant ship trade centered from Kōloa Landing from the mid-19th Century onwards. The question may be elucidated through excavation and dating of historic occupation sites and discerning the final alterations in the agricultural fields before abandonment. A search of historic records for crops produced, their location and tonnage exported may also be of value.

D. Coordination with Other On-going Projects

Cultural Surveys Hawaii is involved with 2 other projects in the immediate vicinity which contain similar sites of the same archaeological complex. This complex stretches on both sides of Waikomo Stream and includes the Kīahuna and Kukuiula project areas. Cultural Surveys Hawaii is attempting to coordinate information from all three of these areas to construct a general picture of what may be termed the Kōloa Field System. Because of the proximity and similarity of the project areas, the information gathered from one will be complimentary and directly relevant to the others. This is particularly true in the case of chronology of origin and development. It is predicted, for example, that the areas directly adjacent to Waikomo Stream on the west and east would have been the earliest to be developed for irrigated agriculture. One would expect expansion to proceed away from the stream on either side. The development of the prehistoric system in the Po'ipulani area may be one of the later phases in the growth of this complex. This again underscores the need for quantitative dates from a wide range of features.

VI. Field and Laboratory Methods

A. Sampling of Sites

It is not realistic or productive to excavate each of the sites on the data recovery list. However, all 51 sites will be subjected to further investigation - either testing or further mapping. Excavation will concentrate on sites whose testing will serve to address the research goals mentioned above. In addition, because of planned development with eventual grubbing and grading the six sites suspected of containing human burials will be tested. Sites which are to be preserved will not be excavated, except for testing to address specific questions. The two cave sites to be preserved should be briefly tested for chronological and environmental data.

The following sampling strategy will guide the field work.

B. Agricultural Sites and Features

1. One cross section trench will be placed in each of the _'auwai_ sections slated for data recovery. _'Auwai_(s) with no soil deposits will not be cross-sectioned. Two or three trenches will be placed along the lengths of the longer _auwai_ sections. The banked sediment on the side of the _auwai_(s) will be of particular interest in stratigraphic and chronological interpretations. At least some of the trenches will be done by backhoe.
2. Three to four test trenches in agricultural fields representing samples of _kula_ fields, traditional _lo'i_

and lo'i later planted in cane. In deeper soil areas trenches will be dug by backhoe.

3. Cross section trenches through field walls, stone terraces and earthen mounds in 3-5 spatially separated localities to recover possible stratigraphic succession of agricultural features.

C. **Habitation Sites**

1. All 4 suspected permanent habitation sites will be tested, with more extensive excavation of two. The selection of the sites for more complete excavation will depend on the results of the testing. The habitation sites with the longest and deepest stratigraphic sequence will be chosen for complete excavation.

2. At least half (approximately 13) of the smaller shelters (C-shape, U-shape, L-shape, etc.) will be tested with complete excavation of 2-3. In the others, data recovery will consist of further mapping. Both isolated shelters in fields as well as those clustered around major habitation sites will be chosen for testing and excavation. These sites will be chosen for testing and excavation on the basis of depth of soil deposits and probability of associated features such as hearths.

D. **Burial Sites**

There are 6 probable burial features (926D, 940, 936,

953, 919, 927) within the Po'ipulani project area not presently on the preserve list. These and Site 953 (a preserve site) will be tested to address research questions and to determine presence or absence of burials and to estimate numbers of individuals. If burials are found the sites will be preserved.

E. Caves

There are two cave sites in the Po'ipulani project area; a small lava tube shelter (939) and a long tube site in the mauka portion of the project area (946). Both of these caves are suspected burial sites and are to be preserved. The entrances will be sealed or closed to allow only authorized access to prevent looting. Data recovery is therefore not necessary. However, brief testing of the cave sediments (a single 1 meter square) will be conducted to collect chronological and paleontological data. Faunal samples will be submitted to Dr. Alan Ziegler for identification.

F. Excavation Methods

The following methods will be used in the excavation of all trenches:

1. screening of all sediments through 1/8 inch mesh screen;
2. recovery of all artifacts and shell and bone midden;
3. recovery of all charcoal both as "in situ" samples and

from the screen;

4. recording of stratigraphy by scale drawing of at least one profile in each 1-meter square trench;
5. all trenches will be excavated to culturally sterile soil deposits or bedrock;
6. the sites chosen for testing excavation will be mapped to scale showing all internal features and excavated trenches.

G. Laboratory Methods and Report Preparation

This phase of work will involve the following:

1. Identification and cataloging of artifactual material including both historic as well as prehistoric forms. Artifacts will be measured with representative samples drawn and/or photographed to scale.
2. Identification, weighing, and analysis of midden material to genus and species. This information will be tabulated for each layer within each stratigraphic unit within each site.
3. Preparation, submittal and dating of datable samples (volcanic glass and charcoal).
4. Dating and identification of historic era artifacts.
5. Preparation and submittal of special faunal remains to Dr. Alan Ziegler.

H. Report Preparation

The final report will contain the following:

1. An in-depth presentation of each research question incorporating prior archaeological and historical studies in the Kōloa area.
2. Site findings, maps, descriptions, surface collections for each site will be discussed separately. Site maps, and stratigraphic profiles will be included.
3. A separate section on artifact analysis.
4. A separate section on midden analysis.
5. A separate section on volcanic glass and radiocarbon and historic period artifact chronology.
6. A summary chapter which re-evaluates the findings on each research question.
7. References
8. Appendices
    a. Master Artifact Catalog
    b. Volcanic Glass Dating Lab Report

I. Report Review Procedures

A draft report will be submitted to Po'ipulani Development Co., the State Historic Preservation Office (SHPO) and Kaua'i County Planning Departments for review, to ensure all information is included and completely presented. The Report will be submitted within 3-4 months following fieldwork.

A final report shall then be produced, incorporating any

recommended revisions. If Cultural Surveys Hawaii disagrees with recommended revisions, consultation will occur with the SHPO and the County Planning Department to resolve these problems. Consultation will occur with both of these offices before the final report is produced.

J. Report Dissemination

Copies of the final report will be sent to Po'ipulani Development Co., the State Historic Preservation Office, Kaua'i County Planning Department, a depository of the County's choice and the Office of Hawaiian Affairs (OHA).

K. Disposition of Finds and Documentary Data

All materials generated by this project will be deposited for curation at a facility on Kaua'i acceptable to SHPO and Kaua'i County Planning Department.

L. End of Fieldwork Report

An End of Fieldwork Report will be submitted within 2-3 weeks following the conclusion of field excavations to document the adequate recovery of information from the ground. The State archaeologist will be given a tour of excavated sites and preserve barriers. This interim report and site tour will hopefully be sufficient to allow the State (and County) to verify in writing that the information has been recovered and the preserved sites protected sufficiently to permit construction to proceed.

VII. Summary of Recommendations for Preservation and Data Recovery

The following recommendations are made specific to preservation and data recovery in the Po'ipulani project area.

A. Preservation

1. Total preservation of 10 archaeological sites (86, 900, 913, 934, 938, 939, 946, 947, 953 and 966);
2. Continuous fencing and flagging of all preserve sites portions to make them highly visible before ground disturbance begins. These fenced and flagged areas will contain buffer zones of at least 50 feet around the sites;
3. Archaeological monitoring during construction to insure avoidance of preserve areas, advise any incorporation of archaeological sites into the golf course and to respond to unexpected findings;
4. Testing of possible burial sites not listed for preservation. If burials are found these sites will be preserved;
5. Maintain security of preserve areas in all phases of construction and pre-construction to prevent rock robbing and vandalism, to include immediate posting of signs at road access points forbidding unauthorized rock gathering;
6. Preparation of a long-term preservation plan to address

interpretation and treatment of preserved sites. Preserved sites should not be cleared of vegetation until construction is completed;

B. Data Recovery

7. Cross section trenches of *'auwai*, agricultural fields, and field walls;
8. Testing of larger habitation sites with more complete excavation of 2;
9. Testing of at least half of all temporary habitation sites with complete excavation of 2-3; In the remaining temporary habitations sites data recovery will consist of further mapping.
10. Testing of 2 cave sites with a one-meter square trench each, to recover chronological and paleontological data;
11. Preparation of an end of fieldwork Report and arrangement of a site tour with SHPO.
12. Preparation of a final report on all data recovery (and monitoring) findings.

References Cited

Hammatt, H. H., W. Folk, and M. Stride
1990 Archaeological Inventory Survey of the Proposed Po'ipulani Golf Course and Residential Development, Kōloa, Kaua'i.

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1990 Archaeological Data Recovery - Phase II, Hyatt Regency, Kaua'i Mitigation Program, PHRI, Hilo.

Appendix I

Preliminary Archaeology Reconnaissance Report Regarding the Proposed Golf Course and Residential Development Located at Po'ipu, Kaua'i, by Mr. Joseph Kennedy

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Archaeologist

Mr. Ray Smith
39 Diablo Rd. Suite 207
Danville, California

February 24, 1990

RE: Preliminary Archaeological Reconnaissance Report Regarding The Proposed Golf Course and Residential Development, TMK: 2-8-14, Located at Poipu Kauai.

Dear Mr. Smith:

At the request of your office, Archaeological Consultants of Hawaii, Inc. has conducted a preliminary reconnaissance survey at the above location. The purpose of this report is to advise the client regarding the presence or absence of cultural materials on the subject property and to make recommendations regarding the future treatment of these sites in order to satisfy county and state permit requirements as outlined in the Hawaii Revised Statutes (HRS) under Chapter 6E.

The subject property is located in the ahupua'a of Koloa in the Kona District of the Island of Kauai. Vegetation on the subject property may be divided into two broad categories - that which is used for pasture and is covered with a variety of weeds and grasses - and a second area, most notably in the southern section of the property, which is covered in a thick growth of haole-koa (Leucaena glauca). There were no permanent water sources noticed on the property.

A check of the archaeological literature at the Department of Land and Natural Resources, Historic Sites Section, indicate that previous archaeological work has taken place on a portion of this property. This work is available under the title Archaeological Survey and Testing of the Proposed Koloa-Poipu Bypass Road, Koloa, Kauai, by Hallett Hammatt.

In this report, we learn of the presence of 47 archaeological sites in a complex located in the southeastern section of the proposed golf course property. Careful mapping of all sites and some limited testing in a select ten of the 47 was undertaken.

Results of these testing efforts indicate 'only sparse evidence of occupation with no apparent cultural stratification.' (Hammatt 1985:i). The report mentions that radioisotope dating material was recovered but the results were not available in the text.

The Hammatt report is not the only one for this area, Sinoto prepared a preliminary report in 1975 entitled Archaeological Reconnaissance Survey of Knudsen Trust Lands at Koloa, Poipu, Kauai which covered a portion of the southern portion of the subject property below the railroad grade. Unfortunately, this short report only informs the reader that many sites exist in the area and that an extensive amount of additional work will be required sometime in the future.

Other reports on the general area by Connolly (1982), Ching (1974), Hammatt (1978), Kikuchi (1963, 1980), Landrum (1984) and others indicate that this portion of the island was well-settled and developed in precontact time.

Our survey of the subject property took place over a three and one half day time period and consisted of a team of four archaeologists making a series of systematic sweeps of the property. One evening was also spent with the owner of the land, Mr. Vladamir Knudsen, in search of informant testimony that may shed some light on several of the features we identified on the property. While Mr. Knudsen was cooperative and cordial, it was quite clear that he was not familiar with some of the features contained on his property, nor the extent of previous archaeological work that has taken place there.

Our survey results may be summarized as follows:

1). A sizeable lave tube opening was noticed in the northern portion of the property. Any exploration of the tube was beyond the scope of this report; however, it was noticed that some midden was scattered near the entrance and that hollow domes are abundant in the immediate area.

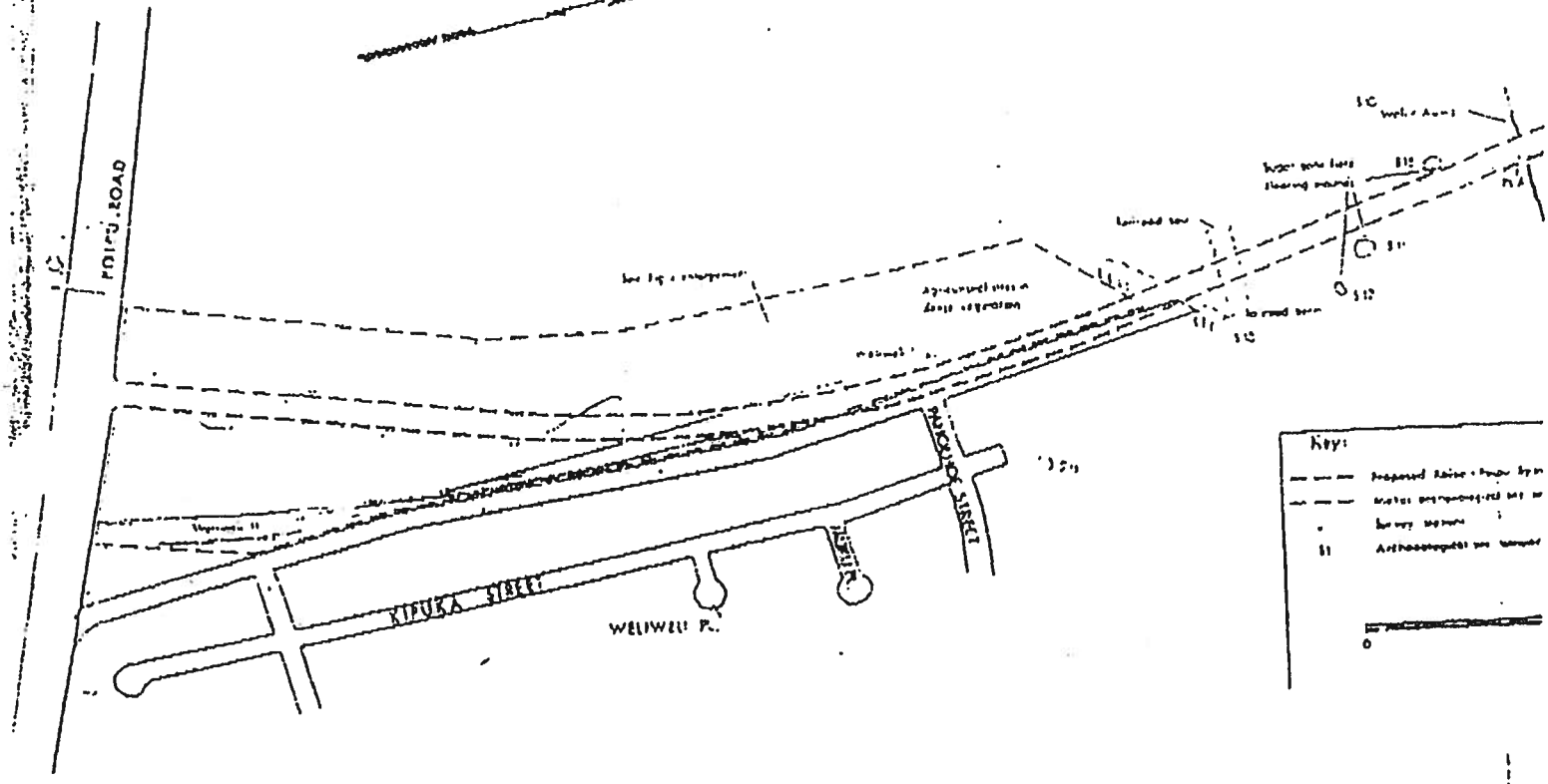

Fig. 3 Proposed Koloa-Poipu Bypass Road Showing Major Archaeological Sites.

From Hammatt 1985

KAUAI
Lihue
STUDY AREA
PROJECT AREA MAP
KNUDSEN TRUST LANDS
KOLOA, KONA, KAUAI
Fig. 1
0
400
1200
scale
site concentrations
WELI WELI SUBDIVISION
CANAL
RAILROAD
TENNIS COURTS
POIPU ROAD
SEWAGE PLANT
PACIFIC

Photo 1975

2). The bed of the old Koloa railroad (long since abandoned) bisects the property in the southern quarter.

3). In the haole-koa thicket along the southern boundary of the property between the western limits of Hammatt's 1985 survey and the western boundary of the subject property there are a number of scattered sites. The majority appear to be agricultural in nature.

4). Throughout the property there are a number of low walls. There can be little doubt that many of these are related to historic ranching activities. At least one wall appears to conform to the ahupua'a political boundary.

5). Along the western boundary are a series of crude rock mounds. Preliminary indications are that these are related to the construction of the power line that runs along the boundary with the Kiahuna property.

CONCLUSIONS AND RECOMMENDATIONS

To begin, the lava tube entrance must be entered and all chambers mapped to term or subject property boundaries. Excavation of the floor should be conducted if possible. The reason for this attention has to do with the possibilities of human burials contained within this tube, a thin lava crust above and the absence of chronological information from surface sites already identified on the property.

Next, the archaeological sites located in the haole-koa thicket between the limits of Hammatt's 1985 survey and the western boundary of the subject property must have their position fixed on an overall map of the property, be sketched to scale, photographed, and test excavated.

It is our opinion that the abandoned railroad bed will not be an area of archaeological concern; however, we are aware that the ORLC bed, a similar structure on Oahu has been placed on the National Register of Historic Places.

In addition, the walls on the property, regardless if ranching related, need to have their position fixed on a map and the mounds along the western boundary need to have their suspected function collaborated by reliable informant testimony.

If there are any questions regarding this report, please feel free to contact me.

Aloha,

Joseph Kennedy
Consulting Archaeologist

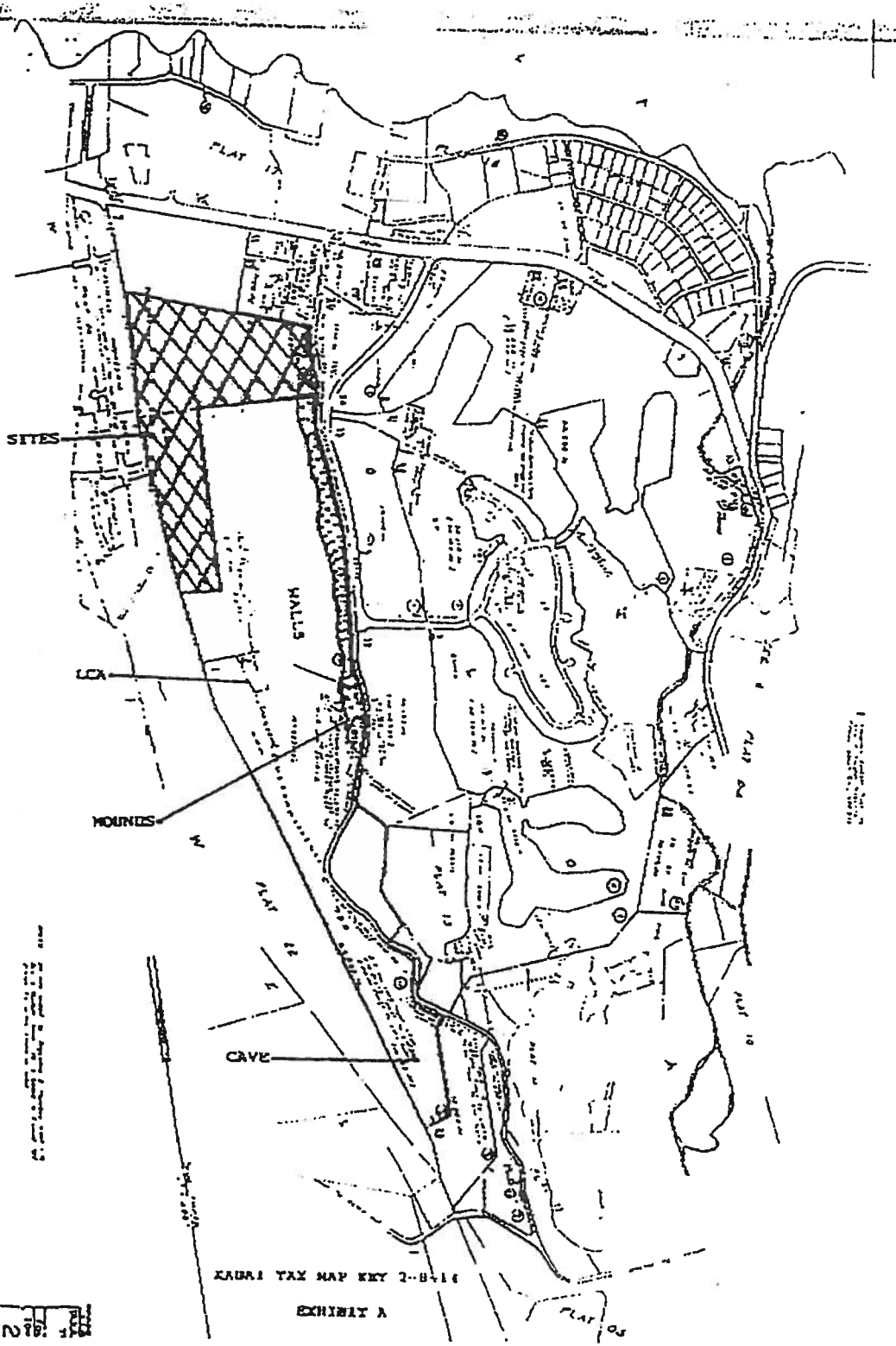

EXHIBIT A

revised 9/12/91

III. Plans for Preservation

A. Introduction

Because of the nature of the development it is possible to preserve a number of archaeological sites from direct development impact. In terms of numbers - of the total of 63 significant sites, nine will be completely preserved and 1 will be partially preserved (Railroad berm Site 947). In addition, the disposition of 6 of the sites is not determined at this time pending archaeological testing to determine if human burials occur within them. If burials are found then these sites will be preserved.

B. Preservation Plans

The following preservation measures will be taken

1. Physical Preservation of all or parts of the most well-preserved agricultural/habitation complexes which best represent former Hawaiian use of the land. These complexes are Sites 913 and 966.
2. Physical Preservation of well-preserved, excellent examples of habitation sites. Included in this category is Site 86, recorded by Bennett in the late 1920s, and Site 900, another habitation platform.
3. Physical Preservation of both lava tube cave sites, Sites 939 and 936, not only because of their archaeological significance but because they almost certainly contain burials. All areas above the tube chambers should be kept as open space.
4. Physical Preservation of all other sites which are likely to

contain burials or which testing shows to contain burials. Site 953 should definitely be preserved. This site will be tested to establish if there is a burial in the rock fill of the platform.

5. Physical Preservation of portions of Site 947, the railroad berm. The berm is best preserved at its western end.
6. Physical Preservation of some of the well-preserved walls. The best examples are found at Sites 934 and 938. These walls are representative of the past use of the land and reflect the unique character of the traditional Kōloa landscape.
7. Physical Preservation of any other sites which can possibly be incorporated into the development landscaping and designated as open space.

C. Preservation of Burial Sites

There are 8 sites designated as possible or probable burial sites as mentioned in the Inventory Survey. Three of the probable burial sites (a total of 5) will be preserved. Included in this list is Site 939 which shows exposed human bone and is therefore a confirmed burial site. Also included is Site 953 which is a highly probable monument platform burial. This site will be tested to establish if it is a burial site. Site 926 lava tube is also a probable burial site which will be preserved. The remaining 5 possible burial sites will be tested. If burials are located in them then they will be preserved.

and lo'i later planted in cane. In deeper soil areas trenches will be dug by backhoe.

3. Cross section trenches through field walls, stone terraces and earthen mounds in 3-5 spatially separated localities to recover possible stratigraphic succession of agricultural features.

C. **Habitation Sites**

1. All 4 suspected permanent habitation sites will be tested, with more extensive excavation of two. The selection of the sites for more complete excavation will depend on the results of the testing. The habitation sites with the longest and deepest stratigraphic sequence will be chosen for complete excavation.

2. At least half (approximately 13) of the smaller shelters (C-shape, U-shape, L-shape, etc.) will be tested with complete excavation of 2-3. In the others, data recovery will consist of further mapping. Both isolated shelters in fields as well as those clustered around major habitation sites will be chosen for testing and excavation. These sites will be chosen for testing and excavation on the basis of depth of soil deposits and probability of associated features such as hearths.

D. **Burial Sites**

There are 5 probable burial features (926D, 940, 936)

within the Po'ipulani project area not presently on the preserve list. These and Site 953 (a preserve site) will be tested to address research questions and to determine presence or absence of burials and to estimate numbers of individuals. If burials are found the sites will be preserved.

E. Caves

There are two cave sites in the Po'ipulani project area; a small lava tube shelter (939) and a long tube site in the mauka portion of the project area (946). Both of these caves are suspected burial sites and are to be preserved. The entrances will be sealed or closed to allow only authorized access to prevent looting. Data recovery is therefore not necessary. However, brief testing of the cave sediments (a single 1 meter square) will be conducted to collect chronological and paleontological data. Faunal samples will be submitted to Dr. Alan Ziegler for identification.

F. Excavation Methods

The following methods will be used in the excavation of all trenches:

1. screening of all sediments through 1/8 inch mesh screen;
2. recovery of all artifacts and shell and bone midden;
3. recovery of all charcoal both as "in situ" samples and

JOHN WAIHEE
GOVERNOR OF HAWAII

WILLIAM W. PATY, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

KEITH W. AHUE
MANABU TAGOMORI
DAN T. KOCHI

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AQUATIC RESOURCES
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CONSERVATION AND RESOURCES ENFORCEMENT
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LAND MANAGEMENT
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

September 9, 1991

Peter Nakamura, Director
Planning Department
County of Kauai
4280 Rice Street
Lihue, Hawaii 96766

Dear Mr. Nakamura:

SUBJECT: Historic Preservation Review -- Revised Third Draft -- Data Recovery and Preservation Plan for the Poipulani Development Area (Hammatt, Cultural Surveys Hawaii, July 1991)
TMK: 2-8-13: 1; 2-8-14: 1,2, 3,4 & 19
Weliweli, Koloa, Kauai

We have received the above revised plans, which address our concerns sent to the consulting archaeologist on March 27, 1991. There are still some minor corrections that need to be made. However, we can accept the plans with the understanding that the consulting archaeologist will submit the corrected pages in two weeks from the date of this letter.

Previously, we concluded that the project area had been adequately surveyed and that all historic sites had been likely found, totalling 75 sites. 12 sites are considered to be "no longer significant" because adequate amounts of their significant information were recorded during the survey; 63 sites are still considered significant. We agreed with the mitigation commitments — preservation of 12 sites (with some data collection to aid preservation planning) and archaeological data recovery of 51 sites.

The plans reviewed in this letter provide a detailed scope of work for data recovery and the interim protection parts of preservation. The long-range preservation concerns (interpretation, landscaping, maintenance, etc.) are not in this plan, and a document covering these long-range preservation concerns must be approved for the preservation plan to be considered complete.

It is our recommendation that the project will have "no adverse effect" on significant historic sites, with the agreed upon mitigation commitments and the implimentation of the acceptable data recovery and interim protection plan. To ensure that the agreed upon mitigation is properly executed, we believe that the following conditions must be attached to any approved permit:

1. The applicant shall preserve the agreed 12 historic sites: 86, 900, 913, 926, 934, 938, 939, 946, 947, 953, 966, and 967. [Five of these sites are probable burial sites (919, 9260, 927, 936, 940), and they will undergo archaeological testing, according to the data recovery plan, to determine if they are burials. If no burials are found, these sites shall be shifted to the archaeological data recovery work. If burials are found, these sites will be

preserved under the preservation plan. Each time a burial is discovered, the State's Historic Preservation Division must be notified immediately, the burial shall remain in place, the site shall be restored in its original condition, and the site findings shall be fully documented.]

2. All sites to be preserved shall be protected during construction according to the Interim Preservation Measures, with buffer zones around each site to be preserved and to be approved in writing by the State's Historic Preservation Division and the County's Planning Department. Buffer zones for burial sites must be presented to DLNR's Kauai Island Burial Council for their comments to the State Historic Preservation Division. A pre-construction meeting to inform construction crews about the historic sites shall occur prior to any construction activity commencing. These steps must be verified by the State Historic Preservation Division and the County of Kauai, Planning Department.

3. A detailed long-range preservation plan for all sites to be preserved shall be approved by the State Historic Preservation Division and the County of Kauai Planning Department, prior to the completion of the project. It must be executed and verified by the State Historic Preservation Division and the County of Kauai, Planning Department, prior to completion of the project. This plan must include interpretation, public access, landscaping and maintenance concerns.

4. The applicant shall undertake archaeological data recovery of the 51 significant historic sites within the project area according to the approved detailed data recovery plan. This work must be executed prior to land alteration or construction work in the area. The successful execution of this work, including the submittal of an acceptable final report, must be verified by the State Historic Preservation Division and the County of Kauai Planning Department prior to land alteration in the area.

5. If burials are found during construction, they shall be treated under Chapter 6E-43, H.R.S.. Construction must stopped in the immediate vicinity of the finds, until mitigation work is completed.

The needed corrections for this plan are on pages 14, 15, and 26. The corrections are underlined. The total number of sites should be 63 significant sites, eleven will be ... (page 14). The total of 5 (page 15). There are 6 probable burial features (926D, 940, 936, 953, 919, 927) (page 26. ~ COMPLETED 9/91

If you have any questions regarding this review, please contact Ms. McMahon at 587-0006.

Sincerely,

Ross Cordy

DON HIBBARD, Administrator
State Historic Preservation Division

cc: Kauai Island Burial Council
Hal Hammatt, CSH
Loren Baxter

EXHIBIT 4

Archaeological Inventory Survey
For the Makai Portion of Parcel 19 of the Eric A. Knudsen Trust Lands, Kōloa Ahupua'a, Kona District, Kaua'i

TMK: 2-18-14-19 por.

by

Jesse Yorck, B.A.,
Jonus Madeus, B.A.,
John E. Dockall, Ph.D.,
Sallee D.M. Freeman, M.A.,
and
Hallett H. Hammatt Ph.D.

Prepared for
Eric A. Knudsen Trust

by
Cultural Surveys Hawai'i, Inc.
May 2005

EXHIBIT "4"

MANAGEMENT SUMMARY

Title	Archaeological Inventory Survey for the Makai Portion of Parcel 19 of the Eric A. Knudsen Trust Lands, Kōloa Ahupua'a, Kona District, Kaua'i (TMK 2-18-14: por. 19).
Date	May 2005 (Draft)
Project Number	Cultural Surveys Hawai'i Inc. (CSH) Job Code: KOLO 24
Investigation Permit Number	CSH completed the inventory survey fieldwork under state archaeological permit No. 0404 issued by the State Historic Preservation Division (SHPD), per Hawai'i Administrative Rules (HAR) Chapter 13-13-282.
Project Location	The project area comprises TMK 2-18-14: por. 19 which is bounded on the south by Po'ipū Road, on the east by the Weliweli House Lots Subdivision, on the north by the proposed Phase I of the Village at Po'ipū project area, and on the west by a landscaping operation's base yard, in Kōloa Ahupua'a, District of Kona, Island of Kaua'i. This area is depicted on the 2000 Kōloa 7.5-minute USGS topographic quadrangle.
Project Land Jurisdiction	Private, Eric A. Knudsen Trust
Project Description	Eric A. Knudsen Trust proposes to develop portions of the 19-acre parcel as part of a residential, multifamily subdivision. Minimally, this would include grading, dwelling construction, and street and utility installation.
Project Acreage	Approximately 18 acres
Area of Potential Effect (APE)	For this inventory survey investigation, the project's APE is defined as the entire approximately 18-acre footprint of the proposed subdivision development. The survey area and the project APE are one and the same.
Historic Preservation Regulatory Context	At the request of the landowner, the Eric A. Knudsen Trust, CSH undertook this archaeological inventory survey. In consultation with the SHPD, the inventory survey investigation was designed to fulfill the state requirements for archaeological inventory surveys [Hawai'i Administrative Rules (HAR) Chapter 13-276].
Fieldwork Effort	Fieldwork was conducted by Gerald Ida, B.A., Missy Kamai, B.A. and Jonas Madeus, B.A., under the general guidance of Hallett H. Hammatt, Ph.D., between the dates of September 1 and 17, 2004.
Number of historic properties identified	16 historic properties were identified in the project APE, 15 were previously recorded (50-30-10-3766, -3769, -3770, -3771, -3775, -3779, -3785, -3790, -3791 -966, -3896, -3897, -3898, -3899, -3900), and one was newly identified (50-30-10-3905)
Historic Properties Recommended Eligible to the Hawai'i Register of Historic Places (Hawai'i Register)	SIHP Site 50-30-10-966, Agricultural and Habitation Complex, (C, D) SIHP Site 50-30-10-3766, Wall, C-shapes, and Mound, (D) SIHP Site 50-30-10-3769, Walls, Terrace, Enclosure, and Mound, (D) SIHP Site 50-30-10-3770, C-Shape and Terrace, (D) SIHP Site 50-30-10-3771, Mound, (D)

	SIHP Site 50-30-10-3775, Mound, (D) SIHP Site 50-30-10-3779, Enclosure, (D) SIHP Site 50-30-10-3785, Enclosure, (D) SIHP Site 50-30-10-3790, C-Shape, (D) SIHP Site 50-30-10-3791, Enclosure and Platform, (D) SIHP Site 50-30-10-3896, Wall, (D) SIHP Site 50-30-10-3897, C-Shape, (D) SIHP Site 50-30-10-3898, Mound, (D) SIHP Site 50-30-10-3899, Enclosure, (D) SIHP Site 50-30-10-3900, Wall, (C, D) SIHP Site 50-30-10-3905, C-Shapes, Terrace, (D)
Effect Recommendation	The proposed subdivision development will adversely affect significant historic properties 50-30-10-3766, -3769, -3770, -3771, -3775, -3779, -3785, -3790, -3791, -3896, -3897, -3898, -3900, 3905 and possibly -3899. The recommended mitigation measures will reduce the project's effect to these historic properties.
Mitigation Recommendation	SIHP Site 50-30-10-966, Remnant Agricultural and Habitation Complex, Preserve remnant portions SIHP Site 50-30-10-3766, Wall, C-Shapes and Mound, Data Recovery SIHP Site 50-30-10-3769, Walls, Terrace, Enclosure and Mound, Data Recovery SIHP Site 50-30-10-3770, C-Shape and Terrace, Data Recovery SIHP Site 50-30-10-3771, Mound, No Further Work SIHP Site 50-30-10-3775, Mound, No Further Work SIHP Site 50-30-10-3779, Enclosure, No Further Work SIHP Site 50-30-10-3785, Enclosure, Data Recovery SIHP Site 50-30-10-3790, C-Shape, Data Recovery SIHP Site 50-30-10-3791, Enclosure and Platform, Data Recovery SIHP Site 50-30-10-3896, Wall, No Further Work SIHP Site 50-30-10-3897, C-Shape, Data Recovery SIHP Site 50-30-10-3898, Mound, Data Recovery SIHP Site 50-30-10-3899, Enclosure, Data Recovery SIHP Site 50-30-10-3900, Wall, Preserve SIHP Site 50-30-10-3905, C-Shapes, Terrance, Data Recovery

TABLE OF CONTENTS

MANAGEMENT SUMMARY i
LIST OF FIGURES v
LIST OF TABLES vi
I. INTRODUCTION 1
A. Project Background 1
B. Scope of Work 4
C. Natural Setting 4
D. Methods 5
1. Field Methods 5
2. Mapping 5
3. Laboratory Methods 5
II. HISTORICAL BACKGROUND 7
A. Mythological and Traditional Accounts 7
B. Early Historic Period 8
C. Mid-1800s-Māhele Era 8
D. Mid to Late 1800s 9
E. 1900s to Present 10
III. PREVIOUS ARCHAEOLOGICAL RESEARCH 13
A. Previous Archaeology in Kōloa 13
B. Summary of Previous Archaeology Specific to Current Project Area 20
IV. PREDICTIVE MODEL 24
V. RESULTS OF FIELDWORK 26
A. Impacts to No Longer Existing Sites 26
B. Research Design 26
C. Site Descriptions 29
SIHP SITE 50-30-10-966 33
SIHP SITE 50-30-10-3766 33
SIHP SITE 50-30-10-3769 33
SIHP SITE 50-30-10-3770 35
SIHP SITE 50-30-10-3771 38

SIHP SITE 50-30-10-3775 38
SIHP SITE 50-30-10-3779 39
SIHP SITE 50-30-10-3785 39
SIHP SITE 50-30-10-3790 42
SIHP SITE 50-30-10-3791 44
SIHP SITE 50-30-10-3896 47
SIHP SITE 50-30-10-3897 48
SIHP SITE 50-30-10-3898 49
SIHP SITE 50-30-10-3899 49
SIHP SITE 50-30-10-3900 51
SIHP SITE 50-30-10-3905 51
VI. EXCAVATION AND LAB RESULTS 53
A. Stratigraphy and Lab Results 53
1. Test Unit 1 53
2. Test Unit 2 55
3. Test Unit 3 57
4. Test Unit 4 59
5. Test Unit 5 60
6. Test Unit 6 61
B. Charcoal 63
C. Summary 66
VII. SUMMARY 67
VIII. SIGNIFICANCE AND RECOMMENDATIONS 69
A. Significance 69
B. Recommendations 69
1. No Further Work 69
2. Data Recovery 69
3. Preservation 70
IX. REFERENCES CITED 74

LIST OF FIGURES

Figure 1. Portion of 7.5-minute U.S. Geological Survey map, Kōloa Quad (2000), showing location of project area 2

Figure 2. Portion of TMK 2-8-14 showing the location of the survey area 3

Figure 3. 1935 Map of Kōloa Plantation showing project area 12

Figure 4. U.S. Geological Survey Map. Kōloa Quad (2000), showing project area and locations of previous archaeological studies 14

Figure 5. Portions of Kiahuna Golf Village (Hammatt et al. 1978) and Kōloa-Po'ipū Bypass Road (Hammatt et al. 1985) archaeological site maps, and Kodani & Associates survey map showing previously recorded archaeological sites (some of which are no longer intact) and disturbed areas in the project area 21

Figure 6. Map of remaining sites within project area, locations recorded using Trimble GPS unit 32

Figure 7. Plan View of SIHP Site 50-30-10-3766 and -3769 34

Figure 8. Plan View of SIHP Site 50-30-10-3770 36

Figure 9. SIHP Site 50-30-10-3770, remnant of Feature A, view north 37

Figure 10. SIHP Site 50-30-10-3770, remnant of Feature B, view east 37

Figure 11. SIHP Site 50-30-10-3775, remnant of C-Shape, view west 38

Figure 12. Plan View of SIHP Site 50-30-10-3785 40

Figure 13. SIHP Site 50-30-10-3785, Portion of *lo'i* wall, view north 41

Figure 14. Plan View of SIHP Site 50-30-10-3790 42

Figure 15. SIHP Site 50-30-10-3790, remnant of C-Shape structure, view southeast 43

Figure 16. Plan View of SIHP Site 50-30-10-3791 45

Figure 17. SIHP Site 50-30-10-3791, remnant of enclosure, view east 46

Figure 18. Plan View of SIHP Site 50-30-10-3896 as shown in Hammatt et al. (1985) 47

Figure 19. SIHP Site 50-30-10-3896, view southwest 47

Figure 20. Plan View of SIHP Site 50-30-10-3897 as recorded in Hammatt et al. (1985) 48

Figure 21. SIHP Site 50-30-10-3897 view northeast. 48

Figure 22. Plan View of SIHP Site 50-30-10-3899 B (dashed line shows cobble remnants marking former outline of site) 49

Figure 23. SIHP Site 50-30-10-3899, Feature B, view northeast 50

Figure 24. SIHP Site 50-30-10-3905, plan view map of Feature A-C 52

Figure 25. Profile of north wall of Test Unit 1, SIHP Site -3766 54

Figure 26. Profile of north wall of Test Unit 2, SIHP Site -3770 A 56
Figure 27. Profile of north wall of Test Unit 3, SIHP Site -3770 B 57
Figure 28. Profile of north wall of Test Unit 4, SIHP Site -3785 59
Figure 29. Profile of north wall of Test Unit 5, SIHP Site -3791 60
Figure 30. Profile of north wall of Test Unit 6, SIHP Site -3905 62
Figure 31. Results of radiocarbon dating for charcoal sample KOLO24TU1C1. 64
Figure 32. Results of radiocarbon dating for charcoal sample KOLO24TU3C2. 65
Figure 33. Map of remaining sites within project area with recommendations for further work 73

LIST OF TABLES

Table 1. Previous Archaeological Investigations in Kōloa Ahupua'a 15
Table 2. Previously Documented Sites Destroyed Prior to or Unlocated During the Inventory Survey 27
Table 3. Sites Relocated During Present Inventory Survey 29
Table 4. Sites Tested and Results from Subsurface Testing 53
Table 5. Test Unit 1, SIHP Site -3769 Midden Results 55
Table 6. Test Unit 3, SIHP Site -3770 B Midden Results 58
Table 7. Test Unit 5, SIHP Site -3791 Midden Results 61
Table 8. Test Unit 6, SIHP Site -3905 Midden Results 63
Table 9. Charcoal Catalogue 63
Table 10. Site Significance and Recommendations (*Site tested during CSH 2004 Survey) 71

I. INTRODUCTION

A. Project Background

At the request of the landowner, the Eric A. Knudsen Trust, Cultural Surveys Hawai'i Inc. (CSH) conducted this archaeological inventory survey. In consultation with the State of Hawai'i Department of Land and Natural Resources / State Historic Preservation Division (DLNR / SHPD), the inventory survey investigation was designed to fulfill the state requirements for archaeological inventory surveys [Hawai'i Administrative Rules (HAR) Chapter 13-276].

The approximately 18-acre parcel, known as the *makai* portion of parcel 19 of the Eric Knudsen Trust Lands comprises TMK 2-18-14: por. 19, and is located in Kōloa Ahupua'a, District of Kona, Island of Kaua'i (Figures 1, 2). The parcel is bounded on the south by Po'ipū Road, on the east by the Weliweli House Lots Subdivision, on the north by the proposed Phase I of the Village at Po'ipū project area, and on the west by a landscaping operation's base yard. This area is depicted on the 2000 Kōloa 7.5-minute USGS topographic quadrangle. The project area is currently being utilized as grazing land for cattle.

The Eric A. Knudsen Trust proposes to develop portions of the 18-acre parcel as part of a residential, multifamily subdivision. Minimally, this would include grading, dwelling construction, and street and utility installation. For this inventory survey investigation, the project's Area of Potential Effect (APE) is defined as the entire approximately 18-acre footprint of the proposed subdivision development.

The project area was originally surveyed and described as part of the archaeological survey in support of the then proposed Kiahuna Golf Village project by the Archaeological Research Center Hawai'i (ARCH) (Hammatt et al. 1978). The current project area was covered as the *makai* (southern) portion of the Kiahuna survey area designated "Area C". Sites were located and described with no subsurface testing. Both habitation and agricultural sites were located in the current project area, including stone enclosures, platforms, *'auwai* (irrigation ditches), and terraced plots.

The eastern portion of the current project area was resurveyed by CSH as part of the archaeological survey for the proposed Kōloa-Po'ipū Bypass Road project (Hammatt et al. 1985). Archaeological work was completed, however the plans for the road alignment were abandoned and a completed survey report was never submitted to the SHPD / DLNR.

In 2003, the current project area was subjected to a field inspection by CSH archaeologists (Tulchin and Hammatt). Pedestrian inspection of the project area indicated disturbed areas including large boulder piles, fenced enclosures, and bulldozed roads that were not present in the 1978 or 1985. Existing sites in the vicinity of the various disturbed areas were located and their condition assessed. Sites within the interior of the disturbed areas were assumed to have either been covered or destroyed. A comprehensive description of the findings of the Tulchin and Hammatt (2003) study can be found in Section III, entitled "Previous Archaeological Research."

Based on the varying levels of documentation and the observation that certain sites have been destroyed and/or severely impacted, the SHPD / DLNR requested an inventory survey plan be developed for review and approval prior to conducting the required inventory survey. The Inventory Survey Plan (Hoffman et al. 2004) was reviewed and approved (LOG No. 2004.2666, Doc No. 0408NM19). Based on the survey plan the following scope of work was implemented.

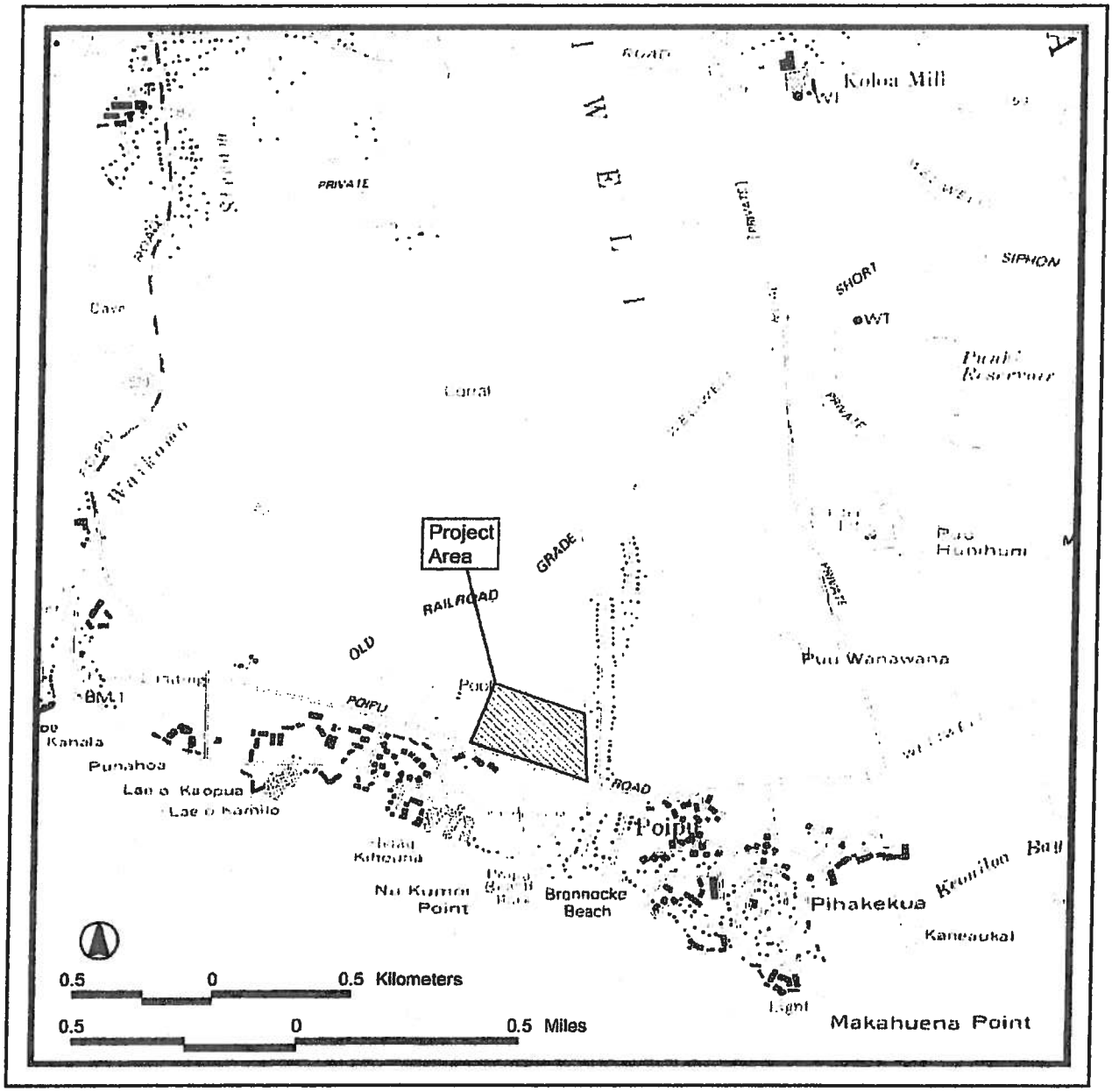


Figure 1. Portion of 7.5-minute U.S. Geological Survey map, Kōloa Quad (2000), showing location of project area

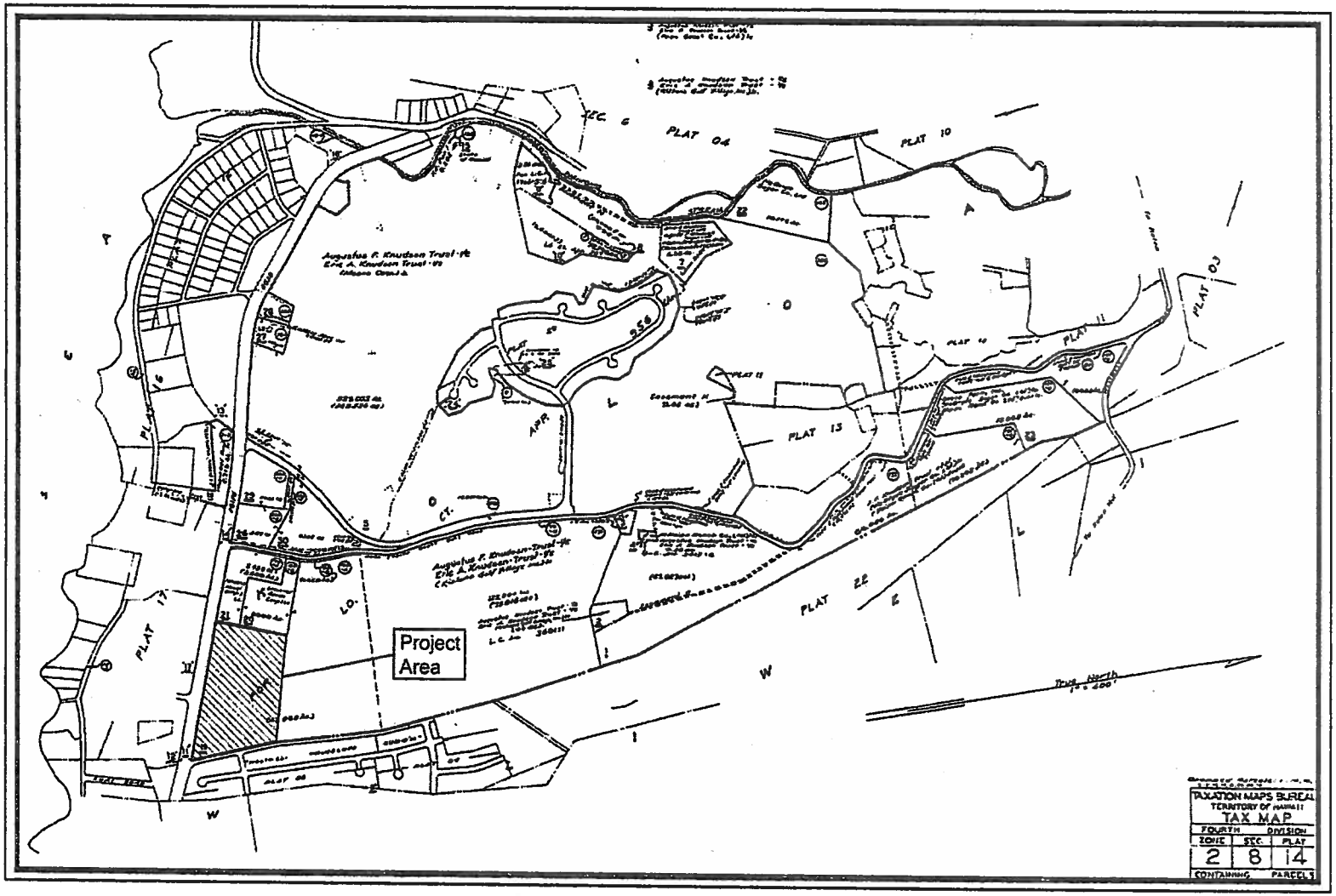


Figure 2. Portion of TMK 2-8-14 showing the location of the survey area

B. Scope of Work

The scope of work for this archaeological inventory survey included:

1. A complete ground survey of the entire project area for the purpose of site inventory. All previously identified sites were relocated, if possible, mapped, photographed and described. Any features not previously documented were described, mapped, and assigned State Inventory for Historic Preservation (SIHP) numbers, if appropriate.
2. Subsurface testing through hand excavation of a sample of sites and/or features. The selections were made based on the state of preservation of the site or feature and the potential for yielding information. Testing focused on gaining a representative sample of site and feature types and function. When appropriate samples from these excavations were found, they were analyzed for chronological and paleoenvironmental information. Documentation included photographs and scale drawings.
3. Research on historic and archaeological background, including search of historic maps, written records, and Land Commission Award (LCA) documents. This research focused on the specific area with general background on the *ahupua'a* and district and emphasized settlement patterns.
4. Preparation of a survey report which includes the following:
    a. A topographic map of the survey area showing all archaeological sites and site areas;
    b. Description of all archaeological sites with selected photographs, scale drawings, and discussions of function;
    c. Historical and archaeological background sections summarizing pre-contact and historic land use as they relate to the archaeological features;
    d. A summary of site categories and their significance in an archaeological and historic context;
    e. Recommendations based on all information generated specifying what steps should be taken to mitigate impact of development on archaeological resources. These recommendations were developed in consultation with the client and the State agencies.

C. Natural Setting

The project area is situated approximately 400 m inland (*mauka*) of shoreline at an elevation of approximately ten to forty feet (3 m to 12 m) above mean sea level, on the southern coast of Kaua'i in the *ahupua'a* of Kōloa in the district of Kona. Waikomo Stream, approximately 1.5 km to the northwest, is a perennial stream and is the primary source of surface water in Kōloa.

The soil mantle in the project area is identified as very rocky Waikomo silty clay. It is aptly described as present on slopes ranging from two to six percent and having a representative profile comprised of a surface layer of dark grayish brown stony silty clay 14 inches thick, a six inch thick subsoil layer of reddish stony silty clay, and hard rock substratum (Foote et al. 1972).

Rainfall averages between 30 and 40 inches a year (Armstrong 1973); prevailing winds are from the northeast. and temperatures range from about sixty-to-ninety degrees Fahrenheit

throughout the year. This dry environment with shallow soil today supports predominantly *koa haole* (*Leucaena glauca)* and *kiawe* (*Prosposis pallida*), exotic grasses, weeds and some grasses, though cattle grazing in the project area have kept the vegetation in check.

D. Methods

1. Field Methods

Fieldwork was conducted by Gerald Ida, B.A., Missy Kamai, B.A. and Jonas Madeus, B.A., under the general guidance of Hallett H. Hammatt, Ph.D., between the dates of September 1 and 17, 2004. The field survey included collection of GPS data, mapping, and test excavations of sites and features in the project area. Fieldwork was performed under CSH's annual archaeological research permit, No. 0404, issued by the DLNR / SHPD.

The surface survey covered 100% of the project area. All previously identified sites were relocated, if possible, mapped, photographed and described. Field personnel utilized site descriptions from previous research in the project area (Hammatt et al. 1978; Hammatt et al. 1985; Hammatt 1991; Hammatt et al. 1991) to make note of changes in site integrity over time. The project director employed this information to make site significance determinations. In addition, any features not previously documented were described, mapped, and assigned State Inventory for Historic Preservation (SIHP) numbers, if appropriate.

The following methods were used in accomplishing test excavations:

1) Excavated sediments were screened through 1/8 inch mesh screen.
2) All artifacts and shell, bone, and botanical midden were recovered from the screens.
3) In situ charcoal samples and charcoal samples were recovered from screening of sediments and collected for radiocarbon dating and wood species identification as appropriate.
4) A minimum of one stratigraphic profile from each excavation unit was recorded by scale drawing. This profile drawing shows stratigraphic relationships between structural elements and sediment layers.
5) All trenches were excavated to culturally sterile sediments or bedrock.
6) Cultural strata was excavated in 10 cm levels were applicable.

2. Mapping

Global Positioning System (GPS) data was collected for all sites and features identified in the project area and will be made available to SHPD for inclusion in the State Database. Scale maps of the project area showing all remaining sites and features are included in the inventory survey report.

3. Laboratory Methods

This phase of work involved the following specific procedures:

1) Identification and cataloguing of artifactual material including both historic and prehistoric forms was completed. Spatial and functional analyses was performed on the assemblages of each feature and cluster of features to examine the type and extent of

activities taking place in each feature and cluster. Artifacts, if found, are to be measured with representative samples drawn and/or photographed.

2) Midden was identified to genus and species, weighed, and analyzed. Depth and stratigraphic data was tabulated for each sample from each excavation unit.

3) Appropriate charcoal samples were submitted for radiocarbon dating. Two samples were dated.

II. HISTORICAL BACKGROUND

A. Mythological and Traditional Accounts

There are several place names within Kōloa that have names and legendary associations. The name Kōloa itself has several derivations. Kōloa is the name for the large soft Hawaiian sugar cane (*Saccharum officinarum*) once grown by the Hawaiians; Kōloa is also the name of a steep rock on the banks of Waikomo Stream, from whence the *ahupua'a* got its name. This bank of the river was called Kōloa, after the native Hawaiian duck (*Anas wyvilliana*) (Kikuchi 1963:46; Pukui et al. 1974:116).

Mau-lili (meaning constant jealousy) is a deep pool in Waikomo (lit. "entering water") Stream. When the gods Kāne and Kanaloa first came to Kaua'i, they explored the island and came to the pool of Maulili at evening. They stretched out beside the pool for their night's sleep on its eastern bank and left the impression of their forms as can be seen in the *apapa* (a flat area). The Maulili Heiau was first built by Ka-pueo-maka-walu, the son of Kapu-lau-kī. It was a place of human sacrifice (Wichman 1998:12). This *heiau* may be the Maulili Heiau described by Makea in the Lahainaluna document mentioned above. "The apapa in this vicinity is called an 'Unu' and a 'Heiau', but was never walled in, it is said. On the nights of Kāne the drums are heard to beat there, also at the sacred rocks, or unu's, of Opuokahaku and Kanemilohae, near the beach of Po'ipū" (Farley 1907).

There are additional legends associated with the Maulili area.

> In the Maulili pool lived a large mo'o [water spirit], named 'Kiwahine'...The eastern wall of the pool, just below the resting places of Kane and Kanaloa, for a short distance, only, is called the 'Pali of Kōloa." The District of Kōloa is named for this Pali, we are told be old Hawaiians. To the south of the Palo o Kōloa, in the wall is a rock named 'Waihānau' [meaning birth water'...as one of their meles has it:
>
> Aloha wale ka Pali o Kōloa,
> Ke Ala huli I Waihānau e, hanau
>
> To the south of Waihānau is a projecting rock named 'Ke elelo o ka Hawai'i—the tongue of Hawai'i, said to have been wrested and brought from Hawai'i by the Kaua'i warrior Kawelo, of Wailua.
>
> At the southern end of the Maulili pool started two large 'auwai's [irrigation ditches], that watered the land east and west of Kōloa [Farley 1907:93].

Thus, this sacred legend-imbued locus was the source that gave life to the lowland taro patches of Kōloa. These special associations would not have been lost on the Hawaiians dependent upon those waters. While taro would have been essential to the life of the *ahupua'a*, other resources were available. Bernice Judd, writing in 1935, summarizes most of what was known—into the first decades of this century—of the traditional life of Kōloa:

> In the old days two large *'auwai* or ditches left the southern end of the Maulili pool to supply the taro patches to the east and west. On the *kuaunas* [embankments] the natives grew bananas and sugar cane for convenience in irrigating. Along the coast they had fish ponds and salt pans, ruins of which are still to be seen. Their dry land farming was done on the *kula*, where they raised sweet potatoes, of which both the tubers and the leaves were good to eat. The Hawaiians planted *pia* [arrowroot] as well as *wauke* [mulberry] in patches in the hills wherever they would grow naturally with little cultivation. In the uplands they also gathered the leaves of the *hala* [screwpine] for mats and the nuts of the *kukui* [candlenut] for light [Judd 1935:53].

B. Early Historic Period

Early historical and ethnographic information suggest that Kōloa was well populated during the late pre-contact period. The earliest explorers, like Cook and Vancouver, used Waimea for anchorage and described the well-maintained, watered agricultural systems on that dry leeward coast. Captain Cook noted,

> What we saw of their agriculture, furnished sufficient proofs that they are not novices in the art. The vale ground has already been mentioned as one continuous plantation of taro, and a few other things, which have all the appearance of being well attended to [Cook et al. 1818].

In 1792 Vancouver visited the island, and recorded of the surrounding countryside: "...the low country which stretches from the foot of the mountains toward the sea [is] occupied principally with the taro plant, interspersed with some sugar-canes of luxuriant growth and some sweet potatoes (Vancouver 1798)."

Although Ladd and Company went bankrupt in 1845, it went through a succession of individual and partnership owners, and was finally incorporated as the Kōloa Sugar Company in 1880. In 1882, the Kōloa Sugar Co. announced the construction of a railroad plant, consisting of four miles of 3-inch gauge track, and a 210-foot train consisting of forty cars and one locomotive (Conde and Best 1973:159). The first tracks were probably laid between the cane fields and the sugar mill. By 1910, the rails extended to Kōloa Landing where the steamers transported the bags of sugar to the mainland. In 1910, the *San Francisco Chronicle* commented:

> Cane is transported from the fields to the mill over a railroad system that consists of fifteen miles of permanent track, two miles of portable track, 250 cane cars and four locomotives. About two miles from the mill and connected with by rail is the steamer landing, with a warehouse that will hold 20,000 bags of sugar [cited in Conde and Best 1973:159].

C. Mid-1800s-Māhele Era

Ethnographic and historical information on the early post-European contact period is sketchy. The *ahupua'a* of Kōloa was controlled by the ruling chief of Kaua'i and was administered by lesser chiefs appointed by him (Kikuchi n.d.). When Ka-umu-ali'i, last of the ruling chiefs of the island, died in 1824, his lands, the lands of Kaua'i and Ni'ihau, were given to Kamehameha who then redistributed them among friends and members of the royal court. By the mid-nineteenth century, control of the *ahupua'a* was divided between Kamehameha III and Moses Kekūāiwa (Alexander 1937). The Māhele records indicate that Kōloa Ahupua'a (8,620 acres) was awarded

to Moses Kekūāiwa (LCA 7714-B), the brother of Alexander Liholiho (Kamehameha IV), Lot Kapuāiwa (Kamehameha V), and Victoria Kamāmalu. One segment was leased to Ladd and Company in the 1830s for sugar cane cultivation. At the time of the Great Māhele, a number of *kuleana* (small holdings) were granted for homesteading and farming (Office of the Commissioner of Public Lands 1929).

Eighty-eight kuleana were awarded to individuals within Kōloa Ahupua'a. the majority of the Land Commission Awards (LCAs) were located in or around Kōloa town itself and the rest along Waikomo Stream. This concentration of awards around the town and stream may reflect the traditional land settlement patter, a focus on the resources of Maulili Pool and Waikomo Stream, and a more recent movement of the populace to the plantation and missionary centers. No individual *kuleana* were awarded in the project area.

A Hawaiian subject by the name of Lae stated a claim in January 1848 for 2 LCAs in close proximity to the current project area (LCA 3268:1, 3268:2 and 3268:3). The claimant received his lands from Kauhi in the days of Ka'ahumanu. Lae appears to have been awarded a house lot on the shore (LCA 3268:1) and an agricultural lot to the north, which abuts the project area (LCA 3268:2 or 3). The agricultural lot consisted of three *loi* (taro fields) and a *kula* (cane field).

D. Mid to Late 1800s

Systematic historic records in Kōloa began with the founding of the American Protestant Mission. On December 31, 1834 Reverend Peter Gulick and his family arrived in Kōloa. Apparently the first foreigners to settle in the *ahupua'a,* they initiated the process of rapid change that would reshape the life of Kōloa in the nineteenth century. In 1835, a 30 by 60 foot grass house was erected as a mission meeting house and school, probably located at Kōloa Town. Mr. Gulick also initiated sugar cane cultivation and collected a cattle herd for the Protestant Mission. In 1837, an adobe church was built and the first mission doctor, Thomas La Fon, arrived to assist Mr. Gulick. His successor, Dr. J.W. Smith reduced the cattle herd and sent 7,000 pounds of sugar grown on mission lands to Honolulu (Palama and Stauder 1973:22). The Kōloa mission station apparently flourished from its start. James Jackson Jarves, who visited Kōloa and Kaua'i for nine months during the early 1840s, recorded:

> Kōloa is now a flourishing village. A number of neat cottages, prettily situated amid shrubbery have sprung up, within two years past. The population of the place, also, has been constantly increasing, by emigration from other parts of the island. It numbers, now, about two thousand people, including many foreigners, among whom are stationed a missionary preacher, and physician, with their families [Jarves 1844:100].

In 1834, two American naturalists, John K. Townsend and Thomas Nuttall, traveled to Kōloa in search of specimens. Townsend noted that from Kōloa Landing to the missionary station there were fields of taro, yam, and maize on both sides of the road. It is possible that he confused maize with Hawaiian cane. He observed irrigation networks, as well as sweet potato patches in the dryer areas. In many cases, these patches were protected with stone walls (Townsend 1839:206). Jarves also remarked on the fields of sugar cane, taro, yams, vegetables, indicating a more than usual attention to agriculture (1838:69).

A visitor in 1845 recorded other notable features of the landscape, including caves used for habitation. In his journal, Gorham Gilman (n.d.:11) describes "...some natural caves near the sea

side." What he saw in one cave was only the most recent version of a scene that must have taken place there over countless generations:

> ...looking round I saw a large hole in the ground near me, into which we descended by a pile of stones raised from the bottom for that purpose... here a strange sight met our view, there were some dozen or more natives seated around, some preparing a pig for the fire, other curing their tobacco and all engaged...making the place a natural kitchen [Gilman n.d.:11].

The first changes from the traditional agricultural and habitation patterns began in the 1830s when two sugar mills began production. Local Chinese erected a crude mill with granite rollers in the Māhā'ulepū area for grinding cane grown by the natives. This mill went out of business when a much larger mill operated by Ladd and Company began production a few years later. The mill and plantation operation resulted in an increase in immigration from other areas of Kaua'i.

The advent of the Ladd and Company enterprise transformed Kōloa into a commercial center. Activity at Kōloa Landing at this time was described as the following:

> The port of Kōloa did a remarkable amount of trade considering the fact that the roadstead was not safe except when the trade winds blew. Most vessels preferred not to anchor but to lay off during the process of loading, rather than risk the chance of being wrecked by a sudden change of wind. An estimate in 1857 stated that 10,000 barrels of sweet potatoes were grown each year at Kōloa and that the crop furnished nearly all the potatoes sent to California from Hawai'i. Sugar and molasses were also chief articles of export [Judd 1935:325-326].

Other agricultural enterprises were attempted, however, none too successfully. Mulberry fields were started for silkworms, but succumbed to wind and drought. An attempt was made to develop a commercial market for *kukui* nut oil, but this failed as well. Tapioca was manufactured from cassava root during a brief period in the 1860s, but was apparently not commercially successful. By 1884, most of the land at Kōloa had been given over to sugar production.

Near the coast it appears that the effects of commercial cultivation were minimal. Clearing for cane cultivation occurred only along the banks of Waikomo Stream. Modifications to traditionally used agricultural fields are not clearly apparent, although substantial high walls superimposed on irrigated field walls and across *'auwai* channels suggest a change in land utilization from one of strict cultivation to one supporting both cultivation and ranching.

In the mid-1800s Kōloa became the scene of the confrontation between the traditional social structure and commercially propelled forces of change. The cane agriculture of Ladd and Company would inevitably affect the lives of the inhabitants in the rest of the *ahupua'a.* Traditional settlement patterns would have been distorted by a population shift to Kōloa Town where sugar cane milling activities were located. A shift from taro to cash crops also changed settlement patterns.

E. 1900s to Present

Kōloa Landing was phased out around 1925 when McBryde Sugar Company and Kōloa Sugar Company began using the alternative Port Allen. Soon after this, the sugar companies ceased to use the *makai* Kōloa fields, and the Knudsen family converted much of the area to cattle pastureland. A map of Kōloa Plantation (Figure 3) shows the extent of the sugar cane

fields in 1935. Small patches of sugar cane grew along the east bank of Waikomo Stream, however no cane was grown in the current project area. The map also shows the railroad extending from Kōloa Mill to Kōloa Landing, along the northern border of the project area. In 1948, the Kōloa Sugar Company became part of the Grove Farm Company. Some inland areas of Kōloa remained under sugar cane cultivation until at least as late as the 1970s, when these cane lands were converted into pasture.

Specifically, the current project area is located immediately *mauka* (north) of Po'ipū Road, is bordered on the east by the Weliweli House Lots subdivision, to the west by the modern 1970s Kiahuna tennis courts, and extends *mauka* again to the southern boundary of the Proposed Po'ipūlani Golf Course project area (Hammatt et al. 1991).

The majority of the project area continues to be used as grazing land for cattle. The western portion of the project area is currently being utilized as a base yard for a landscaping (nursery) operation. A barbed-wire fence separates the nursery from the cattle grazing lands. Bulldozing activities in the current project area are evident, as there are multiple bulldozed roads in the central and eastern portions of the study parcel.

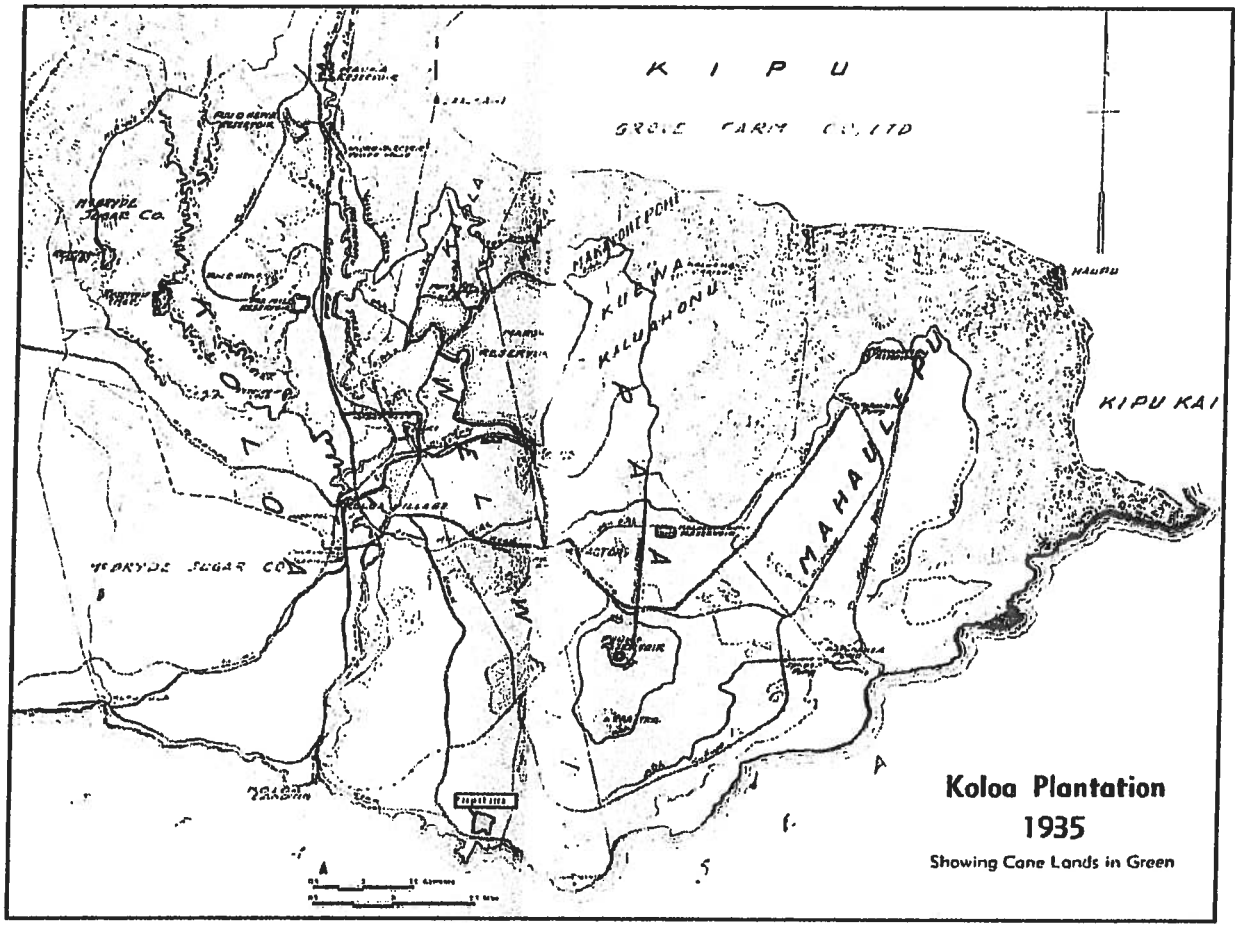


Figure 3. 1935 Map of Kōloa Plantation showing project area

III. PREVIOUS ARCHAEOLOGICAL RESEARCH

A. Previous Archaeology in Kōloa

Figure 4 and Table 1 summarize previous archaeological projects in the vicinity of the current project area.

Archaeological research before 1960 was limited to oral history accounts and surveys of the larger more important sites, especially coastal *heiau*. The first survey of an inventory nature of Kōloa resulted in a catalog of features for the general Kōloa region. The Lahainaluna Schools document lists 14 *heiau* and one fishing shrine in Kōloa Ahupua'a.

Thomas Thrum was the next to discuss sites in the Kōloa area in his list of the *heiau* of Kaua'i. He noted six *heiau* in the district of Kōloa, which once extended from Hanapepe to Mahaulepu. The *heiau* were Hanakalauae, Kanehaule, Kihouna, Kaneiolouma, Weliweli (Weliweli Ahupua'a), and Waiopili (Mahulepu Ahupua'a). The two *heiau* on the Kōloa coast, Kaneiolouma and Kihouna, were described as: "near the Po'ipū Beach, at Kōloa, are two walled heiau but a short distance apart." (Thrum 1907:36-37, 68)

Wendell Bennett conducted the earliest systematic archaeological survey of the island of Kaua'i in the late 1920s. Bennett examined and recorded 202 sites on the island, some in the *ahupua'a* of Kōloa, including the Kihouna Heiau (Bennett 1931:98).

William Kikuchi (1963) conducted a general survey of the Kona District of Kaua'i including all *ahupua'a* from Hanapēpē, eastward to Kīpū Kai. Information from a number of sources (Lahainaluna School document 1885; Thrum 1907; Bennett 1931) was instrumental in helping to locate major archaeological sites during the field survey. Kikuchi's survey was selective since it was not designed to be a complete inventory, and focused on larger or more coastal sites. No sites were near the present project area. Kikuchi did list sites that were not surveyed by him but were mentioned in other sources. In Kōloa, this included the *heiau* of Maulili.

During the 1973-1974 State Wide Inventory of Historic Places performed by the ARCH of the County of Kaua'i for the State of Hawai'i, the archaeological remains first identified by Bennett (1931) (SIHP Site 50-30-10-85) were briefly evaluated and placed on Reserve status, meaning the sites needed to be saved until additional research could be carried out.

Stephen Palama and Catherine Stauder (1973) conducted a reconnaissance survey along the route of the then-proposed main cane haul road to the Kōloa mill site, *mauka* (inland) from the present project area. The proposed new section of road extended from Weliweli Road, southwestward across Po'ipū Road, connecting to an existing cane haul road. This road corridor crossed a portion of Weliweli Ahupua'a and both east and west Kōloa at a distance of between two-thirds to two miles from the coast. A total of 18 sites were recorded along the road corridor. Although the Palama and Stauder study was limited in scope to the proposed road right of way, it included a short but thorough historical summary of the place of archaeological sites within the context of the Kōloa and Weliweli Ahupua'a. An extensive *'auwai* system was observed east of Po'ipū Road. The following comments on this system and the sites in general are relevant to understanding the archaeological significance of the area as a whole, and the historic processes at work:

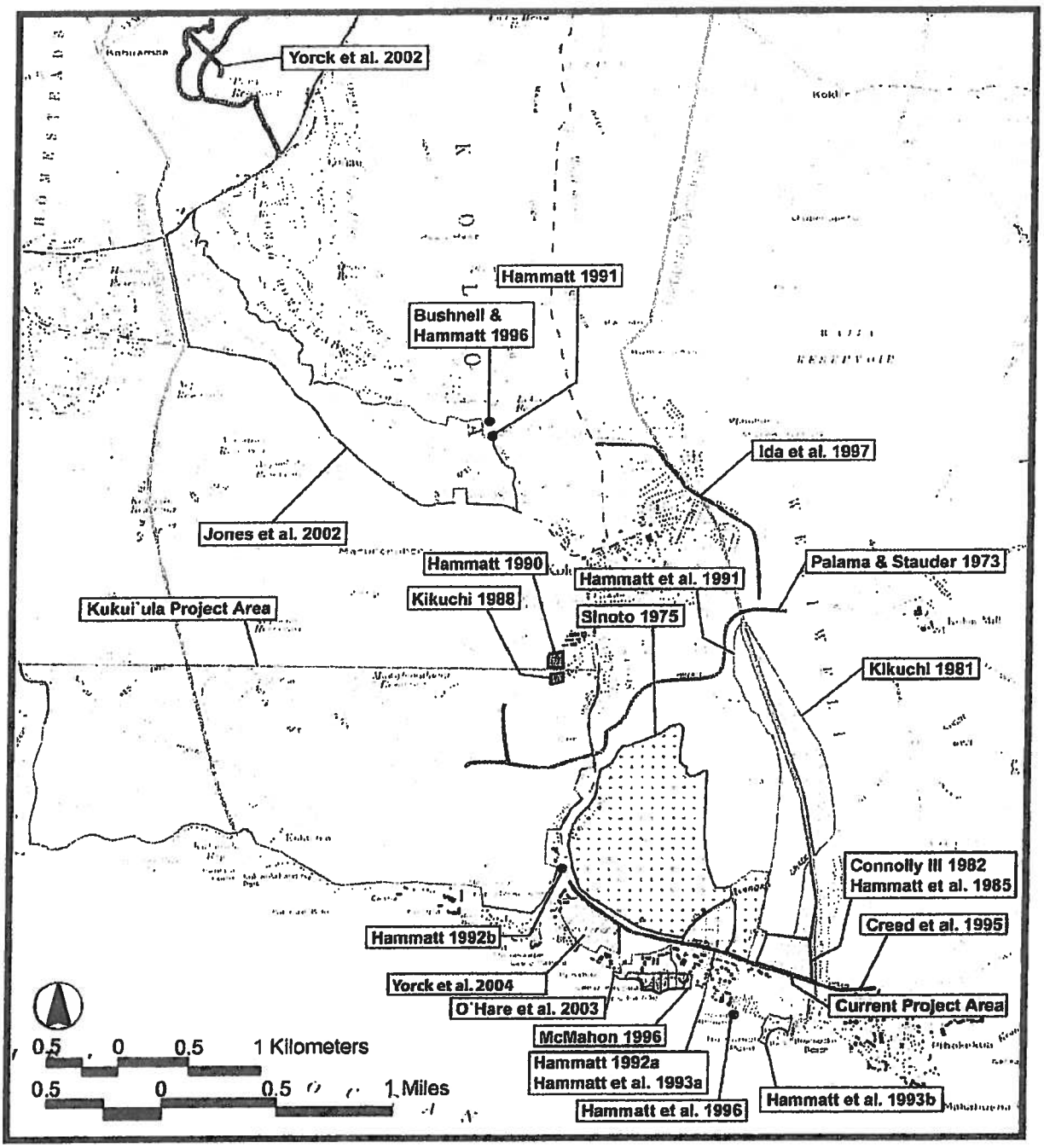


Figure 4. U.S. Geological Survey Map. Kōloa Quad (2000). showing project area and locations of previous archaeological studies

Table 1. Previous Archaeological Investigations in Kōloa Ahupua'a

NAME	YEAR	LOCATION	STUDY TYPE
Bennett	1931	Kukui'ula Valley, Prince Kūhiō Park	General Survey
Kikuchi	1963	Kona District	General Survey
Kikuchi	1973	Hawaiian Fishponds	General Survey
Palama and Stauder	1973	Cane Haul Road-Kōloa Mill	Reconnaissance Survey
Sinoto	1975	Knudsen Trust Lands	Reconnaissance Survey
Bordner	1977	Kukui'ula 'Auwai, SIHP Site 50-39-10-1934	Reconnaissance Survey
Hammatt, Bordner and Tomonari-Tuggle	1978	Kīahuna Complex	General Survey
Kikuchi	1979	Sheraton Kaua'i Hotel	Survey and Subsurface Testing
Connolly	1982	Kōloa-Po'ipū Bypass Road	Reconnaissance Survey
Ching	1983	Kukui'ula-Kualu, Alexander and Baldwin Lands	Reconnaissance Survey
Landrum	1984	Kukui'ula-Kualu, Alexander and Baldwin Lands	Reconnaissance Survey
Hammatt, Borthwick and Shideler	1985	Kōloa-Po'ipū Bypass Road	Survey and Subsurface Testing
Kikuchi	1985	Shoreline Improvements, Waiohai Hotel, Kiha Houna Heiau	Reconstruction
Kikuchi	1988	Pa'anau Sugar Camp	Reconnaissance Survey
Hammatt et al. (Hammatt, Borthwick, Shideler, and Stride)	1988	Kukui'ula Bay Planned Community	Inventory Survey
McMahon	1989	Kaua'i Fishponds	General Survey
Hammatt	1990	Pa'anau Housing Project	Inventory Survey
Hammatt	1991	Pō'ele'ele Stream - Waterline crossing	Archaeological Reconnaissance
Hammatt, Folk, and Stride	1991	Pō'ipulani Golf Course	Inventory Survey
Hammatt	1992a	Kīahuna	Inventory Survey
Hammatt	1992b	Po'ipū Road and Lāwa'i Road Junction	Archaeological Reconnaissance
Hammatt, Ida and Folk	1993a	Po'ipū Road 7.6-acre Parcel	Inventory Survey
Hammatt et al. (Hammatt, Ida, Folk, Shideler, and Colin)	1993b	Po'ipū Beach Park	Subsurface Testing and Monitoring

NAME	YEAR	LOCATION	STUDY TYPE
Creed, Ida and Hammatt	1995	Po'ipū Road	Inventory Survey
Bushnell and Hammatt	1996	'Ōmao Bridge, 'Ōmao Homestead	Archaeological Investigation
Hammatt, Creed, and Ida	1996	Waiohai Resort	Assessment Survey
McMahon	1996	Sheraton Kaua'i Hotel	Reconnaissance Survey
Ida, Creed, and Hammatt	1997	Po'ipū Bypass Road	Inventory Survey
Hammatt et al.	1998	Kukui'ula Planned Community Phase I	Data Recovery
Hammatt et al.	1999	Kukui'ula Planned Community Phase II	Data Recovery
Yorck, Shideler, and Hammatt	2002	Kaumuali'i Highway, Alexander and Baldwin Properties	Inventory Survey
Tulchin and Hammatt	2003	Eric Knudsen Trust Lands	Field inspection

> Our reconnaissance revealed that the most significant archaeological feature located within the study area is the extensive *'auwai* system. Remnants of this irrigation system were observed on both sides of Waikomo Stream . . . [This] network of watering canals proved to be the key to the success of the prehistoric Hawaiian Culture in turning these marginal lands into flourishing wet and dry agricultural fields. From information gathered from local informants and preliminary historical investigation of this area it is evident that the early commercial growers of sugar cane utilized the existing *'auwai* system. Gradually as more and more fields came under sugar cane production these replaced the wet and dry fields of an earlier day. Today the archaeological sites remaining stand as islands as these marginal cane lands were taken out of production and turned into pasture [Palama & Stauder 1973:4].

A survey by the ARCH in 1974 was conducted in the area encompassed by the sewage treatment plant to the west of the project area. A portion of a large agricultural complex was recorded. Ching, Palama, and Stauder conducted a surface survey for the ARCH of coastal lands (approximately 1000 acres) of the *ahupua'a* of Weliweli, Pā'ā, and Māhā'ulepū (Ching et al. 1974). Several important sites--specifically the Waiopili Heiau complex--were located, however extensive bulldozing and stone robbing had destroyed most of the surface features, making spatial analysis impossible.

Akihiko Sinoto conducted a reconnaissance survey of 400+ acres of Knudsen Trust Lands at Kōloa immediately to the west of the current project area. He recorded several features and suggested they were the northern remnants of Bennett's Sites 78, 79, 85 and 86. Sinoto located many sites with both habitation and agricultural features along the southern portion of the study area, from the sewage treatment plant to the Weliweli subdivision (Sinoto 1975).

In 1977, reconnaissance was undertaken to locate an *'auwai* that was reputed to run from Waikomo Stream to the area of the Prince Kuhio Hotel (Bordner 1977). A large *'auwai* was found, which corresponds to the major *'auwai* system assigned SIHP number 50-30-10-1934. A portion of an agricultural system to the north of the present study area was also described. In its lower section, the *'auwai* is built up into an aqueduct several feet above the surrounding ground surface; at present, this is a unique feature in the State of Hawai'i. Again, bulldozing and historic construction has damaged sections of the agricultural system, but there is no doubt that these sites are similar to those found in the study area.

In 1978, ARCH (Hammatt et al. 1978) conducted a survey of the Kiahuna area for Moana Corporation. A total of 460 acres of land was surveyed with extensive mapping and descriptive recording of a major complex of well-preserved nearly continuous and highly integrated agricultural and habitation features including long *'auwai* originating from Waikomo Stream.

William Kikuchi (1979) conducted a reconnaissance survey north of Po'ipū Beach Road, north of the current project area in 1979. Kikuchi found agricultural features and concluded that the area lay within the coastal fringe part of the agricultural and habitation zone that extended inland all the way to Kōloa town. A tidal pool, a railroad berm, and several stonewalls were also recorded in the area.

Francis Ching (1983) conducted a reconnaissance survey, and an historical investigation of 230+ acres of Alexander and Baldwin lands within the *ahupua'a* of Kōloa (west Kōloa) and Lāwa'i. According to Ching, three-fourths of the study area was bulldozed, with many rocks re-located, however, remnants of walls, *lo'i* (wetland cultivation), *'auwai*, terraces, and an historic railroad berm were still discernable. These remnants are evidence of the great expanse of the Kōloa Field System.

James Landrum (1984), of the Bishop Museum, conducted a reconnaissance survey of a 200+ acre portion of Kukui'ula. Landrum recognized that his survey area was once part of an extensive irrigated agricultural complex developed in the prehistoric period with superimposed historic-era occupation (Landrum 1984:24).

Hallett Hammatt, Douglas Borthwick, David Shideler, and Mark Stride (Hammatt et al. 1988) conducted an archaeological inventory survey in the 1000-acre proposed Kukui'ula Bay Planned Community north and west of the current project area. Fifty-eight archaeological sites were recorded, many associated with the Kōloa Field System. Two to three *heiau* were found, including the remains of Kamaloula Heiau.

William Kikuchi (1988) conducted a reconnaissance level survey of the former Pa'anau Sugar Camp, inland and west of the present project area. The camp was located just *makai* of the present day Kōloa Elementary School. The survey recorded a number of cement foundations, ditches, and portable historic artifacts. Kikuchi states that archaeologically the site is interesting because it contains remnants of an early (1910-1950) plantation camp, even though the vast majority of its structures have been destroyed or removed.

Hallett Hammatt (1990) conducted an inventory survey of a 4.7-acre parcel at the west end of Pa'anau Road near Kōloa town, northwest of the present project area. The historical segment of this report indicates the previous existence of the Pa'anau Camp, and a railroad and *'auwai* irrigation ditch which traversed the study area. However, the survey revealed the absence of any traces of pertinent features.

Hallett H. Hammatt (1991) carried out an archaeological reconnaissance for a proposed waterline stream crossing of Pōʻeleʻele Stream, north of Kōloa town, a significant distance to the northwest of the present project area. He noted extensive modern land modification and no significant findings.

Hallett H. Hammatt, William Folk, and Mark Stride (1991) conducted an archaeological inventory survey of 160 acres along the Kōloa-Weliweli Ahupuaʻa boundary. They located, mapped, described, and evaluated 75 sites and observed a wide range of site types. Their survey indicates that the Poʻipūlani project area was associated with the Kōloa Field System. This study is north of the current project area.

Hallett H. Hammatt (1992a) carried out an Archaeological Inventory Survey of a 3.8-acre property at Kīahuna, (TMK 2-8:014-026), but the entire parcel had been previously graded and there were no significant findings. This project is bounded by Poʻipū Road on the southeast and is northwest of the current project area.

Hallett H. Hammatt (1992b) carried out an Archaeological Reconnaissance of the Poʻipū Road and Lāwaʻi Road Junction near the mouth of Waikomo Stream, northwest of the current project area, but again there were no significant findings, owing to prior land disturbance.

Hallett Hammatt, Gerald Ida, William Folk, David Shideler and Brian Collin (Hammatt et al. 1993b) conducted an assessment survey, subsurface testing and monitoring at Poʻipū Beach Park in the *ahupuaʻa* of Kōloa, just south of the present project area. Wave action during Hurricane ʻIniki in 1992 had exposed a cultural layer (SIHP Site 50-30-10-745) which needed to be preserved and monitored during the reconstruction and restoration of the park. Auger testing (Hammatt et al. 1993b:11) revealed charcoal, and both traditional and historic midden and artifacts (i.e. basalt flakes and fragments, nails, glass, *kukui* shells, and mollusk shells). An historic cemetery (SIHP Site 50-30-10-1871), located in the middle of Poʻipū Beach Park, and other sections of the buried cultural layer beneath the park, were also monitored during the removal of several cement slabs, remnants of a pavilion, picnic tables, and barbecues. Three radiocarbon dates were determined for this layer: the earliest was A.D. 1282-1414 and latest ranged from A.D. 1678-1940 (*ibid*:52). The rich cultural layer, supported by radiocarbon dating, indicates that this shoreline occupation is contemporaneous with the development of the Kōloa Field System. This cultural layer is the "single largest coastal beach deposit in the *ahupuaʻa*...of Kōloa" (Hammatt et al. 1993b:65, 66) and greatly contributes to the information bank regarding the cultural development of the Kōloa district.

Victoria Creed, Gerald Ida and Hallett H. Hammatt (1995) reported on an inventory survey within a 1.4-mile corridor along the *mauka* side of Poʻipū Road (TMK 2-8-15, 16, 17 & 18) in the *ahupuaʻa* of Kōloa and Weliweli, north of the present project area. Three sites, including enclosures, a terrace, and the Kōloa-Weliweli boundary wall, survived previous bulldozing of the area and were understood as components of the Kōloa Field System.

Kristina Bushnell and Hallett H. Hammatt (1996) carried out an archaeological investigation of ʻŌmao Bridge in ʻŌmao Homestead, a significant distance northwest of the current project area. The only objects of historical interest noted were the existing bridge and features associated with an old railroad.

Hallett Hammatt, Victoria Creed, and Gerald Ida (1996) conducted an assessment survey of an exposed cultural layer in undisturbed sand deposits at Waiohai Hotel, west of the current

project area. This layer was disturbed by high wave action during Hurricane 'Iniki, which completely destroyed the associated reconstructed Kihouna Heiau (SIHP Site 50-30-10-80). Three charcoal samples from this layer were dated to A.D. 1430-1950. The exposed cultural layer supports the potential existence of widespread intact cultural areas along the general shoreline (Hammatt et al. 1996:36, 39).

Nancy McMahon, (April 1996) at the time an independent archaeological consultant, completed a reconnaissance survey west of the current project area. The purpose of the survey of TMK 2-08-16:3 (8.444 acres), part of the Sheraton Kaua'i Resort, was to report on damage caused by Hurricane 'Iniki. No surface sites or cultural deposits were reported. She noted a sandy deposit up to the foundations of the buildings on the eastern side of the project area near Lae o Kamilo. She suggested that the remnants of beach dunes could still exist and recommended monitoring of any construction in this area in case historic sites, including human burials, were uncovered.

Beginning in December of 1996, reconstruction of areas damaged by the hurricane began at the Sheraton Kaua'i Hotel (McMahon 1996). Excavations took place to construct new buildings on new concrete pads. An intact cultural layer, designated Layer III was uncovered. The cultural layer, Layer III, was a dark sandy layer. After grading of one Pad area was complete, human skeletal remains were found in the excavated material. During monitoring of the rest of the project, a total of ten subsurface features (Features B-K) were discovered. Six were fire pits, one was a stain, one was a concentration of fire-cracked rocks, one was a C-shaped structure, and one was a pig skeleton. Eight burials were also uncovered within Layer III. Six charcoal samples were submitted for radiocarbon age determination for Layer III. These ranged from 20+/- 70 BP (before present) to 540+/- 60 BP, indicating that the earliest possible date for the features was A.D. 1400. The site was west of the current project area.

Gerald Ida, Victoria Creed and Hallett H. Hammatt (1997) conducted a reconnaissance survey on a 1.2 mile corridor of a proposed bypass road within the *ahupua'a* of Kōloa and Weliweli (TMK 2-8-02:3, 2-8-03:1, 2-8-04:1, 2-8-05:2) that had previously been bulldozed. This road extended from an existing bypass road at the coast to north of Kōloa town, north of the present project area. This survey did not reveal any archaeological sites, and further study was not recommended.

CSH (Hammatt et al. 1998) reported on data recovery of the Kukui'ula Planned Community Project Phase One area encompassing approximately 219 acres. The project included excavations at 20 different sites, which encompassed 64 individual features. There were a total of 212 excavation units (212 m^2) and 19 backhoe trenches (only 14 backhoe trenches were chosen for study). Large quantities of midden (approx. 23.7 kg) and artifacts (10,635 items) were recovered and are reported on. The artifacts include a wide range of types with both indigenous (2,592 items) and historic (8,043 items) represented. Radiocarbon (C14) dates ranged from ca. A.D. 1050 onward. The earliest date came from the habitation/burial cave SIHP Site 50-30-10-1927A. In addition to the habitation sites and features dated, seven dating samples from agricultural features were also analyzed. The study is northwest of the present project area.

CSH (Hammatt et al. 1999) reported on data recovery work just *makai* and southwest of Kōloa Town on the west side of Waikomo Stream in the northeastern portion of the Kukui'ula Planned Community Phase II Area. The study area is comprised of approximately 33 acres and has been used as a buffer zone between cane lands/pastures and the residential lots bordering

Po'ipū Road. While some ten land commission awards lie partially or entirely within the project area, most of these properties were bulldozed in the course of sugar cane cultivation. There were, however, areas that appeared undisturbed by sugar cane cultivation or heavy machinery. Excavations were conducted within five archaeological sites (13 features). These excavations yielded 264.8 g of midden; 53 indigenous artifacts (including 43 volcanic glass flakes, 9 basalt flakes, and one coral manuport); and 877 late-historic artifacts (e.g. glass, metal, ceramics, plastic, leather, and slate). Twelve charcoal samples were dated, and ranged from A.D. 1250-1410 to A.D. 1800 to present. This study lies northwest of the present project area.

Jesse Yorck, David Shideler, and Hallett Hammatt (2002) conducted an inventory survey of three proposed well sites near Pīwai Reservoir north of 'Ōmao Homesteads, located a significant distance northwest of the current project area. No archaeological sites were identified in the project area or vicinity.

In 2003, an archaeological survey was conducted along the coast in the Sheraton Kaua'i Hotel property, west of the current project area (O'Hare et al. 2003). Saltpans, abraded areas, and possible bait cups were recorded along the rocky coast; these may correspond to Bennett's Site 76 "Salt pans, east of Waikomo Stream along the shore" (Bennett 1931:98). Five features were noted in the interior section of the project area, two platforms, one mound, one terraced area, and one enclosure. The two platforms were later partially dismantled to test for burials. No human remains or any other cultural materials were recovered from the features.

B. Summary of Previous Archaeology Specific to Current Project Area

Archaeological sites in the project area were originally located and described as part of the archaeological survey in support of the proposed Kiahuna Golf Village project by the Archaeological Research Center Hawai'i (ARCH) (Hammatt et al. 1978) (Figure 5). An archaeological report was completed; however its status with the State Historic Preservation Division (SHPD) as an accepted inventory survey report is unclear. A total of 583 features were recorded in a total surveyed area of 460 acres. The current project area was covered as the *makai* (southern) portion of the Kiahuna survey area designated Area C. Sites were located and described with no subsurface testing. Both habitation and agricultural sites were located in the current project area, including stone enclosures, platforms, *'auwai* (irrigation ditches), and terraced plots. Selective preservation or data recovery was recommended for sites in the Kiahuna Golf Village project area as "they represent a highly significant cultural resource of substantial value for archaeological research and interpretation" (Hammatt et al. 1978).

The eastern portion of the current project area was resurveyed by CSH as part of the archaeological survey for the proposed Kōloa-Po'ipū Bypass Road project (Hammatt et al. 1985) (Figure 5). Archaeological work was completed, however the plans for the road alignment were abandoned and a completed survey report was never submitted to SHPD. A total of 47 previously identified and undocumented sites were located and described, including structures of both habitation and agricultural function associated with the large irrigated agricultural and habitation complexes described by Hammatt et al. (1978). Ten sites, including enclosures and C-shaped structures, were selected for subsurface testing, eight of which are in the current project area. "The testing showed only sparse evidence of occupation with no apparent cultural stratification" (Hammatt et al. 1985:i). The best examples of sites were recommended for either preservation or data recovery.

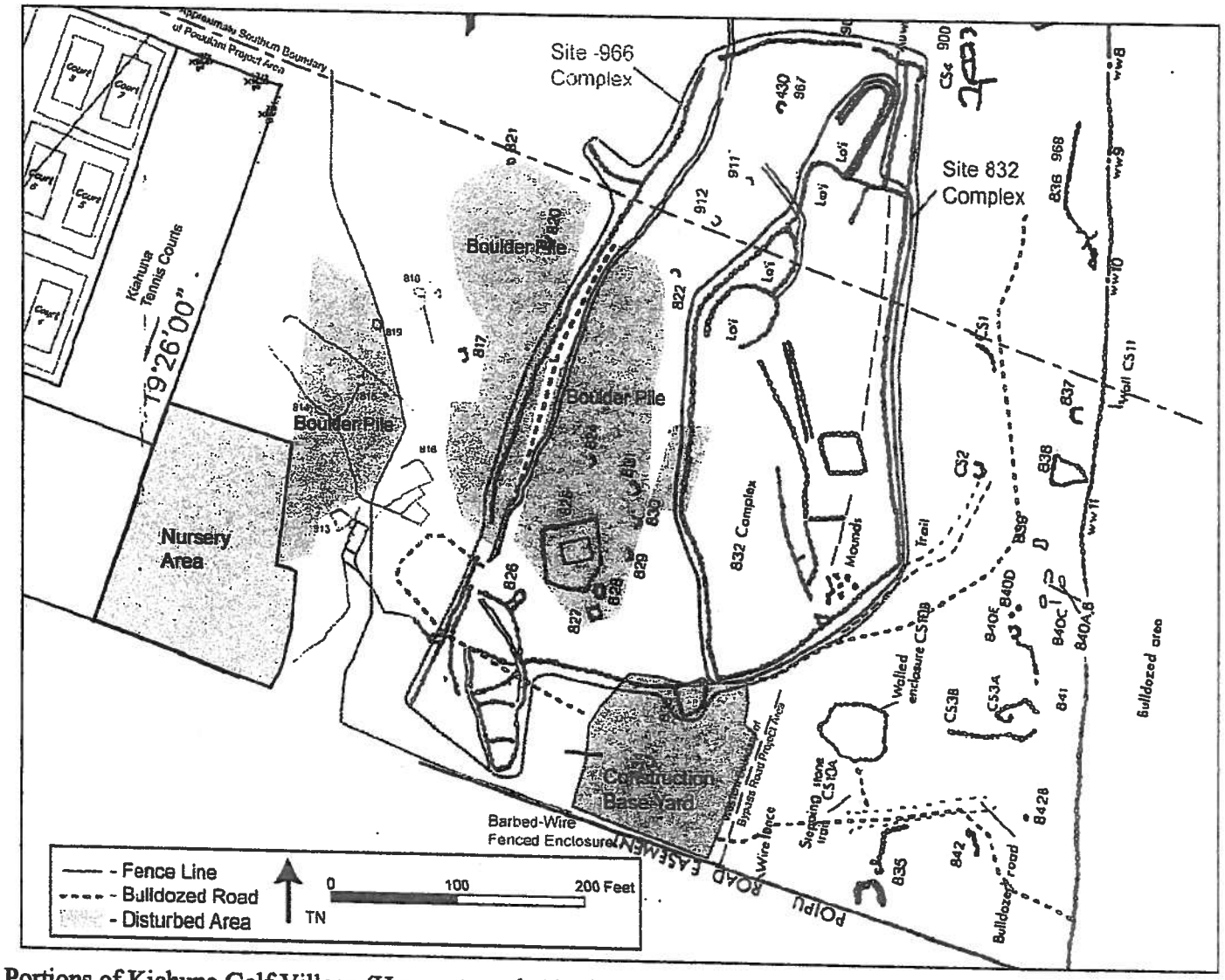


Figure 5. Portions of Kiahuna Golf Village (Hammatt et al. 1978) and Kōloa-Po'ipū Bypass Road (Hammatt et al. 1985) archaeological site maps, and Kodani & Associates survey map showing previously recorded archaeological sites (some of which are no longer intact) and disturbed areas in the project area

The area immediately *mauka* (north) of the current project area was resurveyed as part of the archaeological inventory survey in support of the proposed Po'ipūlani Golf Course project (Hammatt et al. 1991). This report was reviewed and accepted by SHPD along with a data recovery and preservation plan for the property (Hammatt 1991). A total of 75 sites were located and described, including structures of both habitation and agricultural function associated with the large irrigated agricultural and habitation complexes described by Hammatt et al. (1978). Sites previously identified in the Kiahuna Golf Village and Kōloa-Po'ipū Bypass Road projects were relocated and assigned state site numbers. Preservation was recommended for "major sites," and "all other sites which cannot be incorporated into the development should be subjected to a program of data recovery including subsurface testing and excavation" (Hammatt et al. 1991:i). The Po'ipūlani Golf Course inventory survey did not cover any portions of the current project area, though descriptions and recommendations were made concerning SIHP Site 50-30-10-966 (complex), which extends into the current project area.

In 2003, Tulchin and Hammatt inspected the current project area. Pedestrian inspection of the project area was accomplished by following along the borders of disturbed areas including large boulder piles, fenced enclosures, and bulldozed roads using GPS. Existing sites in the vicinity of the various disturbed areas were located and their condition assessed. Sites within the interior of the GPS surveyed boundaries of disturbed areas had either been covered or destroyed. The collected GPS data was overlain on archaeological site maps associated with the Kiahuna Golf Village project (Hammatt et al. 1978) and the Kōloa-Po'ipū Bypass Road project (Hammatt et al. 1985) (see Figure 5). Table 2 contains a summary of all sites/features previously identified in the project area, including recommended treatment provided in earlier studies, and the status of these as determined in the 2003 study (see Tulchin and Hammatt 2003).

During the 2003 inspection, in the *makai* (southern) portion of the project area, a barbed wire fenced enclosure (possibly a corral for cattle) was observed (see Figure 5). The interior of the fenced enclosure was grubbed and sites 833 (enclosure) and 834 (C-shaped structure) were presumably destroyed in the process. No recommended treatment had been specified for sites 833 and 834.

In the central portion of the project area, two piles of large basalt boulders were observed. The two piles were approximately 3-5 m in height and were separated by a bulldozed road. The eastern boulder pile had been placed over features 824 (C-shaped structure), 825 (platform), 827 (enclosure), 828 (enclosure), 829 (C-shaped structure), 830 (enclosure), and 831 (C-shaped structure), which were presumed destroyed in the process. A portion of the interior stone wall of State Inventory of Historic Places (SIHP) SIHP Site 50-30-10-966 (ARCH site 832; complex) was also disturbed by bulldozing activities in the area. Each of these eight features are components of the SIHP Site -966 agricultural/habitation complex. SIHP Site -966 is described as a field system containing "prehistoric field walls in the interior but was modified in historic times with the addition of a surrounding cattle wall which encloses the fields" (Hammatt et al. 1991:110). A portion of the *'auwai* that runs along the western edge of SIHP Site -966 is also assumed to have been destroyed. Preservation with interpretation had been recommended for SIHP Site -966, including all features within the surrounding stone wall, based on criteria C and D of the National and State Registers of Historic Properties (Hammatt et al. 1991; Hammatt 1991).

The western boulder pile in the central portion of the project area had been placed over sites 820 (C-shaped structure). 821 (enclosure), and a portion of the perimeter wall of SIHP -966

(complex) (see Figure 5). These sites were presumably destroyed in the process. No recommended treatment had been specified for sites 820 and 821.

In 2003, the western portion of the project area was being utilized as a base yard for a landscaping (nursery) operation (see Figure 5). A barbed-wire fence separates the nursery from the cattle grazing lands. The cleared nursery areas generally abut the fence line. Site 813 (platform & associated C-shaped structures), while located in the nursery lands, was spared from the bulldozing activities. Sites 814 (enclosure), 815 (C-shaped structure), and 819 (enclosure) were located within the nursery's operational area and are presumably destroyed. No recommended treatment had been specified for these sites and, although the site area has been compromised, site 813 was found to be in good condition and is likely to have significant archaeological research value.

The bulldozed access road that runs between the two large boulder piles *makai* (south) of the fenced enclosure, passed through the *makai* (southern) portions of SIHP -966 (complex). The disturbed area was previously described as a "series of wet agricultural fields descending in five terraces to the south, and fed directly by an *'auwai* entering the system from the north" (Hammatt et al. 1978:82). Bulldozed access roads were also observed in the eastern portion of the project area, though no sites appeared to be impacted.

IV. PREDICTIVE MODEL

The information gathered from legendary inferences, traditional accounts and recent history of Kōloa Ahupua'a provide a good background to produce a predictive model for this project area. The legends indicated the existence and importance of water in Kōloa. The myths also indicated Ma'ulili Pool in Waikomo Stream as a traditional cultural significant place in Kōloa area and associated with irrigated agriculture or field system.

From pervious archaeological studies and historic accounts it appears that habitation and intensive irrigated agriculture were widespread in central and coastal Kōloa utilizing the opportunity to develop an extensive irrigated complex (the Kōloa Field System) off of Waikomo Stream. As the Judd (1935) account asserts, it is likely that low inland areas were used for less intensive cultivation patches of sweet potato, *pia*, and *wauke* and the gathering of *hala, kukui* and other resources. The coastal portion would be a focus for permanent habitation, collection of marine resources, ceremonial activities, and burials.

Kōloa Ahupua'a was also described by early archaeologists as both "in a high state of cultivation" and the evidence of field systems (*loi*) and irrigation channels (*auwai*) have been found throughout the sections of Kōloa. The project area is located approximately 400 m inland from the coast and it is likely that both habitation and agricultural features would be present there.

There have been numerous archaeological studies conducted in Kōloa Ahupua'a however, five of these studies are in close proximity and adjacent to the subject property and will be discussed. Hammatt (1992a) conducted an inventory survey on a 3.8 acre parcel and noted no significant findings due to this parcel had been previously graded. Hammatt et al. (1993a) carried out an inventory survey and identified two previously recorded sites (Old Railroad Grade, and SIHP Site 3758 a house platform or possible *heiau)* and three new sites (habitation and agricultural complexes). These sites are remnants of traditional *auwai*, walls, fields, enclosures and habitation platforms. These two areas were situated approximately 200 m west of the subject parcel. An archaeological assessment (Tulchin and Hammatt 2003) was conducted on the current project area, locating 34 archaeological sites. During the assessment, it was noted that many sites had been modified by rock collectors and that several of the sites were covered in boulder piles (see Figure 5). These sites were assumed to have been destroyed.

Hammatt et al. (1978) conducted a survey in the Kiahuna lands area and identified 583 archaeological sites including 175 enclosures, 108 house platforms, *'auwai,* fields, terrace plots, and rock mounds. The current project area was designated "Area C" in which 27 sites were recorded. In 1985, Hammatt et al. conducted an archaeological inventory survey at the same area of the Kōloa-Po'ipū Bypass Road. The survey with subsurface testing identified a total of 47 archaeological features. These findings were consistent with what have been recorded by Hammatt et al. (1978).

In 2003, Tulchin and Hammatt inspected the current project area. Sites within the interior of the GPS surveyed boundaries, labeled "Disturbed Area", had either been covered or destroyed.

In the central portion of the project area, two piles of large basalt boulders were observed. The two piles were approximately 3-5 m in height and were separated by a bulldozed road. The eastern boulder pile had been placed over features 824 (C-shaped structure), 825 (platform), 827 (enclosure), 828 (enclosure), 829 (C-shaped structure), 830 (enclosure), and 831 (C-shaped

structure), which were presumed destroyed in the process. A portion of the interior stone wall of SIHP Site 50-30-10-966 (ARCH site 832; complex) was also disturbed by bulldozing activities in the area. Each of these eight features are components of the SIHP Site -966 agricultural/habitation complex.

The western boulder pile in the central portion of the project area had been placed over ARCH sites 820 (C-shaped structure), 821 (enclosure), and a portion of the perimeter wall of SIHP -966 (complex) (see Figure 5). These sites were presumably destroyed in the process.

Thus, although a broad range of site types is known to have existed within and in the general vicinity of the current project area, many sites had been modified and/or destroyed by rock collecting and bulldozing activities (see Figure 5).

V. RESULTS OF FIELDWORK

A. Impacts to No Longer Existing Sites

During the 2003 archaeological assessment of the parcel (Tulchin and Hammatt, 2003) it was observed that the known locations of several previously documented archaeological sites were covered by large boulder piles, including ARCH Sites 814, 815, 819-821, 824, 825, 827-831, 834, 838, and portions of SIHP Site 50-30-10-966 (see Figure 5, Table 2). The boulder stockpiles had been created sometime after 1985. The total impact to these previously identified sites was unclear at the time of assessment.

Archaeological monitoring was conducted by CSH, at the request of SHPD/DLNR Kaua'i Archaeologist Nancy McMahon during the removal the boulder stockpiles. Work began on Oct. 12, 2004 and was completed on Nov. 8, 2004.

During the course of monitoring, none of the sites in question were encountered, as the sites were bulldozed prior to the creation of the stockpiles (see Figure 5). Boulders in the stockpile still had a red patina, indicating that the piling activities were taking place until very recently. Thus, based on observations during archaeological monitoring, ARCH Sites 814, 815, 819-821, 824, 825, 827-831, 834, including associated subsurface deposits, no longer exist due to the bulldozing and boulder stockpiling activities.

In addition to the twelve sites completely destroyed by bulldozing and boulder stockpiling activities, six additional sites [SIHP Site -3786 (ARCH 833), -3788 (ARCH 835), -3792 (ARCH 839), -3793 (ARCH 840), ARCH 841, and -3795 (ARCH 842)] were not located during the present study. It is presumed that these sites were destroyed during previous road construction, which occurred prior to the present study.

B. Research Design

Of the 33 sites known to have existed in the project area, 18 have been destroyed. Eight of the sites and features had been previously tested (Hammatt et al. 1985). Field inspections were made of these sites to determine significance but they were not tested again.

This leaves 16 intact sites or features previously untested: 9 associated with C-Shapes, 5 with enclosures, 3 with platforms, 5 with walls, 2 with storage features, one with a trail, and one complex of features (site -966) that also includes agricultural terraces, mounds, and an *'auwai* (Table 3). During the inventory survey, a sample of features was selected for subsurface testing through hand excavation. The selections were made based on the state of preservation of the feature, the potential for yielding information, testing a representative sample of site and feature types, as well as by function.

Testing in other areas of Kōloa has indicated that few, if any, burials are located in surface structures; rather lava tubes and sand dunes have been documented as locales of choice. However the testing of platforms, mounds, and terraces, while addressing presumed habitation and agricultural functions, also served to test for burials. Six units were excavated within the project area. Subsurface testing focused on C-shapes, enclosures, platforms, and mound and terrace features. Two units were placed in C-shaped structures. one in an enclosure, one in a platform, and two in agricultural terraces.

Table 2. Previously Documented Sites Destroyed Prior to or Unlocated During the Inventory Survey

ARCH Site	SIHP Site # 50-30-10-	CSH Site #	Type	Function	Previous Work Done.			Present State (2004)	Recommendations (Significance)
					Kiahuna (1978)	Kōloa-Pō'ipū Bypass Road (1985)	Po'ipūlani (1991)		
814			Enclosure	Habitation	located & described			Destroyed, (in nursery)	No longer significant
815	3768		C-shape	Habitation	located & described			Destroyed, (in nursery)	No longer significant
819			Enclosure	Habitation	located & described			Destroyed, (in nursery)	No longer significant
820			C-shape	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
821			Enclosure	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
824			C-shape	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
825			Platform	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
827			Enclosure	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
828			Enclosure	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
829			C-shape	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
830			Enclosure	Habitation	located & described			Destroyed, (boulder pile)	No longer significant
831			C-shape	Habitation	located & described			Destroyed, (boulder pile)	No longer significant

ARCH Site	SIHP Site # 50-30-10-	CSH Site #	Type	Function	Previous Work Done			Present State (2004)	Recommendations (Significance)
					Kiahuna (1978)	Koloa-Po'ipu Bypass Road (1985)	Po'ipulani (1991)		
833	3786		Enclosure	Habitation	located & described			Destroyed, (construction base yard)	No longer significant
834			C-shape	Habitation	located & described			Destroyed, (construction base yard)	No longer significant
835	3788		C-shape	Habitation	located & described	located & described		Destroyed by rock collecting	No longer significant
839	3792		Enclosure & assoc. c-shaped structure	Habitation	located & described	located & described		Destroyed by rock collecting and bulldozing	No longer significant
840	3793		Complex		located	located, described, & tested		Destroyed by rock collecting and bulldozing	No longer significant
841			Mound					Destroyed by rock collecting	No longer significant
842	3795 A		Wall & 2 c-shaped shelters	Habitation	located & described	located, described, & tested		Destroyed by bulldozing	No longer significant

C. Site Descriptions

A total 16 sites were identified in the project area. Each site and individual component feature was documented during the inventory survey, including descriptions of the formal site/feature type, metric dimensions, quantity, function, presence of cultural material, potential for subsurface cultural deposits and previous site numbers. Site type was designated based on physical attributes of the features within the site while site function was based on perceived use of the collective features within the site. Figure 6 shows an overall project map with all of the plotted sites within the project area. Table 3 below, lists all sites with columns for SIHP Site, previous ARCH site number, type, function, description of previous work done, and current condition.

Table 3. Sites Relocated During Present Inventory Survey

SIHP Site # 50-30-10-	Previous ARCH or CSH Site #	Type	Function	Archaeological Work Accomplished				Condition (2004)	Recommendations (Significance)
				Kiahuna (1978)	Koloa-Po'ipū Bypass Road (1985)	Po'ipūlani (1991)	Current study		
966	ARCH 832	Complex	Agriculture and habitation	Located & described	Located & described as - 832 complex	Located & described	Located & described	Remnant	Preserve remnant (C, D)
3766	ARCH 813	Wall, C-shapes and Mound	Habitation	Located & described			Located, described, & tested	Remnant	Data recovery (D)
3769	ARCH 816	Walls, Terrace, Enclosure and Mound	Habitation	Located & described			Located & described	Remnant	Data recovery (D)
3770	ARCH 817	C-shape	Habitation	Located & described			Located, described,	Remnant	Data recovery (D)

SIHP Site # 50-30-10-	Previous ARCH or CSH Site #	Type	Function	Archaeological Work Accomplished				Condition (2004)	Recommendations (Significance)
				Kiahuna (1978)	Kōloa-Poʻipū Bypass Road (1985)	Poʻipūlani (1991)	Current study		
							& tested		
3771	ARCH 818	Mound	Habitation	Located & described			Located & described	Remnant	No further work (D)
3775	ARCH 822	C-shape	Habitation	Located & described			Located & described	Remnant	No further work (D)
3779	ARCH 826	Enclosure	Storage	Located & described			Located & described	Remnant	No further work (D)
3785	ARCH 832	Large complex of features	Agriculture	Located & described	Located & described	Located & described, included in -966 complex	Located, described, & tested	Partially destroyed remnant	Data recovery (D)
3790	ARCH 837	C-shape	Habitation	Located & described	Located, described, & tested		Located & described	Intact	Data recovery (D)
3791	ARCH 838	Enclosure	Habitation	Located & described	Located, described, & tested		Located, described, & tested	Partially disturbed	Data recovery (D)
3896	CSH 1	Wall	Agriculture		Located & described		Located & described	Remnant	No further work (D)
3897	CSH 2	C-shape	Habitation		Located & described		Located & described	Remnant	Data recovery (D)
3898	CSH 3	Mound	Habitation	Located	Located & described		Located & described	Remnant	No further work (D)

SIHP Site # 50-30-10-	Previous ARCH or CSH Site #	Type	Function	Archaeological Work Accomplished				Condition (2004)	Recommendations (Significance)
				Kiahuna (1978)	Koloa-Po'ipū Bypass Road (1985)	Po'ipūlani (1991)	Current study		
3899	CSH 10B	Enclosure	Agriculture		Located & described		Located & described	Remnant	Data recovery (D)
3900	CSH 11	Wall	Probable *ahupua'a* boundary	Located	Located & described		Located & described	Mostly intact	Preserve (C, D)
3905	New site	C-shapes and terrace	Habitation				Located, described, & tested	Mostly intact	Data recovery (D)

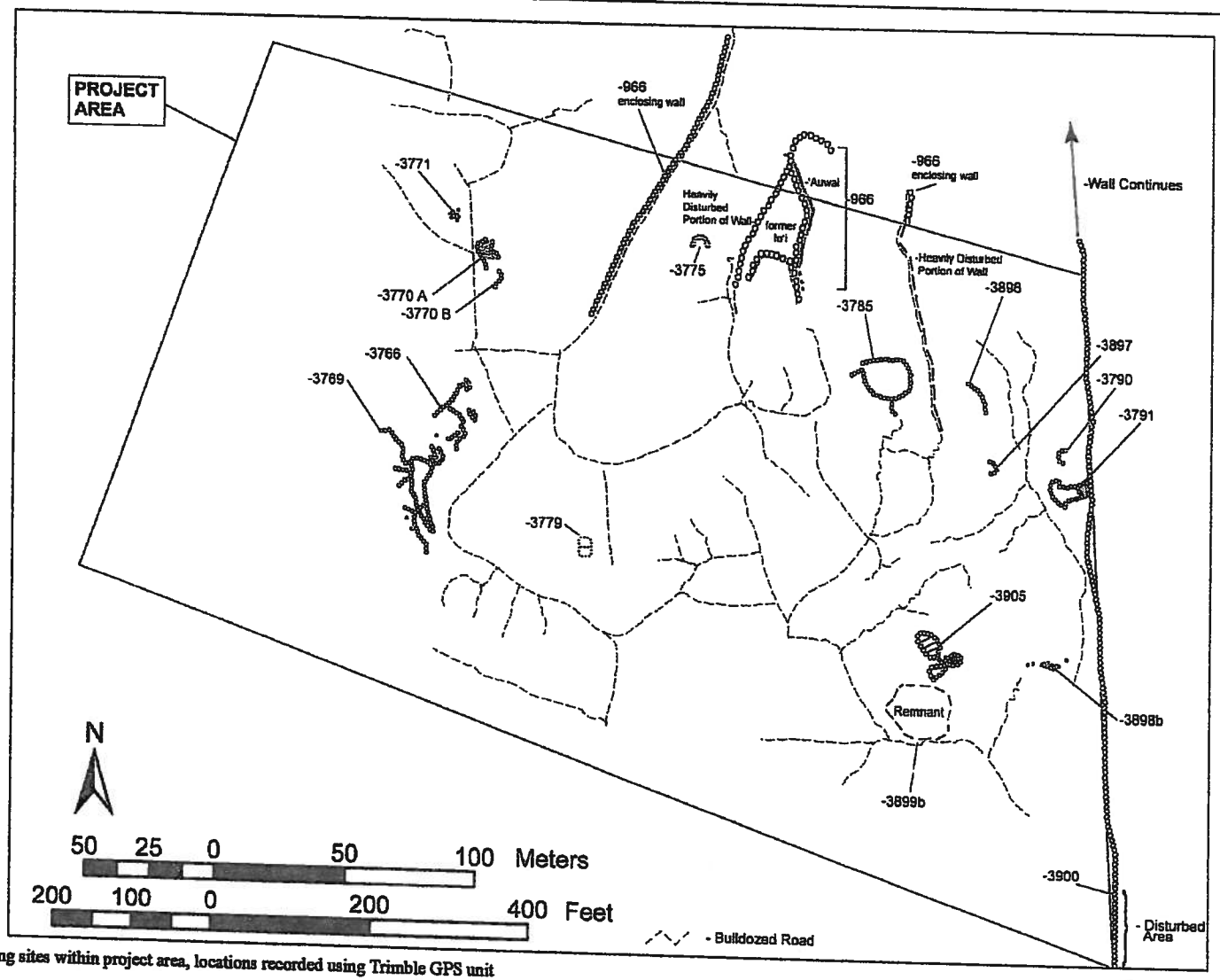


Figure 6. Map of remaining sites within project area, locations recorded using Trimble GPS unit

SIHP SITE	**50-30-10-966**
FUNCTION:	Habitation and Agriculture
SITE TYPE:	Complex
TOTAL FEATURES:	Two Features and One Complex Remaining
DIMENSIONS:	75 m by 1.25 m

DESCRIPTION: Approximately one third of this complex lies outside of the project area to the north. The -966 complex includes the previous ARCH 832 complex. This site has been heavily impacted by modern rock collecting and bulldozing within the project area. Only portions of this complex remain intact within the project area, and are located near the northern boundary of the project area. Portions of the complex that are located outside (*mauka*) of the project area (to the north) are still intact.

Within the project area, near the northern boundary, approximately 75 meters of the western stone wall that encloses the complex is still relatively intact, although it has been moderately impacted by rock collecting. The southern section of the complex enclosure wall has been obliterated by a bulldozed road.

Within the project area, near the northern boundary, a *lo'i* wall and an adjacent *'auwai* (that runs along the eastern side of the wall) have been somewhat impacted by a bulldozed road and are not continuously traceable (see Figure 6). The southern section of the wall has been obliterated by a bulldozed road. The enclosed agricultural fields and miscellaneous walls in the southwest corner of the complex have been all but destyroed by rock collection. Only a few discontinuous amalgamations of basalt cobbles are left.

SIHP SITE	**50-30-10-3766**
FUNCTION:	Habitation
SITE TYPE:	Wall, C-Shapes and Mound
TOTAL FEATURES:	6
DIMENSIONS:	51.3 m by 24.9 m

DESCRIPTION: Site -3766 is an interconnected complex of stacked walls, C-Shapes and a mound. Feature A is a wall measuring 18.8 m by 2 m; it is stacked two tiers high and is constructed of medium to large basalt boulders. Feature B is a C-shape measuring 4.7 m by 4.3 m, stacked two tiers high and constructed of small to large basalt boulders. Feature C is a C-shape measuring 12 m by 7 m; the feature is stacked with 3 tiers of basalt cobbles to boulders. Feature D is a mound constructed of small to large basalt boulders. It measures 3.5 m by 3 m The site is in fair to good condition. (Figure 7)

SIHP SITE	**50-30-10-3769**
FUNCTION:	Habitation
SITE TYPE:	Walls, Terrace, Enclosure and Mound
TOTAL FEATURES:	4
DIMENSIONS:	28.4 m by 20.5 m

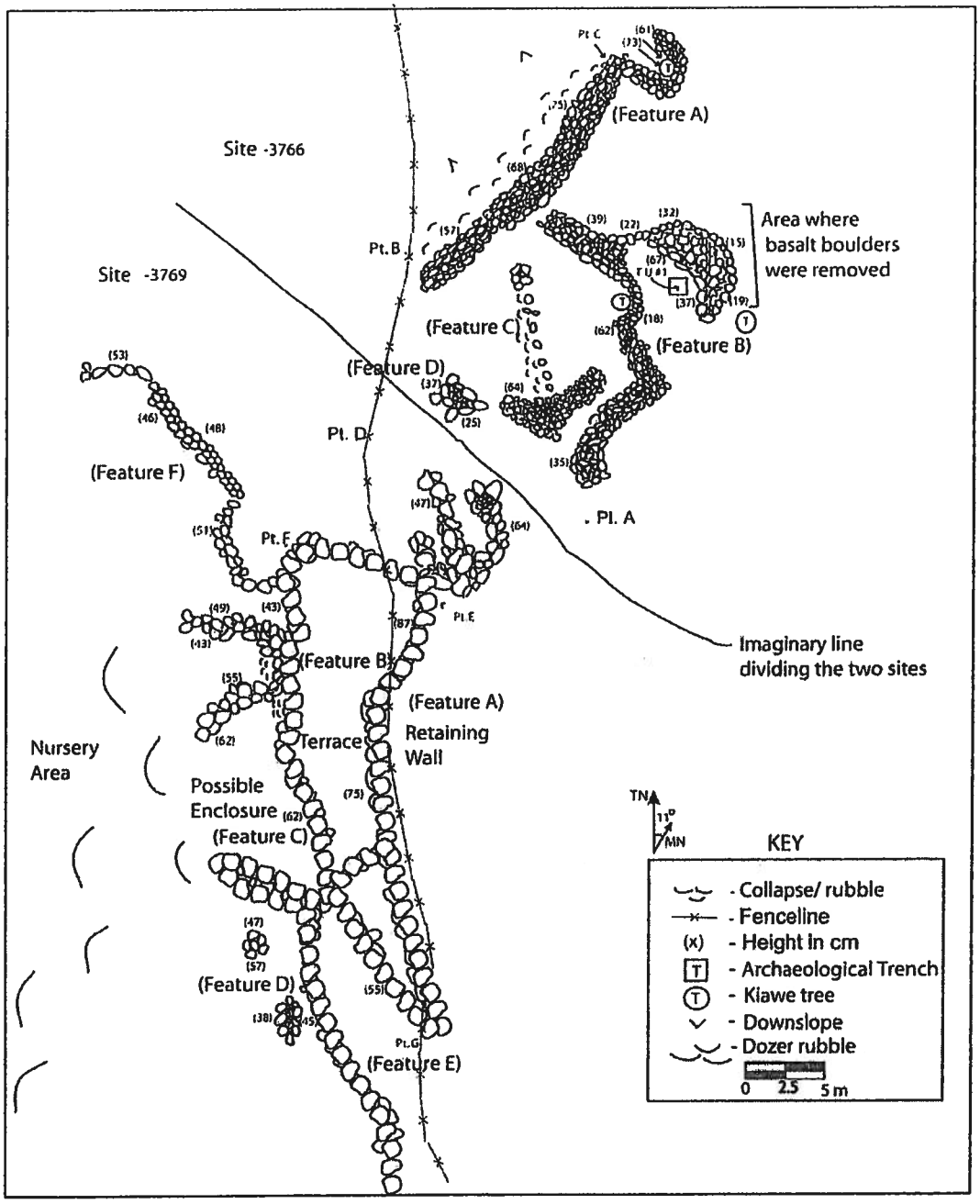


Figure 7. Plan View of SIHP Site 50-30-10-3766 and -3769

DESCRIPTION: SIHP Site 50-30-10-3769 is a habitiation complex that consists of: (Feature A) a retaining wall, (Feature B) terrace, (Feature C) an enclosure (Feature D) a mound and (Features D & F) walls. Feture A is a retaining wall. The retaining wall measures 35.7 meters in length and 0.7 meters in thickness. It is constructed of small to large basalt boulders stacked two to five courses high to a maximum height of 0.87 meters. East of the retaining wall is a level area which consists of soil and vegetation. There is a 31.0 by 8.0 meter terrace that abutts the west end of the retaining wall (Feature B). The retaining wall of the terrace is constructed of small to large basalt boulders stacked two to four courses high to a maximum height of 62 cm. The interior surface of the terrace is level and consists of soil and vegetation. At the west end of the terrace are four walls (Features E and F).

The walls vary from 18.3 to 6.7 meters in length and 0.5 to 1.8 meters in thickness. All the walls are constructed of small to large basalt boulders stacked one to four courses high. These walls might have been part of a structure at one time, but due to the bulldozed area on the west side of the complex in the Kaua'i Nursery area, its not discernable. There is a 3.7 meter by 1.7 meter oval-shaped mound at the south western end of this complex, and it's constructed of small to large boulders stacked one to three courses high with a maximum height of 0.45 meters. Small basalt cobbles are used to fill in the spaces of the boulders. The site is in fair condition (see Figure 7).

A single excavation, Test Unit 1, was completed at Site -3769. 119.4 g of midden was recovered, reflecting habitation occupation of the site.

SIHP SITE **50-30-10-3770**

FUNCTION: Habitation

SITE TYPE: C-Shape, Modified Outcrop Terrace

TOTAL FEATURES: 2

DIMENSIONS: (Feature A) 6 m by 6 m, (Feature B) 8 m by 9 m

DESCRIPTION: Feature A is a C-shape that has been reduced to a remnant by rock collecting. Nearly the entire wall that forms the site has been removed. Remnants remaining consist of two small piles of basalt cobbles, apparently former wall fill, and a few boulders which mark the two ends of the C-shape wall. A bulldozed road passes adjacent to the site on the SW side, apparently used for access by the rock collectors. Even though this site is only a remnant, test excavation potential remains good. Strategic location of any future excavations is still possible as the footprint of the former structure remains fairly discernable. No cultural material was observed.

Feature B is a possible habitation complex that consists of a modified outcrop and a terrace (Figure 8). The 4.7 by 3.7 meter modified crop is constituted of small to large basalt cobbles stacked one to three courses high between the spaces of the natural bedrock boulder outcrop. The maximum height of the modified outcrop is 0.75 meters. The modification that was done to this outcrop was similar to that of a terrace or a retaining wall. The interior surface of this "terrace-like" outcrop is level and consists of loose soil and vegetation. The modified outcrop abutts the west and south face of a large bedrock boulder outcrop. Just west of the modified outcrop is a 8.0 by 7.4 meter terrace. The retaining wall of the terrace is constructed of "mound-like" structures that most likely connected at one time. The "mound-like" structures in the retaining walls are

constructed of small to large basalt boulders and cobbles stacked ont to three courses high to a maximum height of 0.62 meters. The interior surface is level and consists of loose soil, a few large basalt boulders and vegetation. There are several roads to the west of the terrace that most likely contributed to the damage to the structure. The site is in fair to poor condition (Figures 8-10).

Two test units, Test Unit 2 and 3, were completed at Site -3770.Two volcanic glass flakes were recovered from Test Unit 2 (-3770 A), and 54.1 g of midden was recovered from Test Unit 3 (-3770 B).

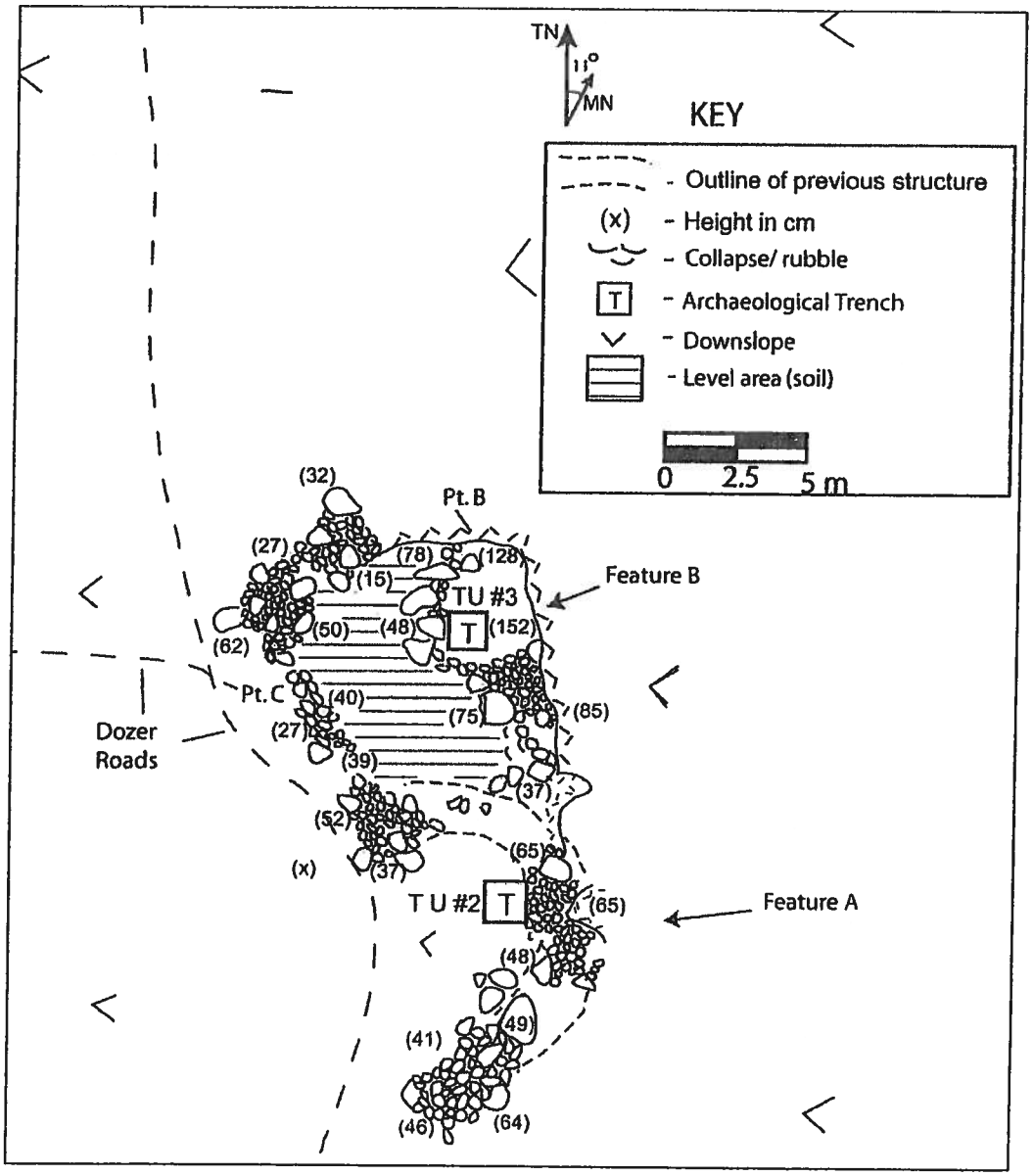


Figure 8. Plan View of SIHP Site 50-30-10-3770

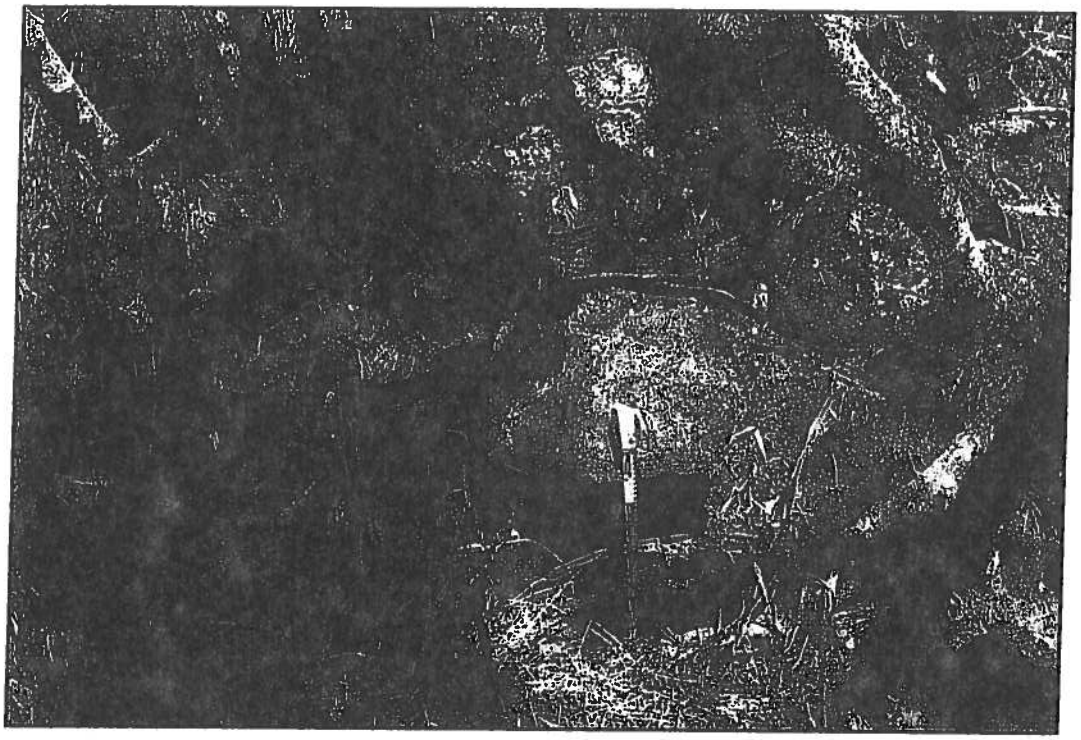


Figure 9. SIHP Site 50-30-10-3770, remnant of Feature A, view north

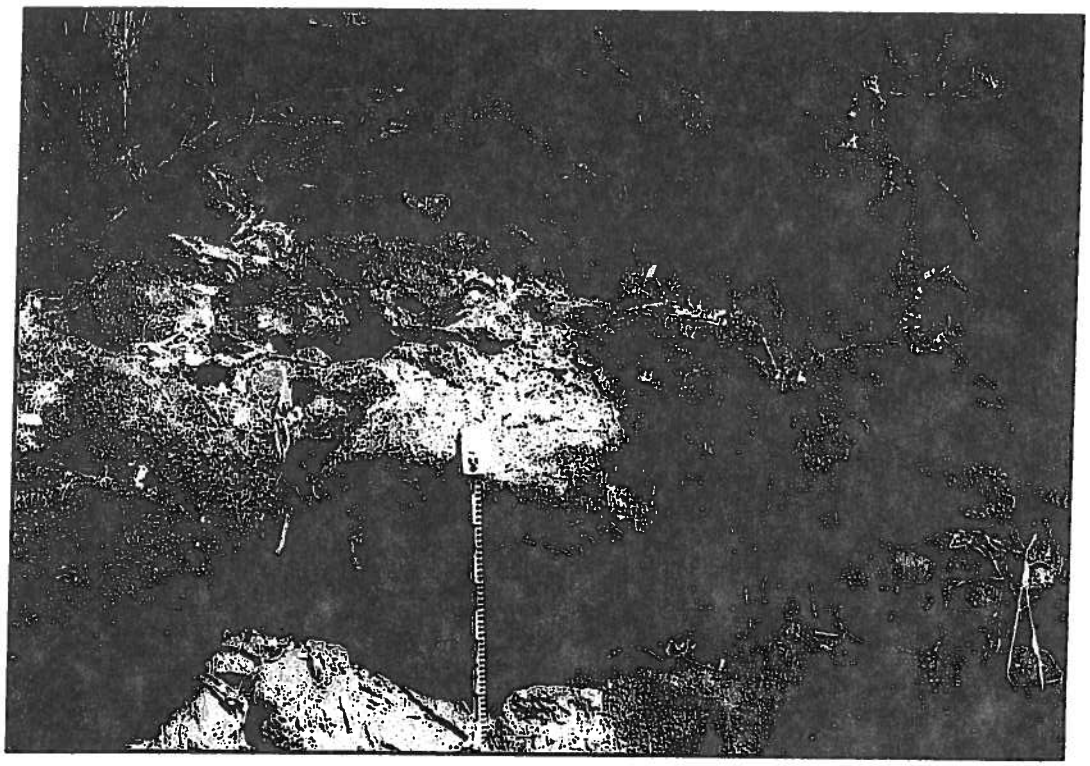


Figure 10. SIHP Site 50-30-10-3770, remnant of Feature B, view east

SIHP SITE **50-30-10-3771**
FUNCTION: Habitation (Remnant)
SITE TYPE: Former C-shape
TOTAL FEATURES: 1 (Remaining)
DIMENSIONS: 2 m by 3 m

DESCRIPTION: Site -3771 was formerly a C-shape (Hammatt et al. 1978). This site has been essentially destroyed by a bulldozed road, which passes near the SW side of SIHP Site 3770 (ARCH 817). All that remains of this site is a small amorphous amalgamation of basalt cobbles with a few boulders. It is impossible to determine what portion of the site this represents. No cultural material was observed. The excavation potential of this site is poor, as strategic placement of excavation trenches is difficult. Original site decriptions and measurements aree found in 1978 Kiahuna Golf Village Area Report.

SIHP SITE **50-30-10-3775**
FUNCTION: Habitation (Remnant)
SITE TYPE: C-shape
TOTAL FEATURES: 1 (Remaining)
DIMENSIONS: 2.m by 2.75 m

DESCRIPTION: This C-shape has been reduced to a remnant by rock collecting (see Figure 6). Essentially all of the boulders have been removed from the structure leaving a linear mound of cobbles in the shape of a "C." The footprint of the structure is still discernable, so excavation potential is good. The western edge of the structure is less than 1 m away from the eastern boulder stockpile in the project area.

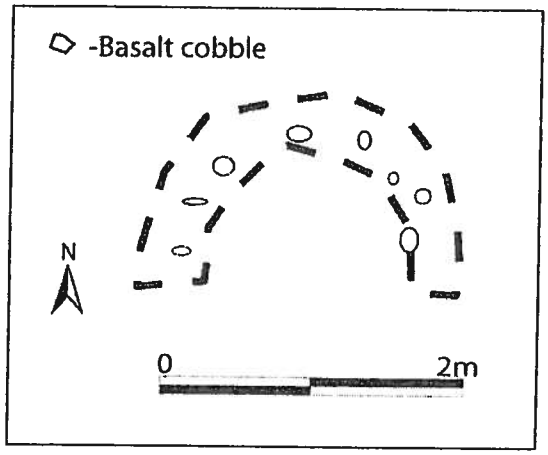


Figure 11. SIHP Site 50-30-10-3775, remnant of C-Shape, view west

SIHP SITE	**50-30-10-3779**
FUNCTION:	Storage
SITE TYPE:	Enclosures
TOTAL FEATURES:	2
DIMENSIONS:	60 m

DESCRIPTION: This site once consisted of two small, abutting circular enclosures (see Figure 6). Rock collecting activity has reduced it to a pile of rubble made up mostly of basalt cobbles and large boulders. The once enclosed areas are no longer discernable. No cultural material was observed. Excavation potential is poor to none because strategic placement of trenches is now impossible.

SIHP SITE	**50-30-10-3785**
FUNCTION:	Agriculture
SITE TYPE:	Complex
TOTAL FEATURES:	1
DIMENSIONS:	60 m

DESCRIPTION: Only a small remnant (approximately 60 meters long) of the stone wall that encloses most of the -3785 enclosure remains on the west side near the north boundary of the project area. The rest of the enclosing wall has been bulldozed and subject to rock collecting, including the west, south, and east sections, although the wall is fairly intact north of the project area. Interior wall and mound features at the southern end of the complex have been cleared by bulldozing. The enclosure has been reduced to a structural remnant by rock collection. Almost all of the structural boulders have been removed leaving a linear mound of cobbles that denote the orginal footprint of the enclosure. Shell midden was observed including cypreaea. The walls to the west of the enclosure have been reduced to remnants by rock collection as has the semi-circular loi wall. The site has been heavily impacted by rock collecting and is in poor to remnant condition. The enclosure was remapped (Figures 12, 13)

A single excavation, Test Unit 4, was completed at Site -3785. No material culture was recovered.

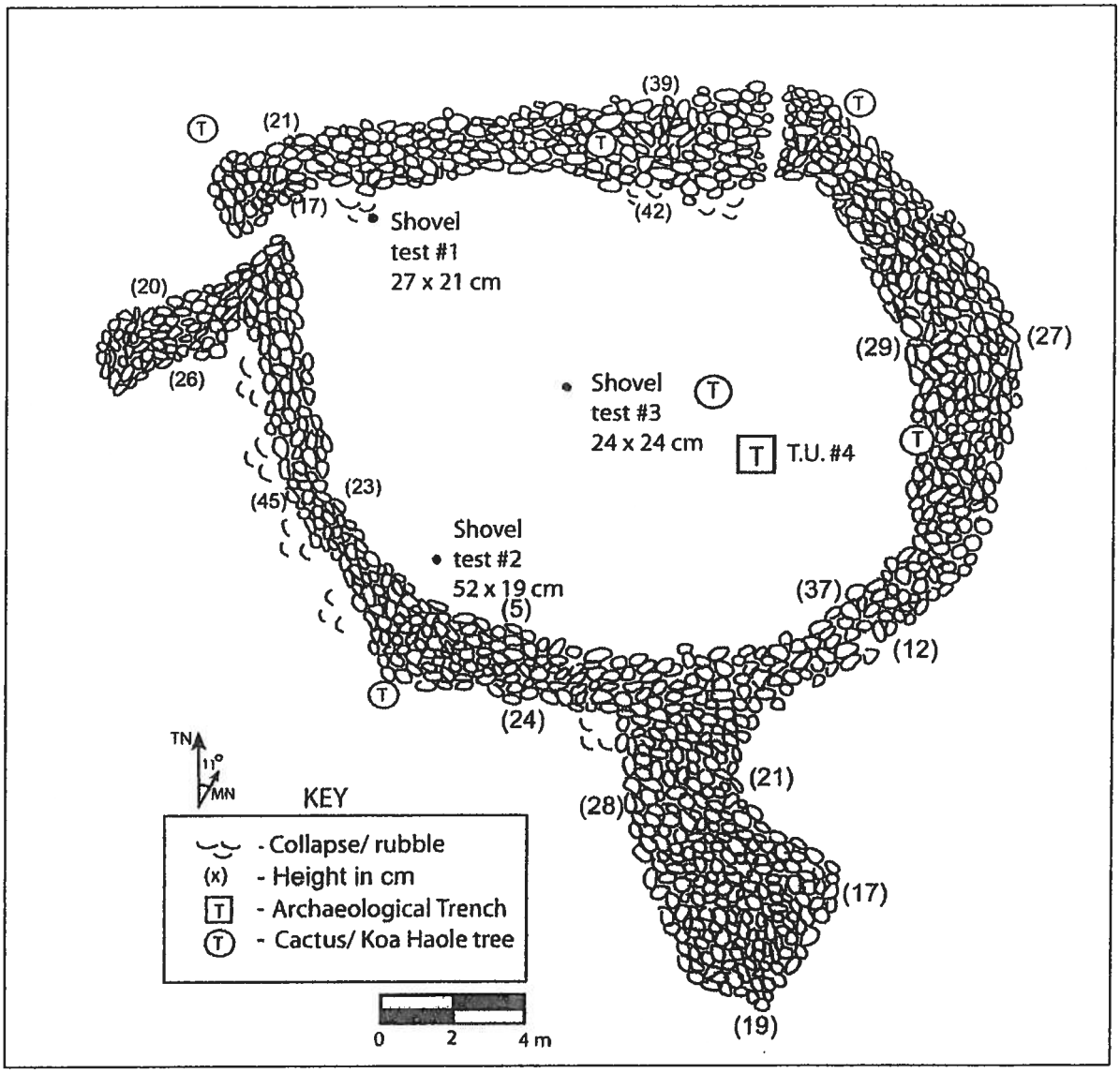


Figure 12. Plan View of SIHP Site 50-30-10-3785

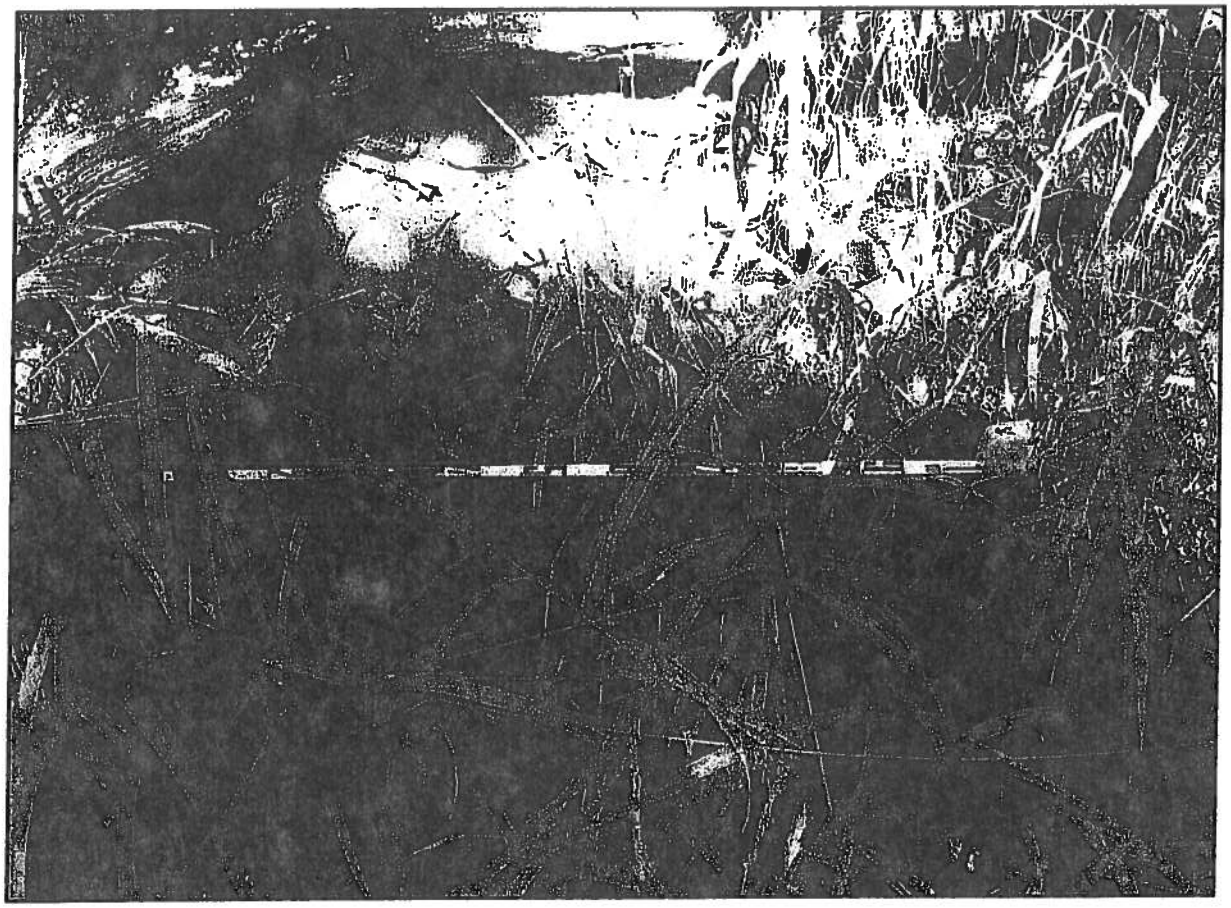


Figure 13. SIHP Site 50-30-10-3785, Portion of *lo'i* wall, view north

SIHP SITE	**50-30-10-3790**
FUNCTION:	Habitation
SITE TYPE:	C-Shape
TOTAL FEATURES:	1
DIMENSIONS:	7.6 m by 8.2 m

DESCRIPTION: SIHP Site 50-30-10-3790 has been impacted by rock collecting. The enclosure wall is still visible but is lower in height than when it was recorded in 1985. This site was tested in 1985 for the proposed Kōloa Bypass Road. The maximum original wall height measure 46cm high, though one area appears to be elevated further by a kiawe root at the base of the wall (Figure 14). The structure is roughly oval, measuring about 7.6m by 8.2m with collapse along the eastern portion of the enclosure. The interior consists of exposed bedrock with soil pockets. Test Unit 1 was excavated over a soil pocket within the southeastern portion of the enclosure. Site -3790 is in fair condition. (Figures 14, 15)

Subsurface testing results for TU 1, -3790 (ARCH 837) are from the 1985 Po'ipū bypass report. The included description is as follows: "Test Unit1, a one-square meter unit; was excavated to a maximum depth of 13 cm (average depth 8 cm) to pahoehoe bedrock. There was approxomatly one gram of marine shell midden and one volcanic glass flake fragment recovered." (Hammatt et al. 1985:42)

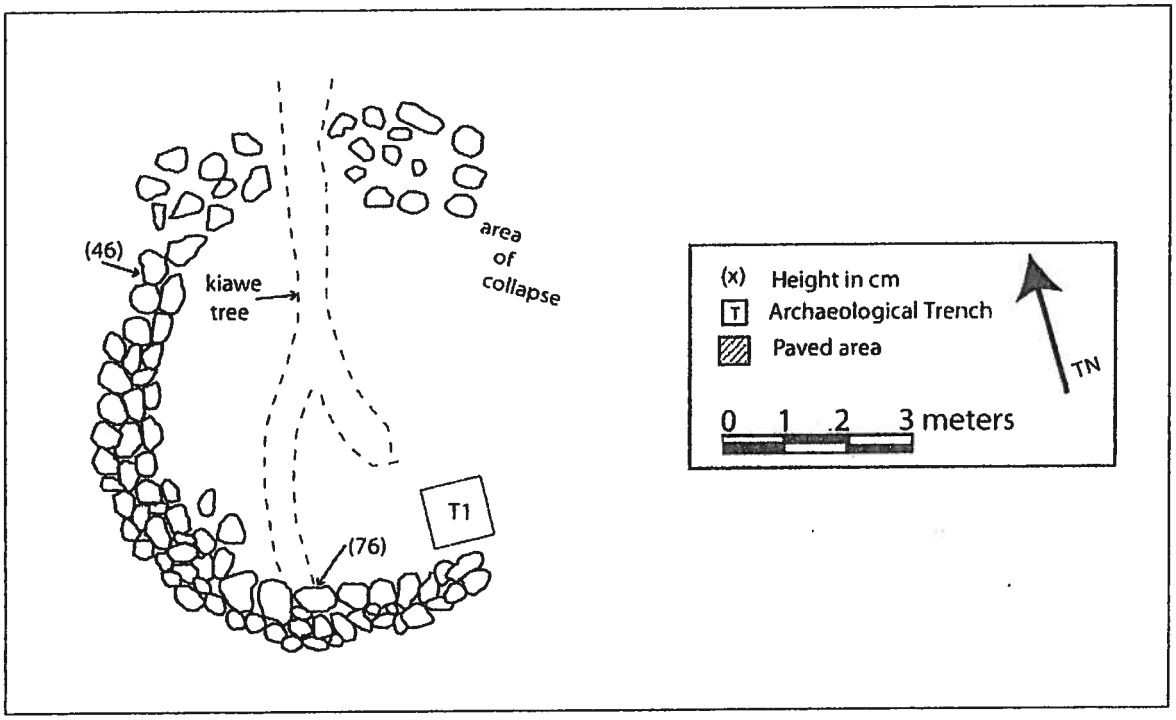


Figure 14. Plan View of SIHP Site 50-30-10-3790

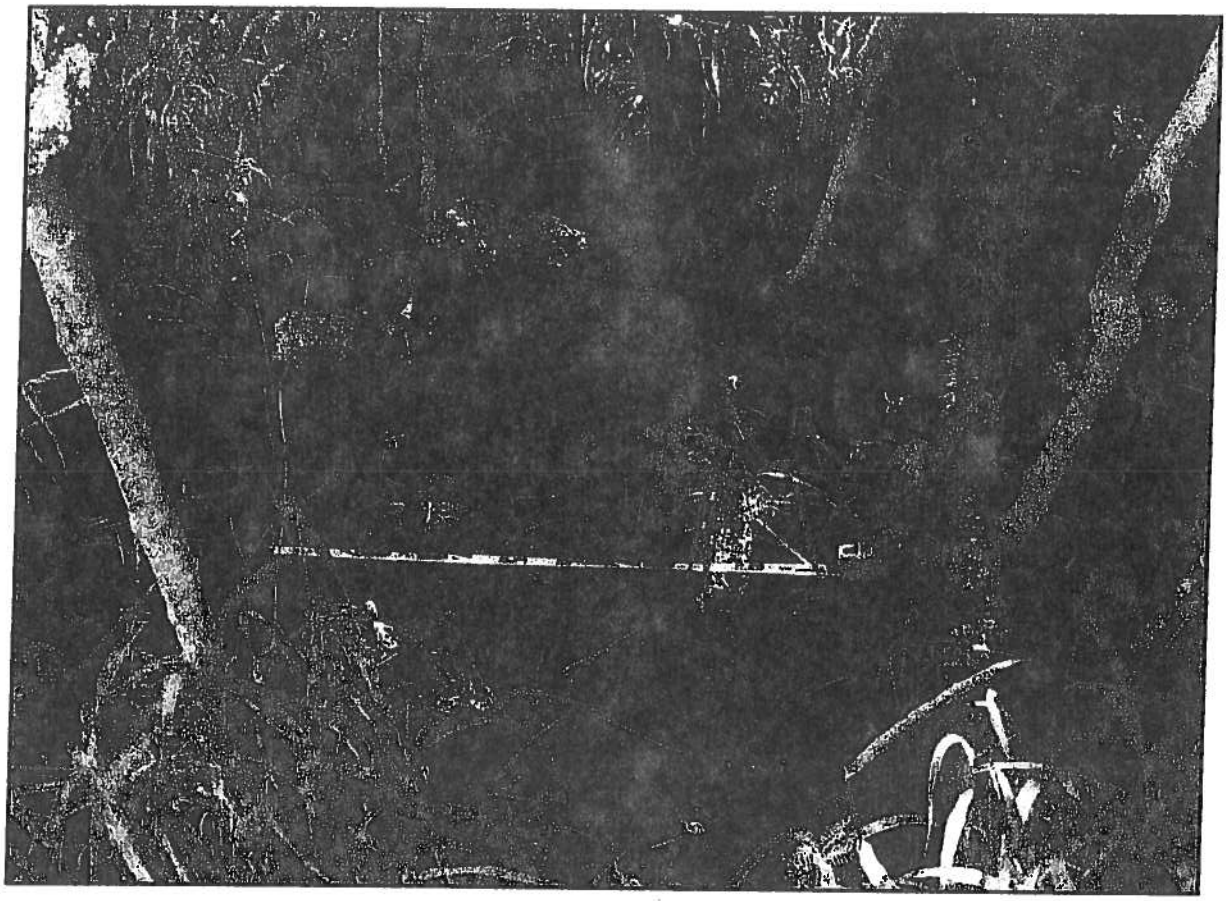


Figure 15. SIHP Site 50-30-10-3790, remnant of C-Shape structure, view southeast

SIHP SITE	**50-30-10-3791**
FUNCTION:	Habitation
SITE TYPE:	Enclosure and Platform
TOTAL FEATURES:	2
DIMENSIONS:	Feature A: 12.2 m by 7.9, Feature B: 5.5 m by 5.7 m

DESCRIPTION: Feature A is an enclosure has been impacted by rock collecting. Parts of the west wall are gone. The enclosure was tested with 3 test units in 1985 (Hammatt et al. 1985).

Feature B is a slightly raised platform which is paved with basalt cobbles and pebbles. The feature, measuring 5.5 x 5.7 m, was newly documented during the present survey. The feature is in good condition and a waterworn basalt hammerstone was observed on the surface. An additional test unit (Test Unit 5) was excavated in this portion of site -3791 during the present inventory survey. Midden totaling 31.8 grams was recovered from the excavation. Excavation potential of this area is good even though deposits may be relatively shallow. The site is in fair condition. (Figures 16, 17)

Subsurface testing results for TU 1, 2 and 3, -3790 (ARCH 838) are from the 1985 Po'ipū bypass report. The included description is as follows: "Test Unit 1, a one-square meter unit, was excavated in the northwest portion of the enclosure. It revealed a maximum of 25 cm of soil overlying sterile subsoil and bedrock. There were about 20 grams of midden, mostly marine shell midden, and a single volcanic glass flake....Test Units 2 and 3, .50 m by .50 m units, did not contain any midden or artifacts. Sterile subsoil (C-horizon) and pahoehoe bedrock were reached at depths ranging from 15-35 cm below surface with average depth being around 20 cm." (Hammatt et al. 1985:39)

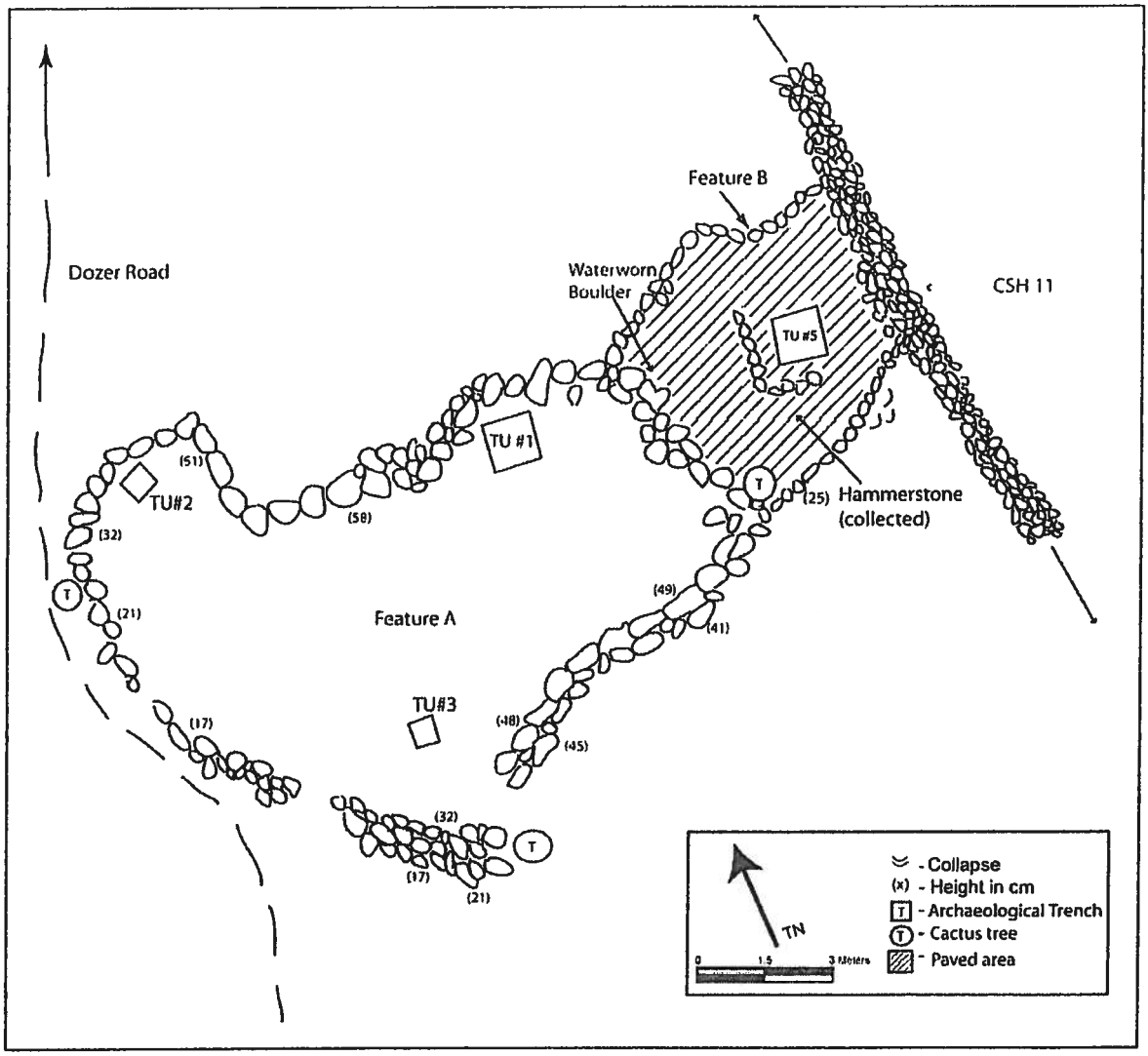


Figure 16. Plan View of SIHP Site 50-30-10-3791

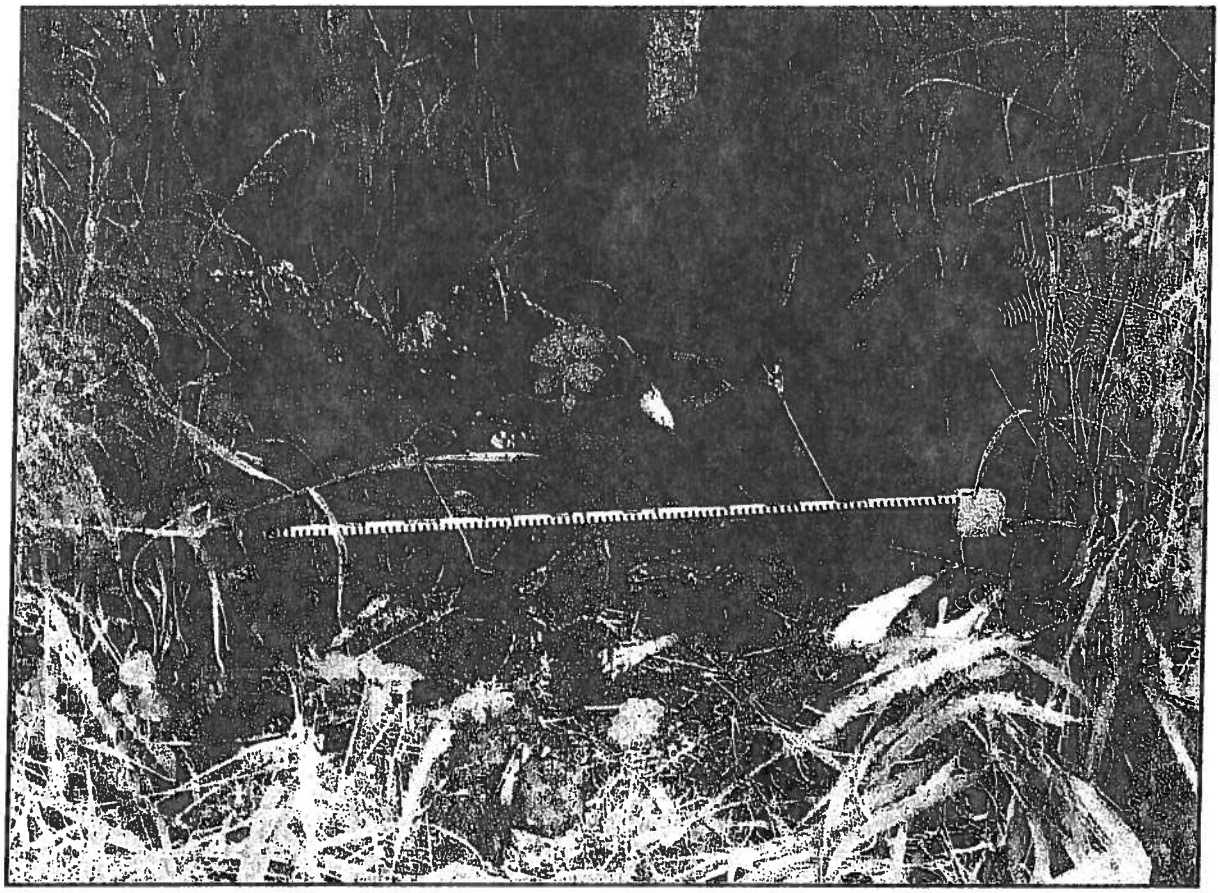


Figure 17. SIHP Site 50-30-10-3791, remnant of enclosure, view east

SIHP SITE	**50-30-10-3896**
FUNCTION:	Agricultural
SITE TYPE:	Wall
TOTAL FEATURES:	1
DIMENSIONS:	8.5 m by 0.3-.76 m

DESCRIPTION: This site has been reduced to a remnant by rock collecting. The entire length as recorded in 1985 could not be traced. Only discontinuous rock alignments are present (Figures 18, 19). Excavation potential is poor due to the condition of the site and its probable agricultural nature. The wall is in remnant condition.

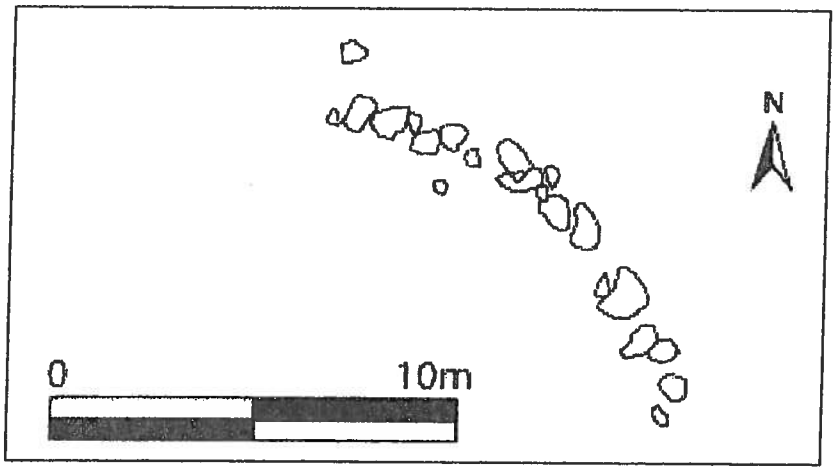


Figure 18. Plan View of SIHP Site 50-30-10-3896 as shown in Hammatt et al. (1985)

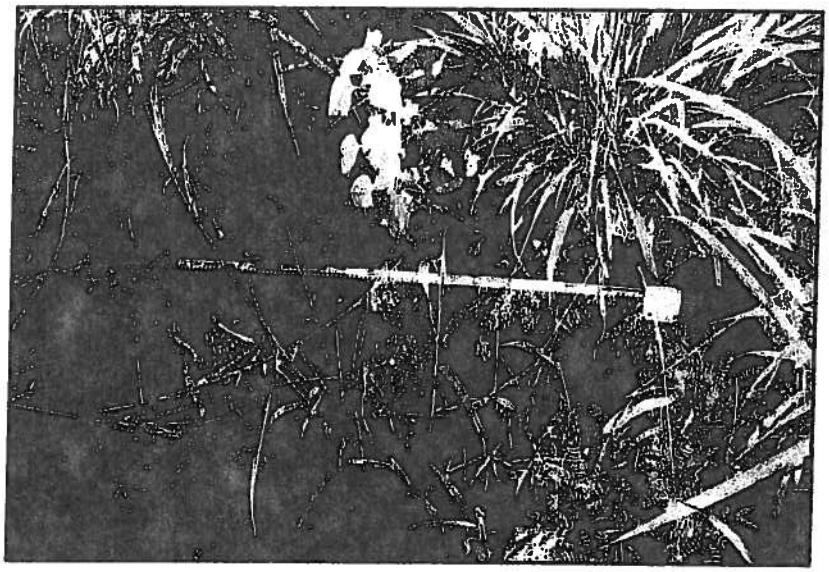


Figure 19. SIHP Site 50-30-10-3896, view southwest

SIHP SITE	**50-30-10-3897**
FUNCTION:	Habitation
SITE TYPE:	C-Shape
TOTAL FEATURES:	1
DIMENSIONS:	7.6 m by 4.6 m

DESCRIPTION: SIHP Site 50-30-10-3897 has been virtually destroyed by rock collecting. Only an amalgamation of basalt cobbles remain. The footprint of the original C-Shape is difficult to discerne (Figures 20, 21). Dimensions are taken from 1985 Kōloa Bypass Road Report (Hammatt et al. 1985). The site is in poor condition.

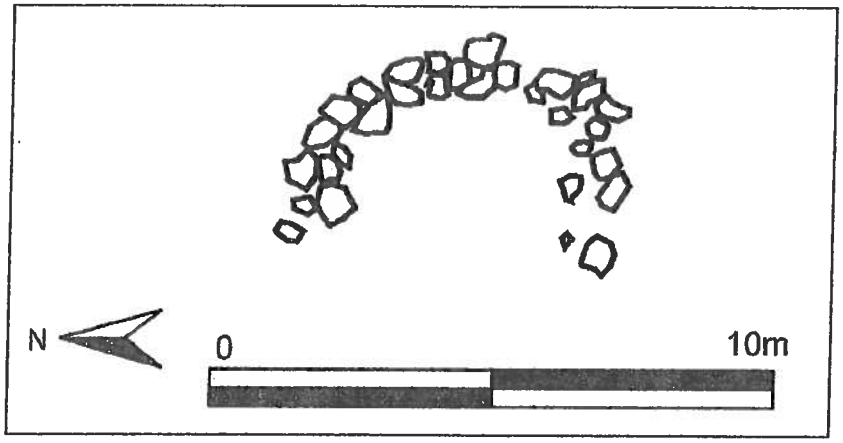


Figure 20. Plan View of SIHP Site 50-30-10-3897 as recorded in Hammatt et al. (1985)

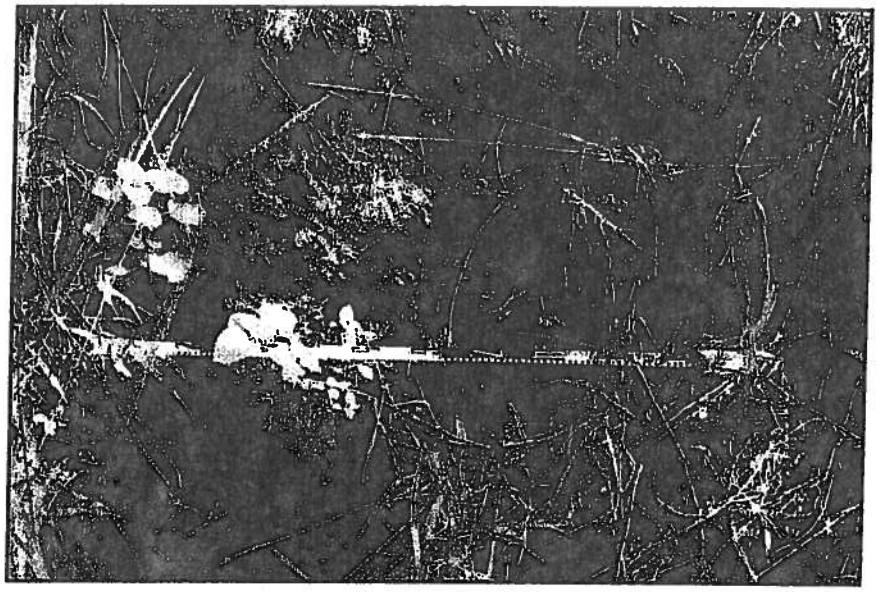


Figure 21. SIHP Site 50-30-10-3897 view northeast.

SIHP SITE **50-30-10-3898**
FUNCTION: Agricultural (Remnant)
SITE TYPE: Mound
TOTAL FEATURES: 1 (Remaining)
DIMENSIONS: 2.1 m by 4.3 m

DESCRIPTION: Feature A could not be relocated, and was likely destroyed by bulldozing and rock collecting.

Feature B was formorly described as a section of an agricultural wall (Hammatt et al. 1985). The feature has been almost totally destroyed by rock collecting and possible bulldozing. Only an amorphous scatter of cobbles marks the former location.

SIHP SITE **50-30-10-3899**
FUNCTION: Agriculture
SITE TYPE: Enclosure
TOTAL FEATURES: 1 (Remaining)
DIMENSIONS: Feature B 18 m by 18 m

DESCRIPTION: Feature A could not be located and as presumably destroyed by bulldozing and/or rock collecting. Dimensions taken from 1985 Kōloa Bypass Road Report. (Hammatt et al. 1985).

Feature B was described as a roughly circular agricultural enclosure. A bulldozed road running from East to West cuts through the southern portion of the structure. Most of the structural boulders from the enclosure have been removed, presumably by rock collectors. The footprint of the structure is still discernable, marked by amalgamations of basalt cobbles. Excavation potential appears poor because the majority of the area enclosed by the structure is exposed bedrock. No surface cultural material was observed (Figures 22, 23).

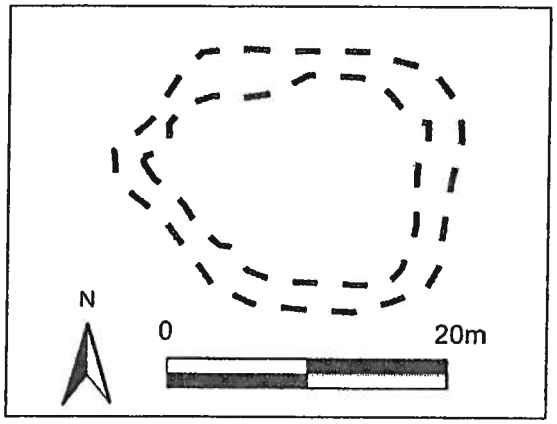


Figure 22. Plan View of SIHP Site 50-30-10-3899 B (dashed line shows cobble remnants marking former outline of site)

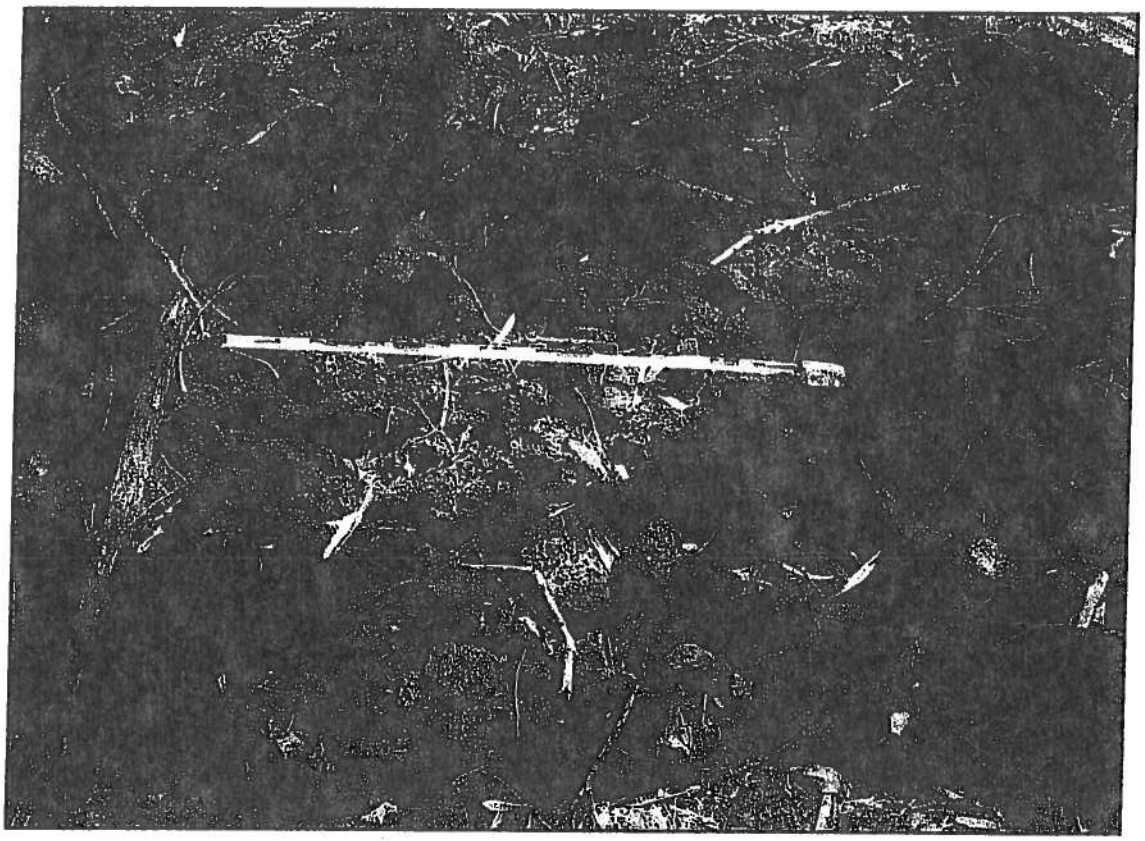


Figure 23. SIHP Site 50-30-10-3899, Feature B, view northeast

SIHP SITE	**50-30-10-3900**
FUNCTION:	Boundary marker
SITE TYPE:	Wall
TOTAL FEATURES:	1
DIMENSIONS:	260 m by 0.6/1.4 m

DESCRIPTION: SIHP Site -3900 is a stacked boulder wall that may mark the boundary between *ahupua'a* of Kōloa and Weliweli. It has 6-8 vertical courses. Thirty meters of the southern end has been heavily impacted by rock collecting, with only a single course remaining. There are several other breaches along its length. Site -3900 is in fair condition. The wall continues *mauka* beyond the project area (see Figure 6).

SIHP SITE	**50-30-10-3905**
FUNCTION:	Habitation/Agriculture
SITE TYPE:	C-Shapes and Terrace
TOTAL FEATURES:	3
DIMENSIONS:	(Feat. A) 9.4 m by 5.3 m, (Feat. B) 6.1 m by 3.7 m, (Feat. C) 3.9 m by 6.4 m

DESCRIPTION: Feature A of SIHP Site 50-30-10-3905 is a C-Shaped structure in fair condition (Figure 24).

The wall of the C-Shaped structure is constructed on a bedrock boulder outcrop of small to medium basalt boulders stacked one to four courses high to a maximum height of 1.32 meters. The opening of the C-Shape faces southwest and the interior surface is lined and consists of bedrock boulders with a few basalt cobbles. There are little pockets of soil present on the interior surface. The site is located just north of Feature B of SIHP Site 50-30-10-3905 and shares its wall with feature B as well.

Feature B of SIHP Site 50-30-10-3905 is a C-Shaped structure. The wall of the C-Shape is constructed on a bedrock outcrop of small to medium height of 1.24 meters. Some parts of the wall has collapsed. The opening of the C-Shape faces west. The interior surface gently slopes to the southwest and consists of loose soil, vegetation, and a few small to medium sized basalt boulders. It is likely that the boulders on the interior surface were part of the structure at one time. The site is located just south of and shares a wall with Feature A. It is just west of Feature C.

Feature C of SIHP Site 50-30-10-3905 is a rectangular shaped terrace. The retaining wall of the terrace is constructed of medium to large basalt boulders stacked one to two courses high to a maximum height of 0.57 meters. The interior surface of the terrace is level and paved with medium to large basalt cobbles. The terrace is located on a bedrock boulder outcrop just east of Feature B.

A single excavation (Test Unit 6) was undertaken at site -3905. 8.7 g of midden, two volcanic glass flakes, and 3.2 g of charcoal were recovered from Test Unit 6.

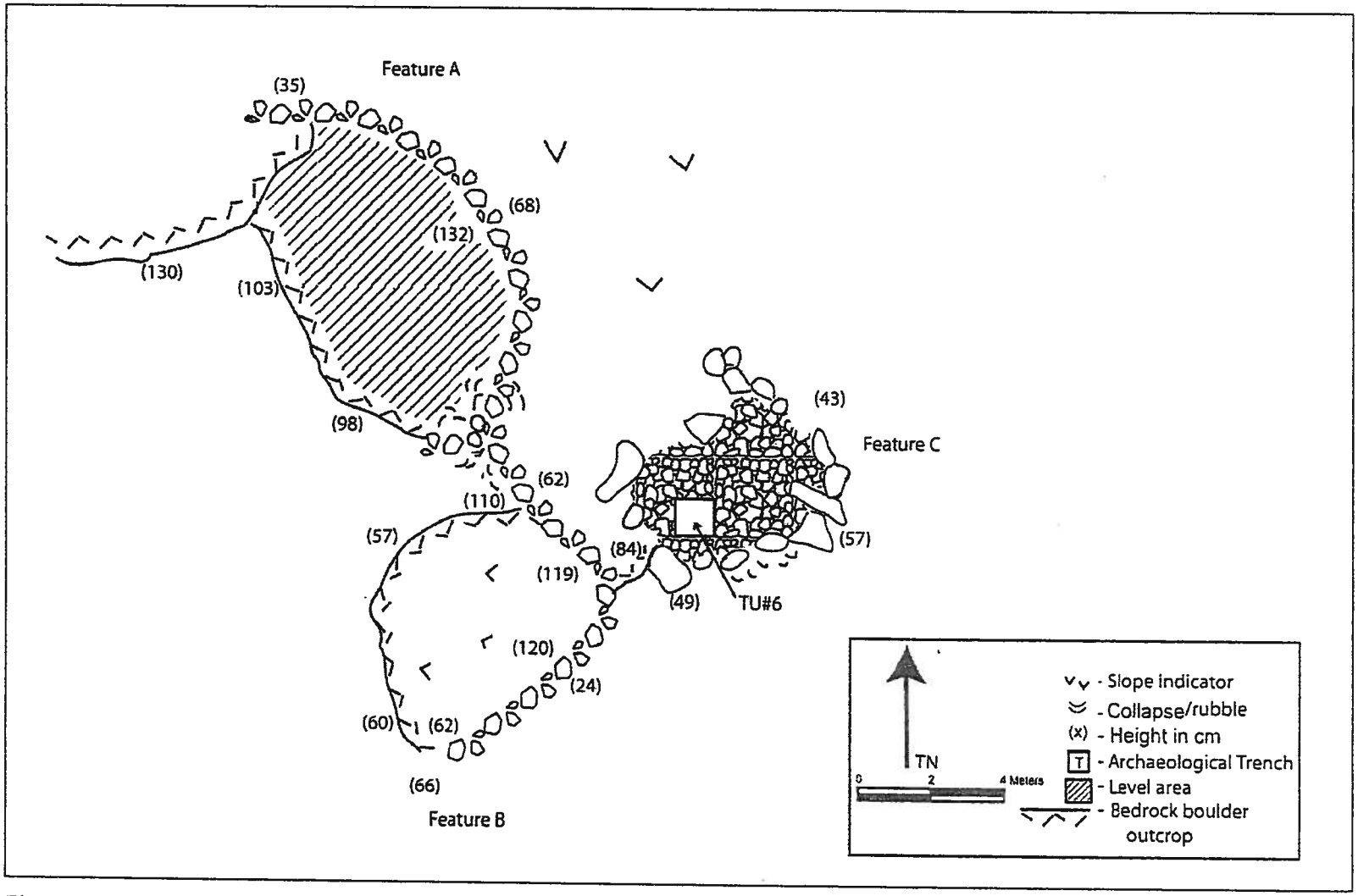


Figure 24. SIHP Site 50-30-10-3905, plan view map of Feature A-C

VI. EXCAVATION AND LAB RESULTS

In all, six test units were excavated for the subsurface testing portion of the inventory survey (Table 4). The six test units were situated within five sites [-3766 B (C-shape); -3770 Features A and B (C-shape and terrace); -3785 (enclosure); -3791 (C-shape); -3905 (C-shape)] and excavated to sterile sediments or bedrock. All midden, charcoal and artifacts were encountered within the Stratum II cultural layer.

Table 4. Sites Tested and Results from Subsurface Testing

Test Unit	SIHP Site	Findings
1	-3766 B (C-shape)	119.4 g total midden; 95.6 g marine invertebrate; 20.3 g echinoderm; 1.1 g kukui endocarp; 0.1 g small mammal bone; 0.7 g bird; 1.2 g *Scaridae sp.*; 0.4 g unidentified fish
2	-3770 A (C-shape)	2 volcanic glass flakes
3	-3770 B (Terrace)	54.1 g total midden; 50.0 g marine invertebrate; 3.6 g echinoderm; 0.3 g rat bone; 0.1 g small mammal; 0.1 g fish; also 55 g charcoal;
4	-3785 (Enclosure)	none
5	-3791 (Platform)	31.8 g total midden; 31.2 marine invertebrate; 0.2 g echinoderm; 0.4 g small to medium mammal; 13.6 g charcoal and one basalt hammerstone recovered (97.4 g)
6	-3905 (Terrace)	8.7 g total midden; 4.8 g marine invertebrate; 0.3 g kukui; 0.4 g medium mammal; 3.2 g charcoal; 2 volcanic glass flakes

A. Stratigraphy and Lab Results

1. Test Unit 1

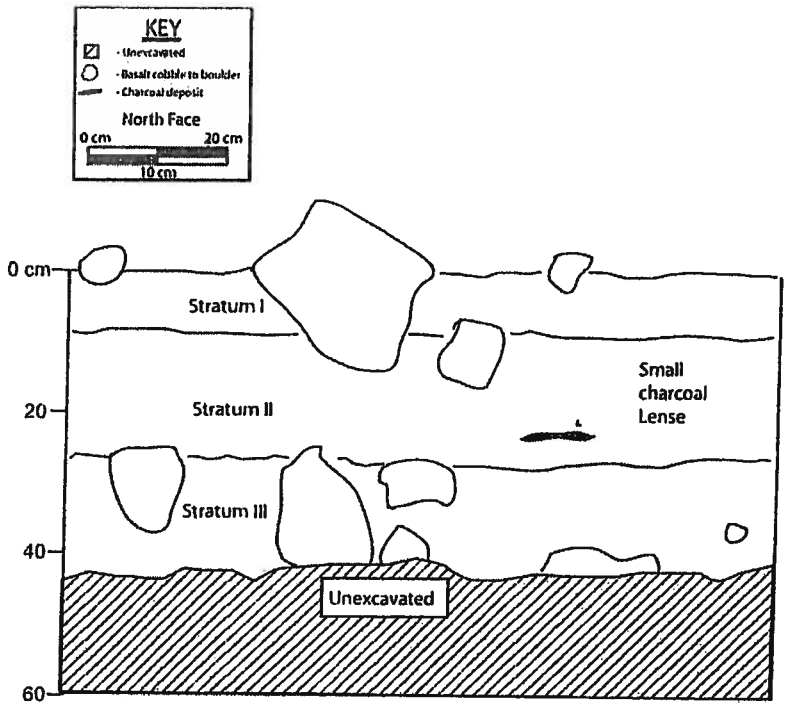
Test unit 1 was excavated within SIHP Site -3766 Feature B (C-shape). The C-shape was part of a probable agricultural complex that included a large terrace complex. A 1 m by 1 m test unit was placed within the interior of the feature and was excavated to sterile sediments (Stratum III).

The stratigraphic sequence encountered within the test unit consisted of three distinct sediment layers (Figure 25). Stratum I consisted of a 9 cm thick dark brown sandy loam that contained no cultural materials and layers. Stratum II consisted of 17 cm thick very dark brown silt loam cultural layer that contained abundant shell midden and a charcoal lens. Stratum III consisted of a sterile dark brown silt layer. Excavation was halted 20 cm into the stratum.

In total, 119.4 g of midden was recovered during the subsurface testing (Table 5). Of the 119.4 g, marine invertebrate shell accounted for 95.6 g (80.0%), echinoderm accounted for 20.3

g (17.0%), kukui endocarp accounted for 1.1 g (1.0%); *Scaridae sp.* accounted for 1.2g (1.0%). one bird bone shaft accounted for 0.7 g (<1.0%), unidentified fish bone accounted for 0.4 g (<1.0%), and small mammal accounted for 0.1 g (<1.0).

In addition, two branch coral manuports, weighing 12.3 g, and a discreet charcoal lens were also encountered within Stratum II (9-26 cmbs) of Test Unit 1. The charcoal lens was collected for 14C radiocarbon dating analysis. A 55.8 g sample of charcoal was submitted to Beta Analytic and returned a 2 sigma (95% probability) calibrated date range of A.D. 1660 to 1950.



Stratum I: 0-9 cmbs 7.5 YR 3/2, dark brown; sandy loam; weak, medium, granular structure; loose dry consistency; non-plastic; no cementation

Stratum II: 9-26 cmbs 7.5 YR 2.5/2, very dark brown; silt loam; moderate, fine, granular structure; weakly coherent dry consistency; slightly plastic; weak cementation; clear smooth lower boundary

Stratum III: 26 + cmbs 7.5 YR 3/3, dark brown; silt loam; moderate, fine, crumb structure; slightly hard dry consistency; non-plastic; weak cementation; clear smooth lower boundary; sterile soil in pockets of bedrock

Figure 25. Profile of north wall of Test Unit 1. SIHP Site -3766

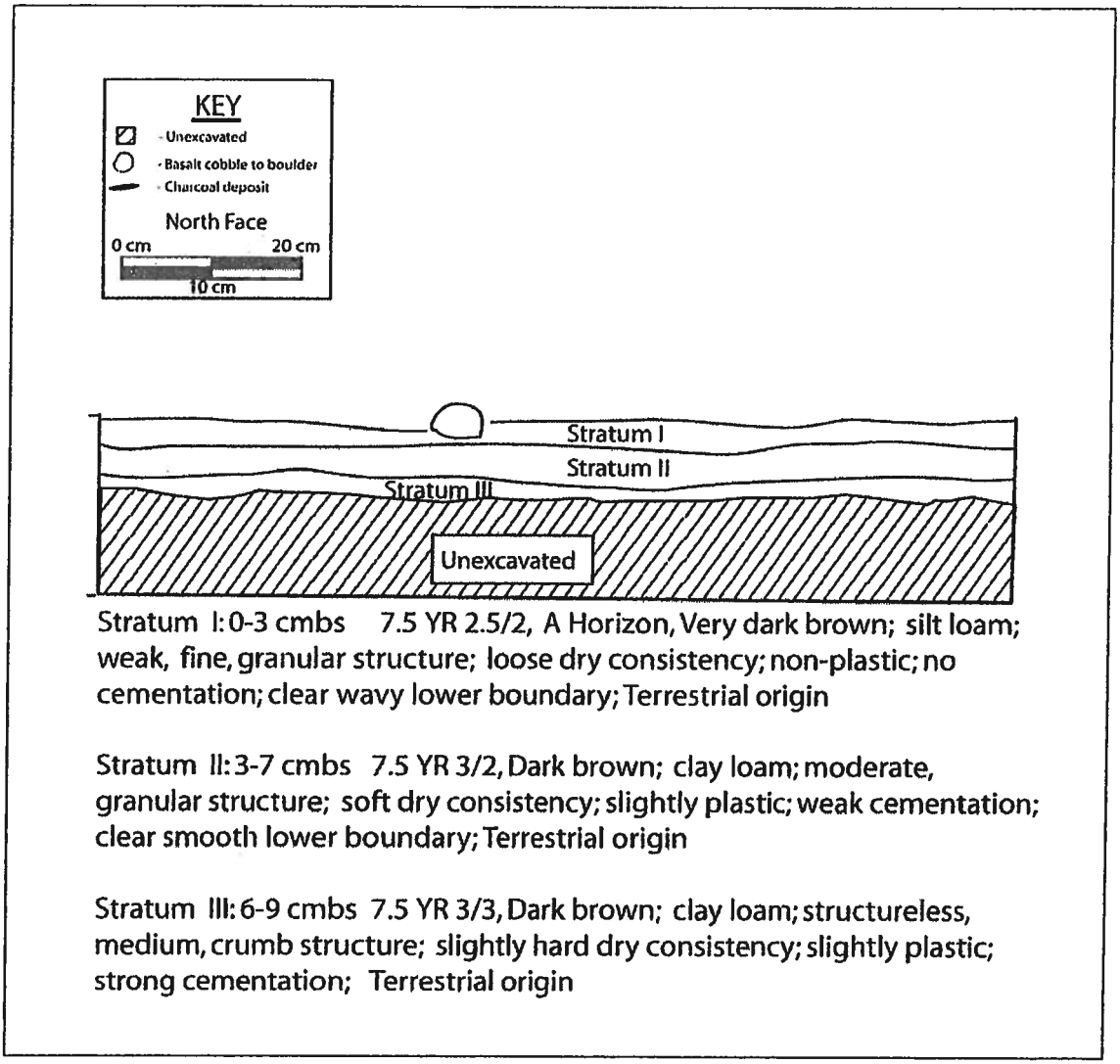
Table 5. Test Unit 1, SIHP Site -3769 Midden Results

Midden Taxa	Stratum	Depth (cmbs)	Number of Pieces	Weight (g)
Conus sp	II	9-26	3	7.4
Cymatium sp	II	9-26	1	0.9
Cypraeidae	II	9-26	12	12.7
Isognomon sp	II	9-26	5	3.8
Nerita picea	II	9-26	27	9.2
Strombus maculatus	II	9-26	2	1.8
Thaididae sp	II	9-26	1	1.2
Trochus inetxtus	II	9-26	1	1
Turbo sandwichensis	II	9-26	10	8.8
Unidentified shell midden	II	9-26		48.8
Echinoderm	II	9-26	54	20.3
Kukui	II	9-26	11	1.1
small mammal	II	9-26	2	0.1
bird	II	9-26	1	0.7
Scaridae sp.	II	9-26	2	1.2
unidentified fish	II	9-26	2	0.4
Total				119.4

2. Test Unit 2

Test Unit 2 was excavated within SIHP Site -3770 Feature A (C-shape). The C-shape had been heavily disturbed by rock collectors and only a remnant of the former C-shape existed. A 1 m by 1 m test unit was placed within the interior of the feature and was excavated to sterile sediments (Stratum III).

The stratigraphic sequence encountered within the test unit consisted of three distinct sediment layers (Figure 26). Stratum I consisted of a 3 cm thick dark brown sandy loam that contained no cultural materials and layers. Stratum II consisted of a 4 cm thick dark brown silt loam cultural layer that contained two small volcanic glass fragments. Stratum III consisted of a sterile dark brown silt layer. Excavation was halted 5 cm into the stratum.



Stratum I: 0-3 cmbs 7.5 YR 2.5/2, A Horizon, Very dark brown; silt loam; weak, fine, granular structure; loose dry consistency; non-plastic; no cementation; clear wavy lower boundary; Terrestrial origin

Stratum II: 3-7 cmbs 7.5 YR 3/2, Dark brown; clay loam; moderate, granular structure; soft dry consistency; slightly plastic; weak cementation; clear smooth lower boundary; Terrestrial origin

Stratum III: 6-9 cmbs 7.5 YR 3/3, Dark brown; clay loam; structureless, medium, crumb structure; slightly hard dry consistency; slightly plastic; strong cementation; Terrestrial origin

Figure 26. Profile of north wall of Test Unit 2, SIHP Site -3770 A

3. Test Unit 3

Test Unit 3 was excavated within SIHP Site -3770 Feature B (habitation terrace). The terrace was part of a probable habitation complex that included an additional C-shape (Feature A). A 1 m by 1 m test unit was placed within the interior of the feature and was excavated to sterile sediments (Stratum III).

The stratigraphic sequence encountered within the test unit consisted of three distinct sediment layers (Figure 27). Stratum I consisted of a 5 cm thick dark brown sandy loam layer that contained no cultural materials. Stratum II consisted of 21 cm thick very dark brown clay loam cultural layer that contained abundant shell midden and a charcoal lens. Stratum III consisted of a sterile dark brown clay layer. Excavation was halted 10 cm into the Stratum III.

In total, 54.1 g of midden was recovered during the subsurface testing (Table 6). Of the 54.1 g, marine invertebrate shell accounted for 50.0 g (92.4%), echinoderm accounted for 3.6 g (6.7%), rat bone accounted for 0.3 g (0.2%), small mammal accounted for 0.1 g (0.1%) and unidentified fish accounted for 0.1 g (0.1%).

In addition, 55.0 g of charcoal was recovered from Stratum II of Test Unit 3. The charcoal was collected for 14C radiocarbon dating analysis. The charcoal sample was submitted to Beta Analytic and returned a 2 sigma (95% probability) calibrated date range of A.D. 1490 to 1680, A.D. 1770 to 1800 and A.D. 1940 to 1950.

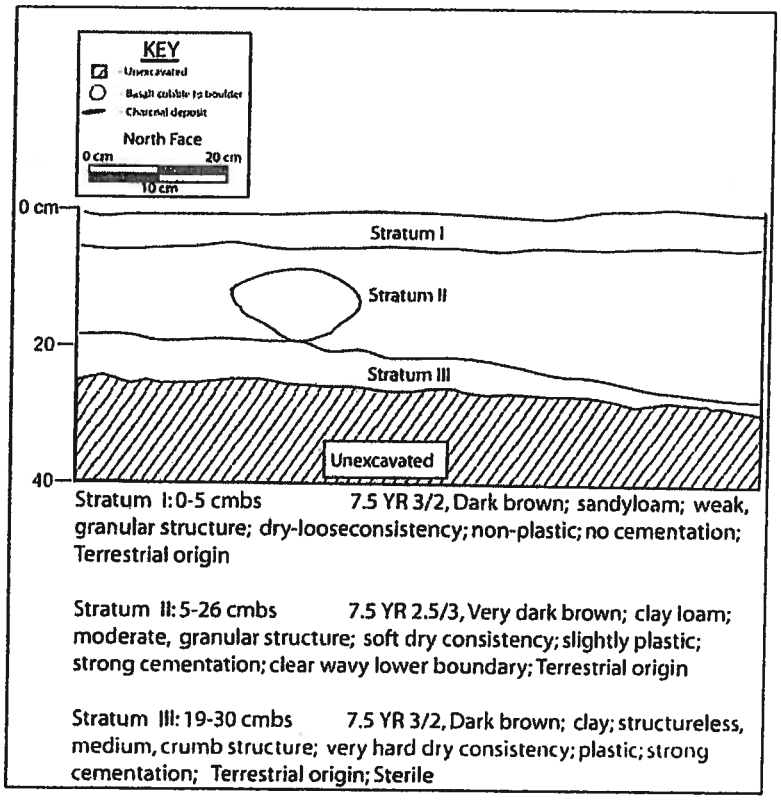


Figure 27. Profile of north wall of Test Unit 3, SIHP Site -3770 B

Table 6. Test Unit 3, SIHP Site -3770 B Midden Results

Midden Taxa	Stratum	Depth (cmbs)	Number of Pieces	Weight (g)
Cypraeidae	II	5-26	6	6.4
Isognomon sp	II	5-26	0.8	2
Littorina pintado	II	5-26	1	0.1
Modiolos matris	II	5-26	1	0.1
Nerita picea	II	5-26	24	4.9
Strombus maculatus	II	5-26	2	1.4
Thaididae sp	II	5-26	3	1.5
Trochus inetxtus	II	5-26	3	0.2
Turbo sandwichensis	II	5-26	16	15.6
Unidentified shell midden	II	5-26		17.8
Echinoderm	II	5-26	28	3.6
Rattus exulans	II	5-26	9	0.3
small mammal	II	5-26	1	0.1
fish bone	II	5-26	1	0.1
Total				54.1

4. Test Unit 4

Test Unit 4 was excavated within SIHP Site -3785 The enclosure was part of a probable habitation and agricultural complex that once included a portion of a lo'i wall (destroyed). A 1 m by 1 m test unit was placed within the interior of the feature and was excavated to sterile sediments (Stratum III).

The stratigraphic sequence encountered within the test unit consisted of two distinct sediment layers (Figure 28). Stratum I consisted of a 2 cm thick very dark brown silt loam layer that contained no cultural materials. Stratum II consisted of a 13 cm thick dark brown clay loam. No cultural materials or artifacts were encountered during the excavation and screening of sediments. Excavation was halted 13 cm into the Stratum II.

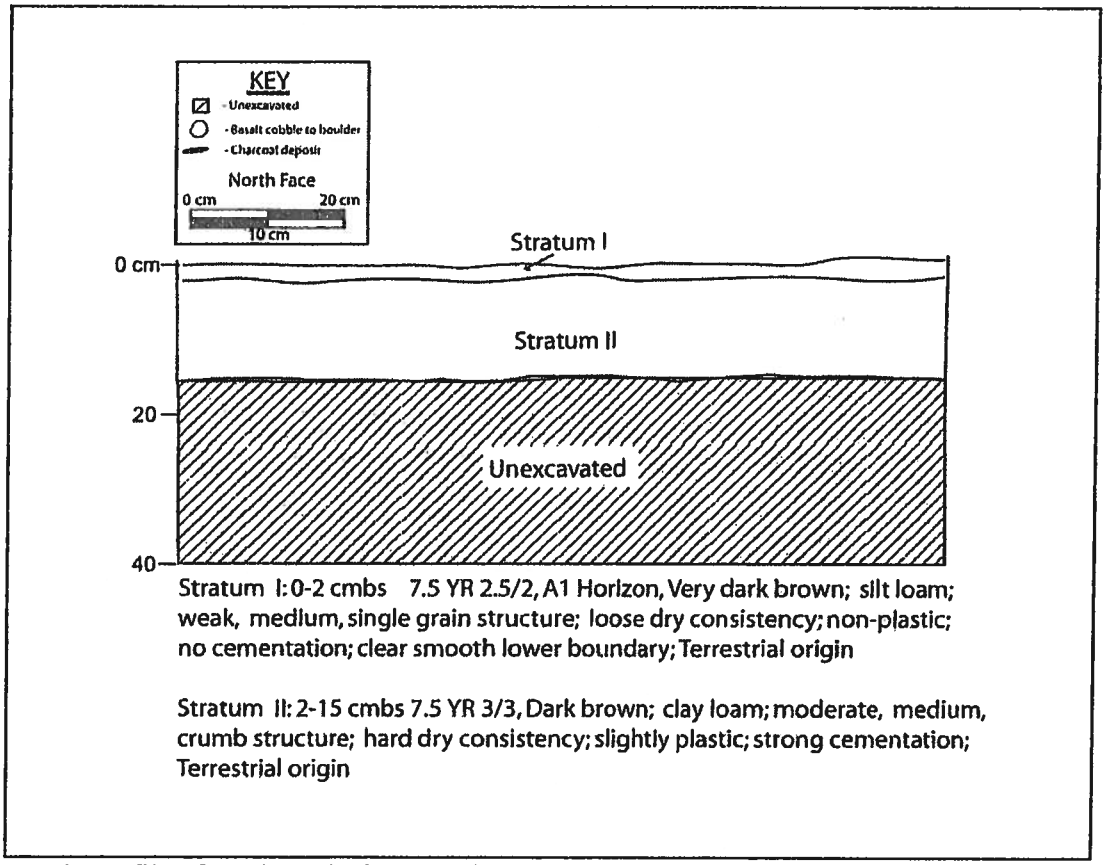


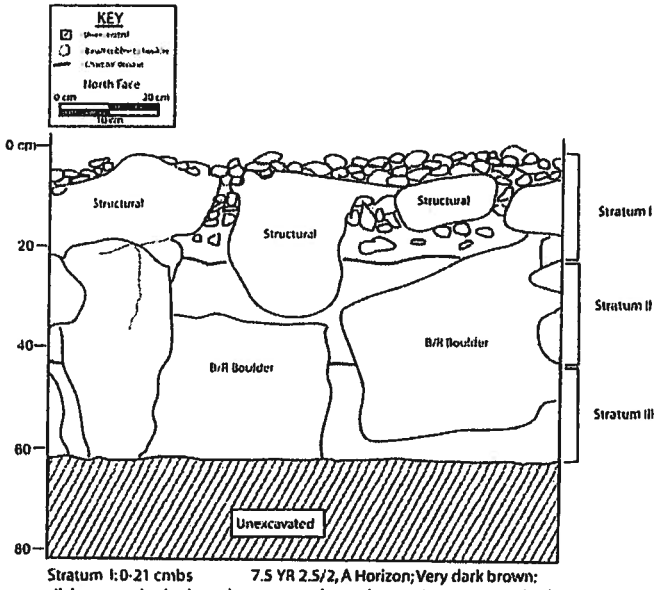
Figure 28. Profile of north wall of Test Unit 4, SIHP Site -3785

5. Test Unit 5

Test Unit 5 was excavated within SIHP Site -3791. The Platform was located on top of a paved terrace that was part of a probable habitation complex that included an additional terraced/enclosed area (destroyed). A 1 m by 1 m test unit was placed within the interior of the feature and was excavated to sterile sediments (Stratum III).

The stratigraphic sequence encountered within the test unit consisted of three distinct sediment layers (Figure 29). Stratum I consisted of a 21 cm thick very dark brown silt loam layer that contained scarce shell midden. Stratum II consisted of 21 cm thick very dark brown clay loam cultural layer that contained scarce shell midden and a charcoal lens. Stratum III consisted of a sterile dark brown clay loam layer. Excavation was halted 15 cm into the Stratum III.

In total, 31.8 g of midden was recovered during the subsurface testing (Table 7). Of the total, marine invertebrate shell accounted for 31.2 g (98.1%), echinoderm accounted for 0.2 g (0.7%), and small mammal accounted for 0.2 g (0.7%). A total of 13.6 g of charcoal were also collected during excavation, though this sample was not from a discreet lens. In addition to the midden and encountered in Test Unit 5, a small basalt hammerstone, weighing 97.4 g, was collected on the surface of SIHP Site -3791.



Stratum I: 0-21 cmbs 7.5 YR 2.5/2, A Horizon; Very dark brown: silt loam; weak, single grain structure; loose dry consistency; non-plastic; no cementation; clear wavy lower boundary; Terrestrial Includes pavement Marine Shell present

Stratum II: 21-42 cmbs 7.5 YR 2.5/3, Very dark brown; clay loam; moderate, fine, granular structure; soft dry consistency; slightly plastic; weak cementation; clear wavy lower boundary; Terrestrial origin. Includes pavement structure Charcoal, Kukui nut and Marine Shell present

Stratum III: 42-60 cmbs 7.5 YR 2.5/3, Dark brown; clay loam; structureless, slightly hard dry consistency; slightly plastic; strong cementation; Terrestrial origin. Sterile

Figure 29. Profile of north wall of Test Unit 5, SIHP Site -3791

Table 7. Test Unit 5, SIHP Site -3791 Midden Results

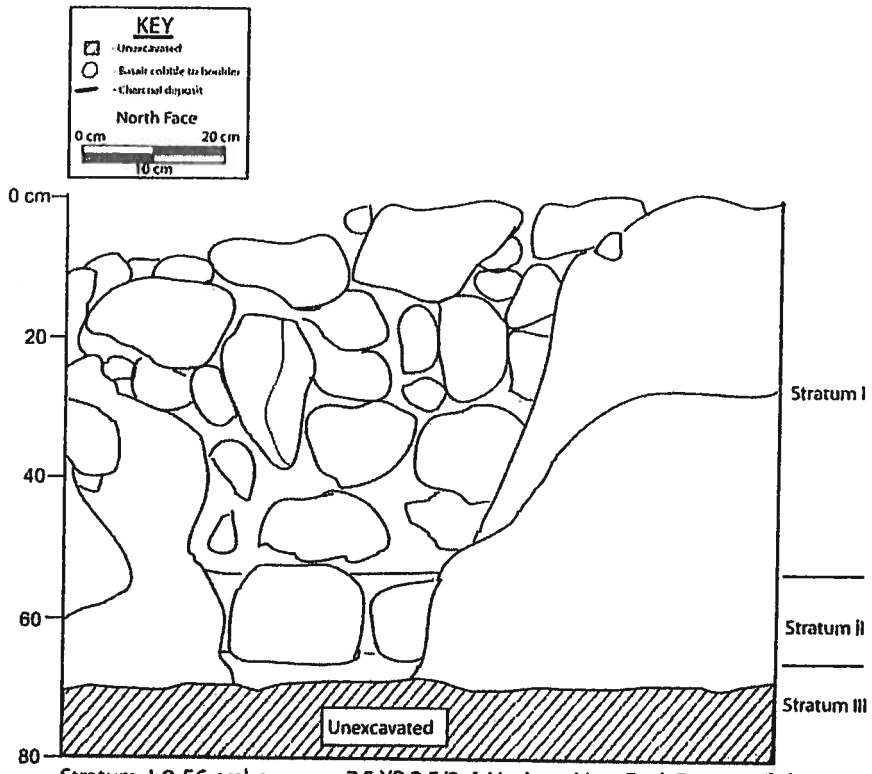
Midden Taxa	Stratum	Depth (cmbs)	Number of Pieces	Weight (g)
Conus sp	II	21-42	3	1.6
Cypraeidae	II	21-42	1	1.6
Littorina pintado	II	21-42	2	0.2
Nerita picea	II	21-42	3	0.2
Thaididae sp	II	21-42	3	4.5
Turbo sandwichensis	II	21-42	4	4.4
Unidentified shell midden	II	21-42		18.8
Echinoderm0.5	II	21-42	2	0.2
small mammal	II	21-42	1	0.4
Total				31.8

6. Test Unit 6

Test Unit 6 was excavated within SIHP Site -3905 Feature C (terrace). The terrace was located adjacent to two C-shapes. The interior of the terrace is leveled with medium to large cobbles. A 1 m by 1 m test unit was placed within the interior of the feature and was excavated to sterile sediments (Stratum III).

The stratigraphic sequence encountered within the test unit consisted of three distinct sediment layers (Figure 30). Stratum I consisted of a 56 cm thick very dark brown silt loam layer that contained abundant (90%) basalt cobbles. Stratum II consisted of 10 cm thick very dark brown clay loam cultural layer that contained scarce shell midden. Stratum III consisted of a sterile dark brown clay loam layer. Excavation was halted 4 cm into the Stratum III.

In total, 5.5 g of midden was recovered during the subsurface testing (Table 8). Of the total, marine invertebrate shell accounted for 4.8 g (87.3%), medium mammal accounted for 0.4 g (7.3%) and kukui endocarp accounted for 0.3 g (5.5%). A total of 3.2 g of charcoal were also collected during excavation, though this sample was not from a discreet lens and was not submitted for radiocarbon dating. In addition to the midden, 2 volcanic glass fragments (1.2 g) were encountered within Stratum II.



Stratum I: 0-56 cmbs 7.5 YR 2.5/2, A Horizon; Very Dark Brown; silt loam; structureless, loose dry consistency; non-plastic; no cementation; clear smooth lower boundary; Terrestrial origins includes terrace paving and structure

Stratum II: 56-66 cmbs 7.5 YR 2.5/3, Very dark brown; clay loam; moderate, fine, granular structure; soft dry consistency; slightly plastic; weak cementation; clear wavy lower boundary; Terrestrial origin Charcoal, marine shell, Kukui, bone, fish scale, and volcanic glass encountered

Stratum III: 66-70 cmbs 7.5 YR 3/3, Dark brown; clay loam; moderate, medium, granular structure; slightly hard dry consistency; plastic; strong cementation; Terrestrial origin. Sterile

Figure 30. Profile of north wall of Test Unit 6, SIHP Site -3905

Table 8. Test Unit 6, SIHP Site -3905 Midden Results

Midden Taxa	Stratum	Depth (cmbs)	Number of Pieces	Weight (g)
Cypraeidae	II	55-66	1	1.5
Nerita picea	II	55-66	2	0.1
Terebra sp	II	55-66	1	0.2
Trochus intextus	II	55-66	1	0.2
Turbo sandwichensis	II	55-66	1	0.5
Unidentified shell midden	II	55-66	9	2.3
Kukui	II	55-66	1	0.3
med. mammal	II	55-66	1	0.4
Total				5.5

B. Charcoal

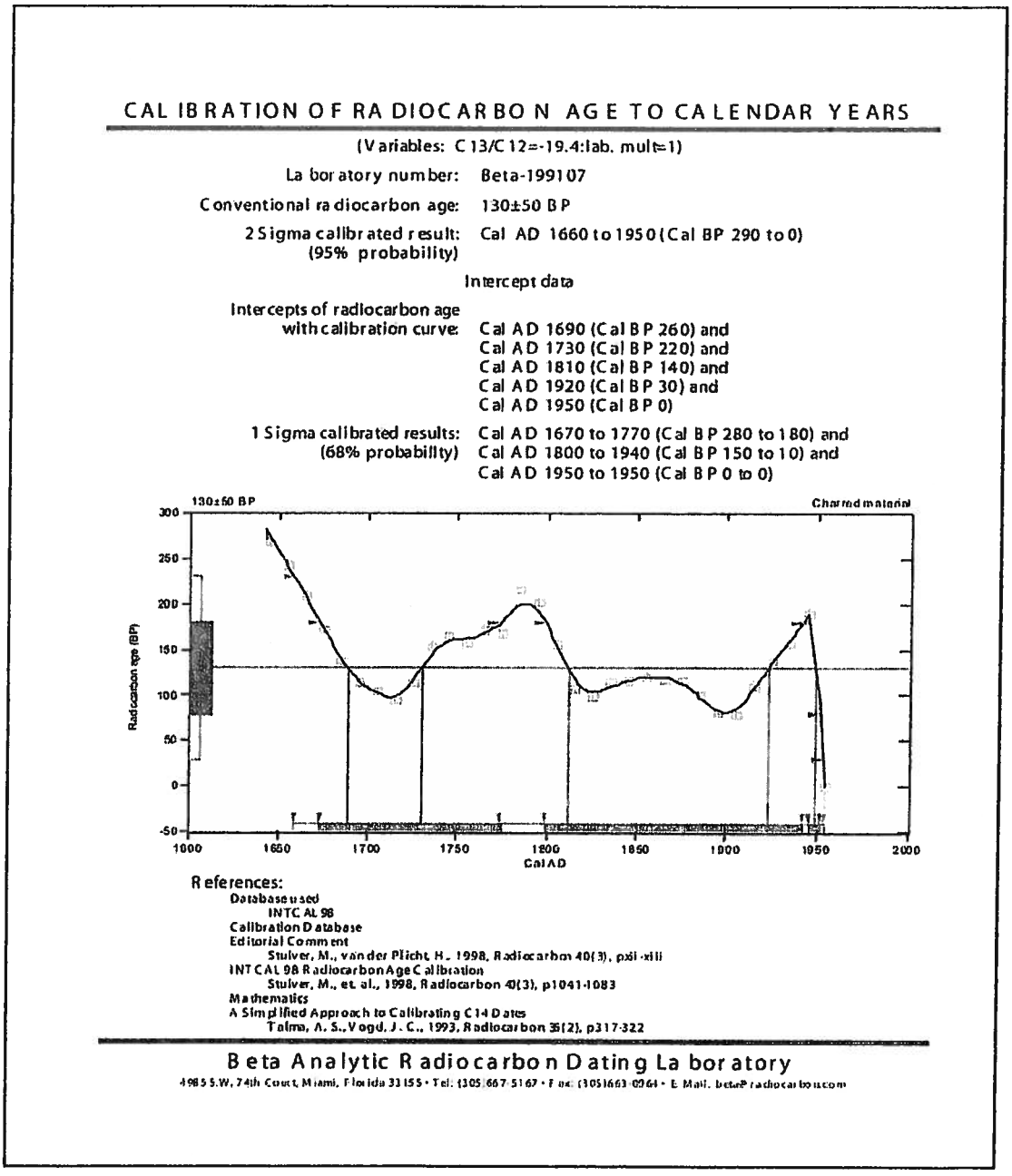
Four charcoal samples were collected during the subsurface testing portion of the inventory survey, two of which were suitable for radiocarbon dating. (Table 9)

Table 9. Charcoal Catalogue

Accession Number	Test Unit	Stratum	Depth	Material	Weight (g)	Calibrated Date (95% probability)
KOLO24TU1 C1*	1	II	9-26	Charcoal	55.8	AD 1660-1950
KOLO24TU3 C2*	3	II	5-26	Charcoal	55	AD 1490-1680 AD 1770-1800 AD 1940-1950
C3	5	II	21-42	Charcoal	13.6	
C4	6	II	56-66	Charcoal	3.2	
Total					127.6	

* denotes sample was sent to Beta Analytic for radiocarbon dating analysis

Both charcoal samples sent for radiocarbon dating (KOLO24TU1C1 and KOLO24TU3C2) had inconclusive radiocarbon dates. (Figures 31, 32) Sample KOLO24TU1C1 has an intercept date range of 1690-1950 AD, with a 68% probability ranging from 1670-1950 AD. Sample KOLO24TU3C2 has an intercept date range of 1650 AD, with a 68% probability ranging from 1330-1660 AD, however, there is a 95% probability date range of 1940-1950 AD as well. Neither sample reliably supports that indigenous occupation occurred in the project area.



CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-19.4:lab. mult=1)

Laboratory number: Beta-199107

Conventional radiocarbon age: 130±50 BP

2 Sigma calibrated result: (95% probability) Cal AD 1660 to 1950 (Cal BP 290 to 0)

Intercept data

Intercepts of radiocarbon age with calibration curve: Cal AD 1690 (Cal BP 260) and
Cal AD 1730 (Cal BP 220) and
Cal AD 1810 (Cal BP 140) and
Cal AD 1920 (Cal BP 30) and
Cal AD 1950 (Cal BP 0)

1 Sigma calibrated results: (68% probability) Cal AD 1670 to 1770 (Cal BP 280 to 180) and
Cal AD 1800 to 1940 (Cal BP 150 to 10) and
Cal AD 1950 to 1950 (Cal BP 0 to 0)

References:

Database used
INTCAL98
Calibration Database
Editorial Comment
Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii
INTCAL98 Radiocarbon Age Calibration
Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083
Mathematics
A Simplified Approach to Calibrating C14 Dates
Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

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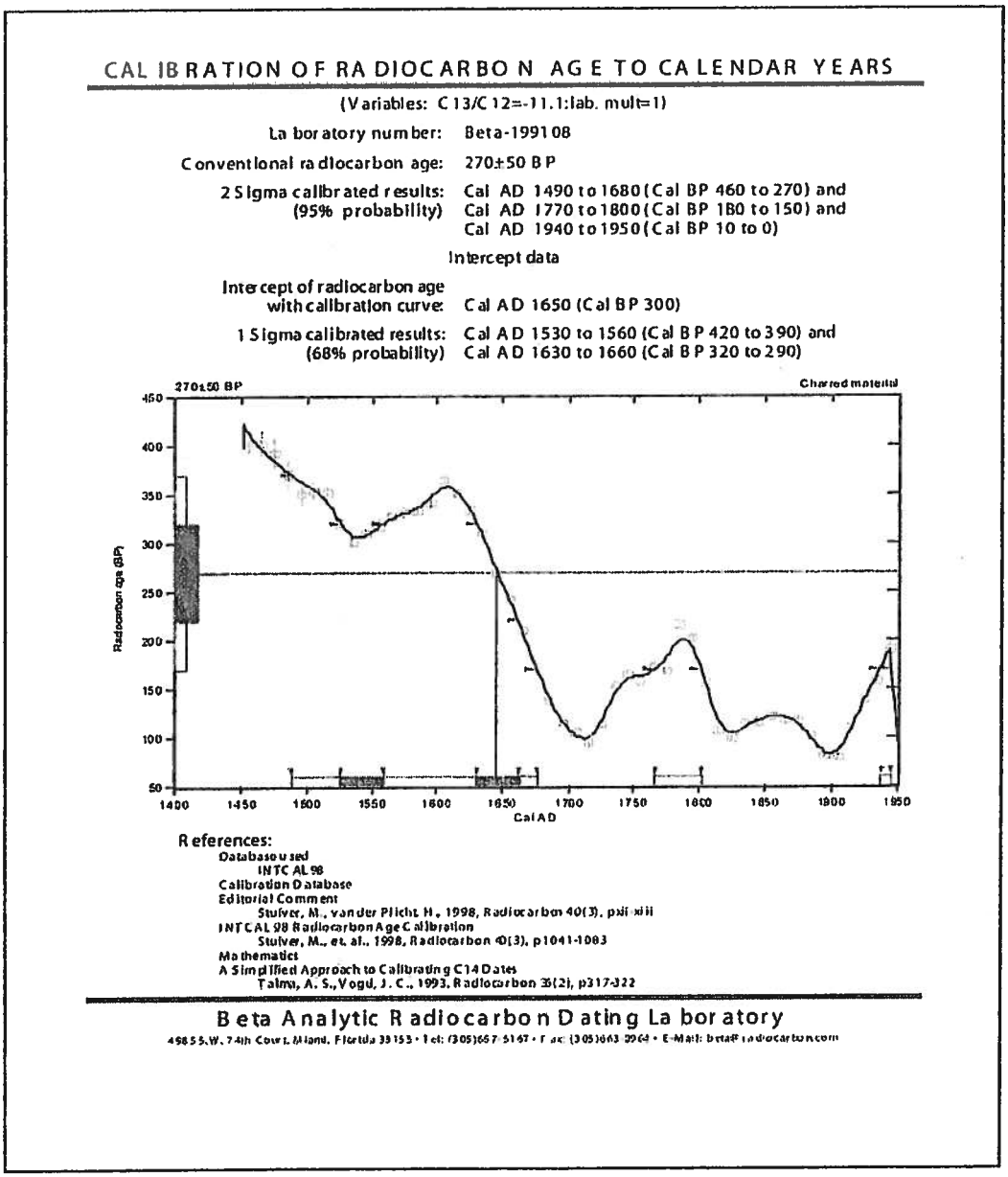
Figure 31. Results of radiocarbon dating for charcoal sample KOLO24TU1C1.



CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-11.1:lab. mult=1)

Laboratory number: Beta-199108

Conventional radiocarbon age: 270±50 BP

2 Sigma calibrated results: Cal AD 1490 to 1680 (Cal BP 460 to 270) and
(95% probability) Cal AD 1770 to 1800 (Cal BP 180 to 150) and
Cal AD 1940 to 1950 (Cal BP 10 to 0)

Intercept data

Intercept of radiocarbon age with calibration curve: Cal AD 1650 (Cal BP 300)

1 Sigma calibrated results: Cal AD 1530 to 1560 (Cal BP 420 to 390) and
(68% probability) Cal AD 1630 to 1660 (Cal BP 320 to 290)

References:

Database used
INTCAL98
Calibration Database
Editorial Comment
Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxii-xiii
INTCAL98 Radiocarbon Age Calibration
Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083
Mathematics
A Simplified Approach to Calibrating C14 Dates
Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

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Figure 32. Results of radiocarbon dating for charcoal sample KOLO24TU3C2.

C. Summary

All of the recovered cultural remains (artifacts, midden, bone and charcoal) excavated during the inventory survey were encountered within Stratum II. The stratigraphic model for the project area is that Stratum II, a cultural layer, is sandwiched between a sterile A horizon (Stratum I) and a C horizon (Stratum III). Radiocarbon dating results did little to support the stratigraphic sequence or occupational model of the area. The amount of recovered cultural remains reflects that the sites in question were used primarily for temporary habitation, including limited food preparation/ consumption and lithic reduction related to tool making.

VII. SUMMARY

Kōloa Ahupua'a is described by early archaeologists as "in a high state of cultivation". The evidence of field systems (*l'oi*) and irrigation channels (*auwai*) have been found throughout sections of Kōloa. The project area's location (approximately 400 m to the coast) is indicative of both habitation and agricultural features. *Kuleana* awards indicate that habitation and agriculture were occurring around the subject property suggesting that a broad range of site types may be present

From previous archaeological studies and historic accounts it appears that habitation and intensive irrigated agriculture were widespread in central and coastal Kōloa utilizing the opportunity to develop an extensive irrigated complex (the Kōloa Field System) off of Waikomo Stream. As Judd (1935) asserts, it is likely that low inland areas were used for less intensive cultivation patches of sweet potato, *pia*, and *wauke* and the gathering of *hala, kukui* and other resources. With this in mind, the types of archaeological sites and/or cultural materials within the project area were expected include both historic and pre-contact surface features such as walls, mounds, terraces, channels (*auwai)* associated with agriculture, as well as, other structures consistent with temporary habitations or field houses (c-shapes, small terraces, and small scale enclosures) and permanent habitations (large scale enclosures, terraces, and house platforms).

Hammatt et al. (1978) conducted a survey in the Kiahuna lands area and identified 583 archaeological sites including 175 enclosures, 108 house platforms, *auwai,* fields, terrace plots, and rock mounds. The subject property was possibly part of this survey. Hammatt et al. (1991) conducted an archaeological reconnaissance on an adjacent parcel to the northwest boundary of the subject parcel. This reconnaissance noted extensive modern land modification and no significant findings. In 1985 Hammatt et al. conducted an archaeological inventory survey at the same area of the Kōloa-Po'ipū Bypass Road. This survey with subsurface testing identified a total of 47 archaeological features. These findings were consistent with what have been recorded by Hammatt et al. (1978).

During a 2003 archaeological assessment of the parcel (Tulchin et al. 2003) it was observed that the known locations of several previously documented archaeological sites were covered in large boulder piles, including ARCH Sites 814, 815, 819-821, 824, 825, 827-831, 834, 838, and portions of SIHP Site 50-30-10-966 (see Figures 5, 6, see Table 2). The boulder stockpiles had been created sometime after 1985. The total impact to these previously identified sites was unclear at the time of assessment.

Archaeological monitoring was conducted by CSH, at the request of SHPD/DLNR Kaua'i Archaeologist Nancy McMahon, during the removal the boulder stockpiles. Work began on Oct. 12, 2004 and was completed on Nov. 8, 2004. During the course of monitoring, none of the sites in question were encountered. Based on observation, the sites were bulldozed prior to the creation of the stockpiles (see Figures 5, 6). Boulders in the stockpile still had a red patina, indicating that the piling activities were taking place until very recently. Thus, based on observations during archaeological monitoring, ARCH Sites 814, 815, 819-821, 824, 825, 827-831, 834, and portions of SIHP Site 50-30-10-966 including associated subsurface deposits, no longer exist due to the bulldozing and boulder stockpiling activities.

In addition to the thirteen sites destroyed by bulldozing and boulder stockpiling activities, five additional sites [SIHP Site -3786 (ARCH Site 833), -3788 (ARCH Site 835), -3792 (ARCH

Site 839), -3793 (ARCH Site 840), and -3795 (ARCH Site 842)] were not located during the present study. It is presumed that these sites were destroyed during previous road construction, which occurred prior to the present study. Of the 33 previously documented sites in the project area, 15 remain and 18 no longer exist. One site was newly identified in this study (SIHP site -3905)

Of the sixteen located sites 10 have a habitation function, 3 have an agricultural function, one has a storage function, and one is a probable *ahupua'a* boundary. Site complex -966 has both an agricultural and habitation function.

During the present inventory survey, six test units were excavated at five sites (-3766 A, -3770 A&B, -3785, -3791, -3905). Moderate amounts, 214 g, if inner coastal shell midden and scant amounts of small mammalian and avian bone was collected from the excavation units. In addition, four volcanic glass flakes, one basalt hammerstone and 127.6 g of charcoal was collected from the six test units. Two charcoal samples (KOLO24TU1C1, KOLO24TU3C2) were sent for radiometric dating. Both samples had inconclusive return dates and do not reliably support any type of habitation model (see Table 9, see Figures 31, 32).

The material finds recovered during the survey are indicative of an agriculture field with associated habitation and temporary habitation. Though material evidence of historic occupation was not encountered during the inventory survey, the Kōloa area is known to have been heavily modified to allow commercial agriculture (sugar cane, victual trade goods) and extensive ranching in the historic era (see Section II).

VIII. SIGNIFICANCE AND RECOMMENDATIONS

A. Significance

A total of sixteen sites of varied archaeological significance are present in the project area. Individual significance and recommended treatment are specified in Table 10 and Figure 33. Sites were evaluated for significance according to the broad criteria established for the National and State Registers. The five criteria are:

A	Site reflects major trends or events in the history of the state or nation.
B	Site is associated with the lives of persons significant in our past.
C	Site is an excellent example of a site type.
D	Site may be likely to yield information important in prehistory or history.
E	Site has cultural significance; probable religious structures and/or burials present.

The initial significance assessments are based on functional interpretations of the sites and site types. All of the sites within the project area are considered significant.

Sites -966, -3766, -3769, -3770, -3771, -3775, -3779, -3785, -3790, -3791, -3896, -3897, -3898, -3899, and -3905 are considered significant under Criteria D. These sites are all likely to yield additional information pertinent to prehistory and/or history.

Site -3900, the probable *ahupua'a* boundary wall, is considered significant under Criteria C and D. It is an excellent example of traditional Hawaiian site types (Criterion C) and is likely to yield additional information important to prehistory or history (Criterion D).

Site -966 (complex) has been heavily impacted by rock collecting and bulldozing, yet portions of the site remain intact, within and outside of the current project area. The intact northern (*mauka*) portion of the site complex, located outside of, but adjoining, the current project area is considered significant under Criteria C and D. The complex contains a variety of habitation and agricultural features and is an excellent example of traditional Hawaiian site types (Criterion C) and is likely to yield additional information important to prehistory or history (Criterion D). Although Criterion C is no longer relevant for the remnants within the current project area, due to their poor condition, Criterion D is relevant, as the complex is likely to yield additional information important to prehistory or history.

B. Recommendations

1. No Further Work

Five sites are recommended for no further work. Sites -3771, -3775, -3779, -3896, and -3898 have been severely impacted by rock collecting with only remnants of the original sites remaining. The five sites have been mapped, photographed, described and their locations have been recorded using GPS technology.

2. Data Recovery

Of the sixteen sites documented during the inventory survey, nine are recommended for further data recovery work. Initial documentation of Sites -3766, -3769, -3770, -3785, -3790, 3791, -3897, -3899 and -3905 suggest that additional data collection (i.e. subsurface excavation,

additional mapping) is necessary to fully understand the function of the sites and relationships between individual features in the larger site complexes.

3. Preservation

Two sites are recommended for preservation, site –3900 (the probable *ahupua'a* boundary wall) and the -966 complex.

While the –966 complex has been heavily impacted by modern rock collecting and bulldozing and is in remnant condition, portions of the site remain intact. Within the project area, near the northern boundary, these remnants include the approximately 75 meters of the western stone enclosing wall which is still relatively intact (although it has been moderately impacted by rock collecting), a *lo'i* wall, and an adjacent *'auwai* (that runs along the eastern side of the wall). The *lo'i* wall and adjacent *'auwai* have been somewhat impacted by a bulldozed road and are not continuously traceable (see Figure 6). Outside of, but adjoining, the project area, the remnants of the site complex include the intact northern (*mauka*) portion of the site complex (see Figure 6).

The intact northern (mauka) portion was part of the Po'ipūlani inventory survey (Hammatt et al. 1991) and for the most part the site remains intact. Thus, CSH recommends that the preservation of site -966 be focused on the remaining northern portion, as there is very little of the site left within the current project area.

Table 10. Site Significance and Recommendations (*Site tested during CSH 2004 Survey)

SIHP Site # 50-30-10-	Type	Function	Previous Work Done			Present State (2004)	Recommendations (Significance)
			Kiahuna (1978)	Kōloa-Po'ipū Bypass Road (1985)	Po'ipūlani (1991)		
966	Complex	Agriculture and habitation	located & described as individual features	located & described as -832 complex	located & described	Partially disturbed	Preserve remnant (C, D)
3766*	Wall, C-Shapes and Mound	Habitation	located & described			Intact	Data recovery (D)
3769	Walls, Terrace, Enclosure and Mound	Habitation	located & described			Intact	Data recovery (D)
3770*	C-shape and Terrace	Habitation	located & described			Intact	Data recovery (D)
3771	Mound	Habitation (Remnant)	located & described			Partially disturbed	No Further Work (D)
3775	Mound	Habitation (Remnant)	located & described			Partially disturbed	No Further Work (D)
3779	Enclosure	Storage	located & described			Remnant	No Further Work (D)
3785*	Enclosure	Agriculture	located & described	located & described	located & described, included in -966 complex	Partially disturbed	Data recovery (D)

SIHP Site # 50-30-10-	Type	Function	Previous Work Done			Present State (2004)	Recommendations (Significance)
			Kiahuna (1978)	Kōloa-Poʻipū Bypass Road (1985)	Poʻipūlani (1991)		
3790	C-shape	Habitation	located & described	located, described, & tested		Intact	Data Recovery (D)
3791*	Enclosure and Platform	Habitation	located & described	located, described, & tested		Intact	Data Recovery (D)
3896	Wall	Agriculture		located & described		Intact	No Further work (D)
3897	C-shape	Habitation		located & described		Partially disturbed	Data recovery (D)
3898	Mound	Agriculture (Remnant)	located	located & described		Partially disturbed	No Further work (D)
3899	Enclosure	Agriculture		located & described		Partially disturbed	Data Recovery (D)
3900	Wall	Probable ahupuaʻa boundary	located	located & described		Intact	Preserve (C, D)
3905*	C-shapes and a terrace	Habitation				Intact	Data Recovery (D)

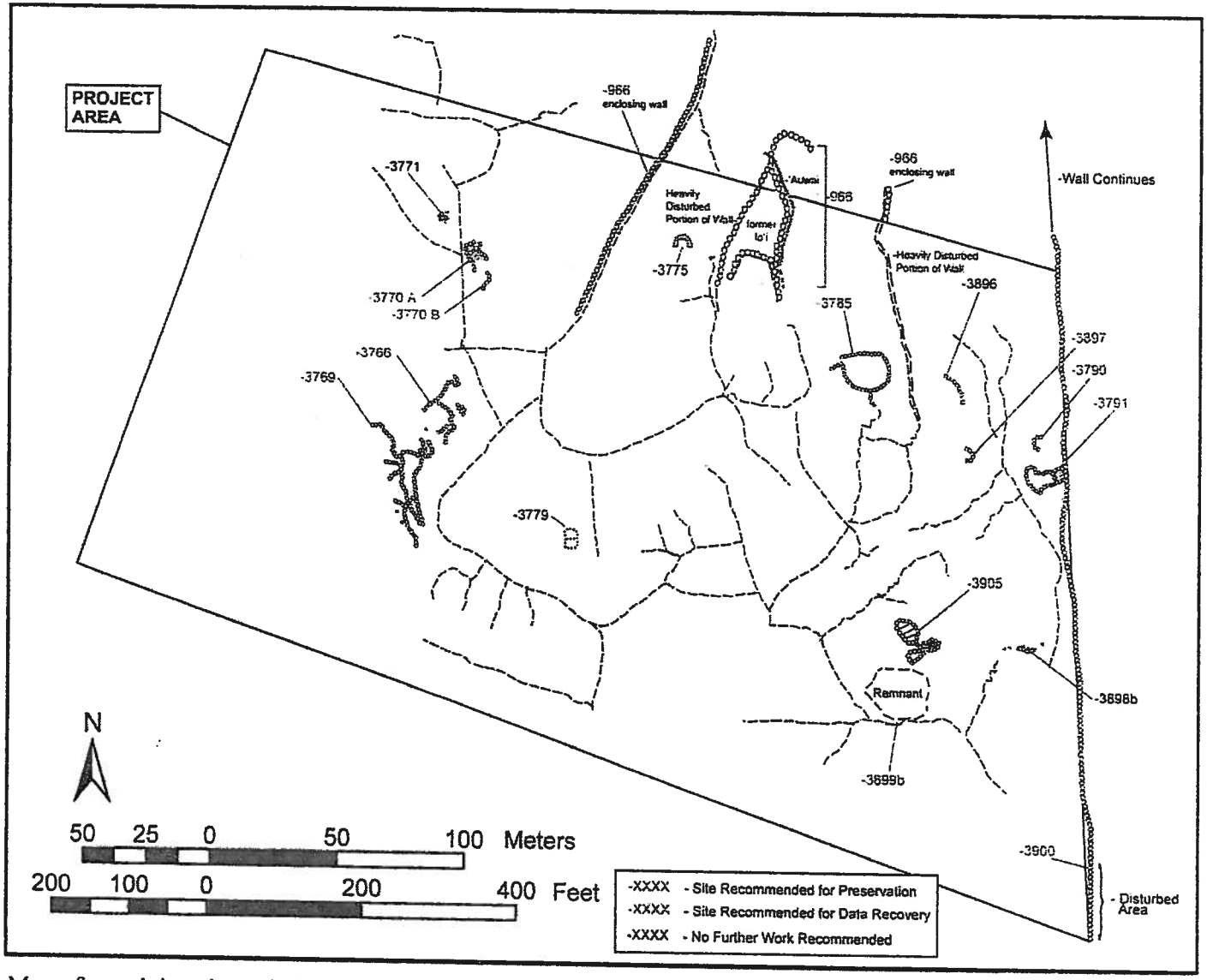

Figure 33. Map of remaining sites within project area with recommendations for further work

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LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
DEPUTY DIRECTOR - LAND

OBAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

June 15, 2005

Hal Hammatt, Ph.D.
Cultural Surveys Hawaii
P.O. Box 1114
Kailua, Hawaii 96734

LOG NO: 2005.1208
DOC NO: 0506NM16

Dear Dr. Hammatt:

SUBJECT: **Historic Preservation Review –Revised Archaeological Inventory Survey for the Makai Portions of Parcel 19 of the Eric A. Knudsen Trust Lands, Koloa (Hammatt, Cordy, Rainaiter, Gomes, Shideler and Folk, CSH, 2005)**
Koloa, Koloa, Kauai
TMK: (4) 2-18-14: 19 por.

Thank you for submitting the above revised report for our review which received on May 14, 2005. This report is for an 18-acre project area. A total of 33 historic properties were known to have existed in the 18-acre project area. The age ranges were from 1330-1660 A.D. and 1670-1950 A.D.

Fifteen sites (3766, 3769, 3770, 3771, 3775, 3779, 3785, 3790, 3791, 3896, 3897, 3898, 3899, 3900 and 3905) have been determined to be significant under criteria D of the National and State Registers. Sites 966 and 39000 are significant under criteria C and D.

You recommend no further archaeological work for sites 3771, 3775, 3779, 3896, and 3898 because these sites have been impacted by rock collecting, are in poor condition and do not merit preservation.

You are recommending data recovery for nine of the sites (3766, 3769, 3770, 3785, 3790, 3791, 3897, 3899, and 3905). In accordance with Hawaii Administrative Rules13-278 with you will need to submit a data recovery plan for review and approval by our office.

You are recommending that one site complex 966 and site 3900 be preserved. In accordance with Hawaii Administrative Rules 13-277 you will need to submit a preservation plan for site 966 and one for site 3900 which includes short and long term measures for review and approval by our office.

The revisions have been made, the report is acceptable. If you have any questions, please call Nancy McMahon 742-7033.

Aloha,

Melanie Chinen, Administrator
State Historic Preservation Division

NM:jen

c: Ian Costa, County Planning Department
KHPRC

EXHIBIT 5

IN THE LAND COURT OF THE TERRITORY OF HAWAII

---oOo---

In the Matter of the Application

of

BISHOP TRUST COMPANY, LTD., Trustee, under certain deeds of trust made by Eric A. Knudsen and Augustus F. Knudsen,

to register and confirm its title in fee simple, as trustee aforesaid, in land situated at Koloa, Kona, Kauai, Territory of Hawaii.

L. C. PET. NO. 956

ANSWER AND CLAIM OF THE TERRITORY OF HAWAII

LAND COURT
TERRITORY OF HAWAII
FILED
1955 MAY 23 AM 9 58
REGISTRAR

E. R. McGhee,
Deputy Attorney General,
Attorney for the Territory of Hawaii.

239

EXHIBIT "5"

IN THE LAND COURT OF THE TERRITORY OF HAWAII

---oOo---

In the Matter of the Application

of

BISHOP TRUST COMPANY, LTD., Trustee, under certain deeds of trust made by Eric A. Knudsen and Augustus F. Knudsen,

To register and confirm its title in fee simple, as trustee aforesaid, in land situated at Koloa, Kona, Kauai, Territory of Hawaii.

L. C. PET. NO. 956

ANSWER AND CLAIM OF THE TERRITORY OF HAWAII

Comes now the TERRITORY OF HAWAII, one of the respondents in the above-entitled cause, by E. R. McGhee, Deputy Attorney General, its attorney, and for answer to the petition filed herein claims as follows:

I

That the Territory of Hawaii is the owner in fee simple of a portion of the land mentioned and described in said Land Court Application, the same being portion of the land of Wèliwèli included in Lot 9 of said Land Court Application and being particularly described as follows:

240

Beginning at a pipe at the Southeast corner of this parcel of land, being also the Southwest corner of Grant 1414 to Waliwali, and the Northwest corner of Grant 1408 to Kauiahewa, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Paa" (original) being 3247.8 feet South and 3103.5 feet West, and running by azimuths measured clockwise from true South:

1. 81° 57' 30" 328.4 feet;
2. 193° 27' 00" 117.5 feet along the East boundary of the land of Koloa as described in Boundary Certificate 27, February 20, 1875;
3. 176° 23' 00" 1147.1 feet along the East boundary of the land of Koloa as described in Boundary Certificate 27, February 20, 1875;
4. 182° 46' 00" 939.2 feet along the East boundary of the land of Koloa as described in Boundary Certificate 27, February 20, 1875;
5. 174° 40' 00" 1263.2 feet along the East boundary of the land of Koloa as described in Boundary Certificate 27, February 20, 1875;
6. 171° 07' 00" 1172.2 feet along the East boundary of the land of Koloa as described in Boundary Certificate 27, February 20, 1875;
7. 161° 15' 00" 4185.1 feet along the East boundary of the land of Koloa as described in Boundary Certificate 27, February 20, 1875;

241

8.	176°	50'	00"	313.4	feet to the West corner of Grant 1420 to M. Charman;
9.	330°	08'	00"	3511.8	feet along Grant 1420 to M. Charman Grant 1418 to Pahia and Grant 1410 to Kolua to a pipe;
10.	343°	55'	00"	570.7	feet along Grant 1412 to Kaawamaikai to a pipe;
11.	354°	40'	00"	1374.7	feet along Grant 1412 to Kaawamaikai and Grant 1409 to Naawa to a pipe;
12.	311°	14'	00"	468.0	feet along Grant 1407-1/2 to Kenoi;
13.	4°	32'	00"	1062.6	feet along Grant 1407-1/2 to Kenoi and Grant 1415 to Kau to a pipe;
14.	14°	25'	00"	991.1	feet along Grant 1419 to Kakeo to a pipe;
15.	00°	36'	00"	1067.7	feet along Grant 1417 to Haumea and Grant 1414 to Waliwali to a pipe;
16.	6°	55'	00"	488.8	feet along Grant 1414 to Waliwali to the point of beginning, and

containing an area of 110.57 acres.

A blue print of said portion of said land of Weliweli included in said Lot 9 of said application is hereto attached, made a part hereof and marked Exhibit "A".

II

That the Territory of Hawaii is the owner in fee simple of those certain portions of the Ili of Omao conveyed to said Territory by Ernest H. Wodehouse, Trustee, on October 20, 1909, by deed recorded in the Bureau of Conveyances in

242

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387

Book 319 on page 293, which said portions of said Ili are more particularly described as follows:

PARCEL I

Being a portion of L. C. Award 387, Part 2, Section 3, No. 4 to A. B. C. F. M.

Beginning at the end of Course 431 of Land Court Application 956, at the Southwesterly intersection of the center lines of the old and present Omao stream, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Laaukahi" being 4221.6 feet South and 7532.9 feet West, and running by azimuths measured clockwise from true South:

Up along the middle of the present Omao stream, the direct azimuths and distances between points in the middle of said stream being:

1. 214° 00' 135.0 feet;
2. 139° 00' 60.0 feet to the junction of the old and present Omao stream;

Thence down the middle of the old Omao stream, the direct azimuths and distances between points in the middle of said stream being:

3. 246° 00' 100.0 feet;
4. 320° 00' 60.0 feet;
5. 20° 00' 80.0 feet;
6. 45° 00' 95.0 feet;
7. 82° 24' 72.2 feet to the point of beginning, and containing an area of 0.35 acres.

243

A blue print of the above-described land is hereto attached, marked Exhibit "B", and made a part hereof.

PARCEL II

Being a portion of L.C. Award 387, Part 2, Section 3, No. 4, to A.B. C. F. M.

Beginning at the end of Course 254 of Land Court Application 956, said point of beginning being at the Easterly intersection of the center lines of the old and present Poeleele stream, the coordinates of said point of beginning referred to Government Survey Triangulation Station "Laaukahi" being 7494.0 feet South and 9563.2 feet West, and running by azimuths measured clockwise from true South:

Up along the middle of the old Poeleele stream, the direct azimuths and distances between points in the middle of said stream being:

1. 325° 00' 200.0 feet;
2. 41° 00' 170.0 feet;
3. 92° 00' 110.0 feet;
4. 150° 00' 150.0 feet;
5. 177° 00' 110.0 feet;
6. 226° 54' 185.3 feet to the Westerly junction of the old and present Poeleele stream;

Thence down the middle of the present Poeleele stream, the direct azimuths and distances between points in the middle of said stream being:

7. 351° 00' 40.0 feet;
8. 310° 00' 60.0 feet to the point of beginning, and containing an area of 1.57 acres.

244

387

A blue print of the above described land is hereto attached, marked Exhibit "C", and made a part hereof.

III

That the Territory of Hawaii is the owner in fee simple of those certain government highways or roads shown on the map filed with the application, which said roads are more particularly described as follows:

A. Main government road, 50 feet wide, from Lihue-Koloa boundary to Koloa town, and from Koloa town to Koloa-Lawai boundary, lying between R. P. 4512, Mahele Award 43, to J. Y. Kanehoa, and Lot 33, Lawai Homesteads;

B. Koloa town road, 50 feet wide, from the intersection of the main government road at Koloa town to the Koloa Plantation store;

C. Cockett Road, 40 feet wide, from the junction of the main government road South of Exclusion 4, to Weliweli boundary;

D. Koloa Mill Road, 40 feet wide, from the junction of Koloa town road to Grant 1421 to Kalau (Weliweli boundary);

E. Blake or Maulili Road, 40 feet wide, from the junction of Koloa Mill Road to Waikomo stream, and from said junction Northerly to Grant 92 to Aleon;

F. Poipu shortcut road, sometimes known as Catholic Church road, 30 feet wide, from the junction of Koloa Mill Road to Poipu Road, South of Exclusion 23;

G. Poipu Road, 40 feet wide, from Waikomo stream to the North boundary of Exclusion 27, and from Exclusion 27 to Weliweli-Koloa boundary;

245

DXF

390

H. Koloa Landing Road, 40 feet wide, from the junction of Poipu Road to Koloa Landing, Omao Road;

I. Omao Road, 40 feet wide, from the junction of main government road to Grant 93 (West boundary), and from the West boundary of Grant 93, through Lot 9, to the West boundary of Grant 93;

J. Shortcut road, 40 feet wide, from the East boundary of Lawai Homesteads (between Lots 36 and 68) to the Poeleele stream, and from the Omao stream (between R. P. 1936 to James W. Smith and the Northeast boundary of Omao Homesteads) to the junction of the government road at the Knudsen Gap home;

K. Two portions of old government road, containing a total area of 12.13 acres, as shown on blue prints thereof, hereto attached and made a part hereof and marked Exhibits "D" and "E".

WHEREFORE, this respondent prays that if the title to the lands mentioned and described in the within application be registered and confirmed in the applicant, that portion of government land of Weliweli described in paragraph I hereof, said portions of the Ili of Omao described in paragraph II hereof, and government highways described in paragraph III hereof, be excluded therefrom.

Dated at Honolulu, T. H., this 22 day of May, 1933.

TERRITORY OF HAWAII,

By _____
E. K. Hoohee
Third Deputy Attorney General,
Its Attorney.

246

59

591

Territory of Hawaii)
) ss.
City and County of Honolulu)

E. R. McHEE, being first duly sworn, on oath deposes and says: That he is a duly appointed, qualified and acting Deputy Attorney General of the Territory of Hawaii; that he has read the foregoing Answer and Claim of the Territory of Hawaii, knows the contents thereof, and that the same is true to the best of his knowledge and belief.

E. R. McHee

Subscribed and sworn to before me this 22nd day of May, 1933.

Notary Public, First Judicial Circuit, Territory of Hawaii.

247

340

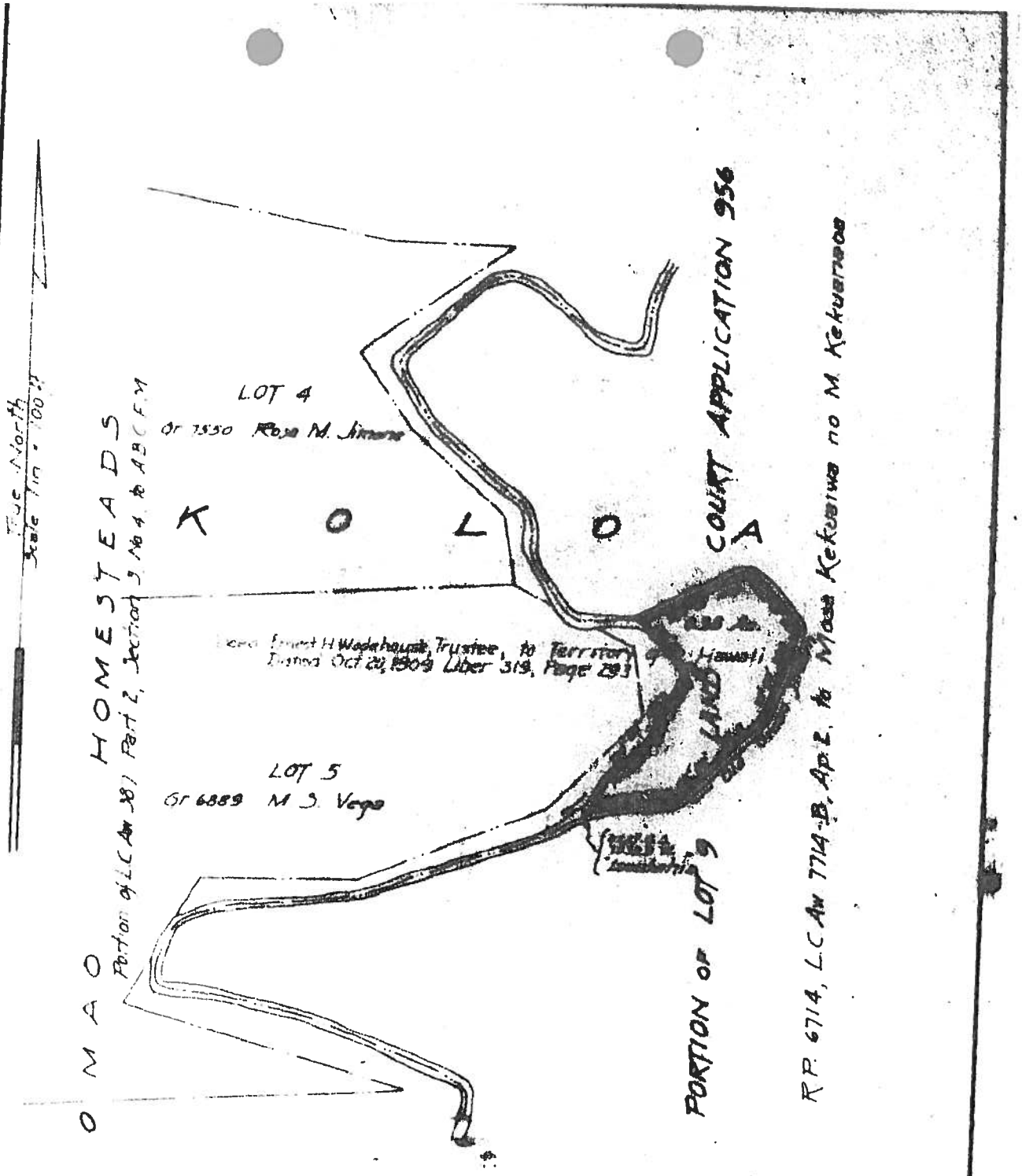
3/2

LAND COURT APPLICATIONS

APPLICATION NO. 956

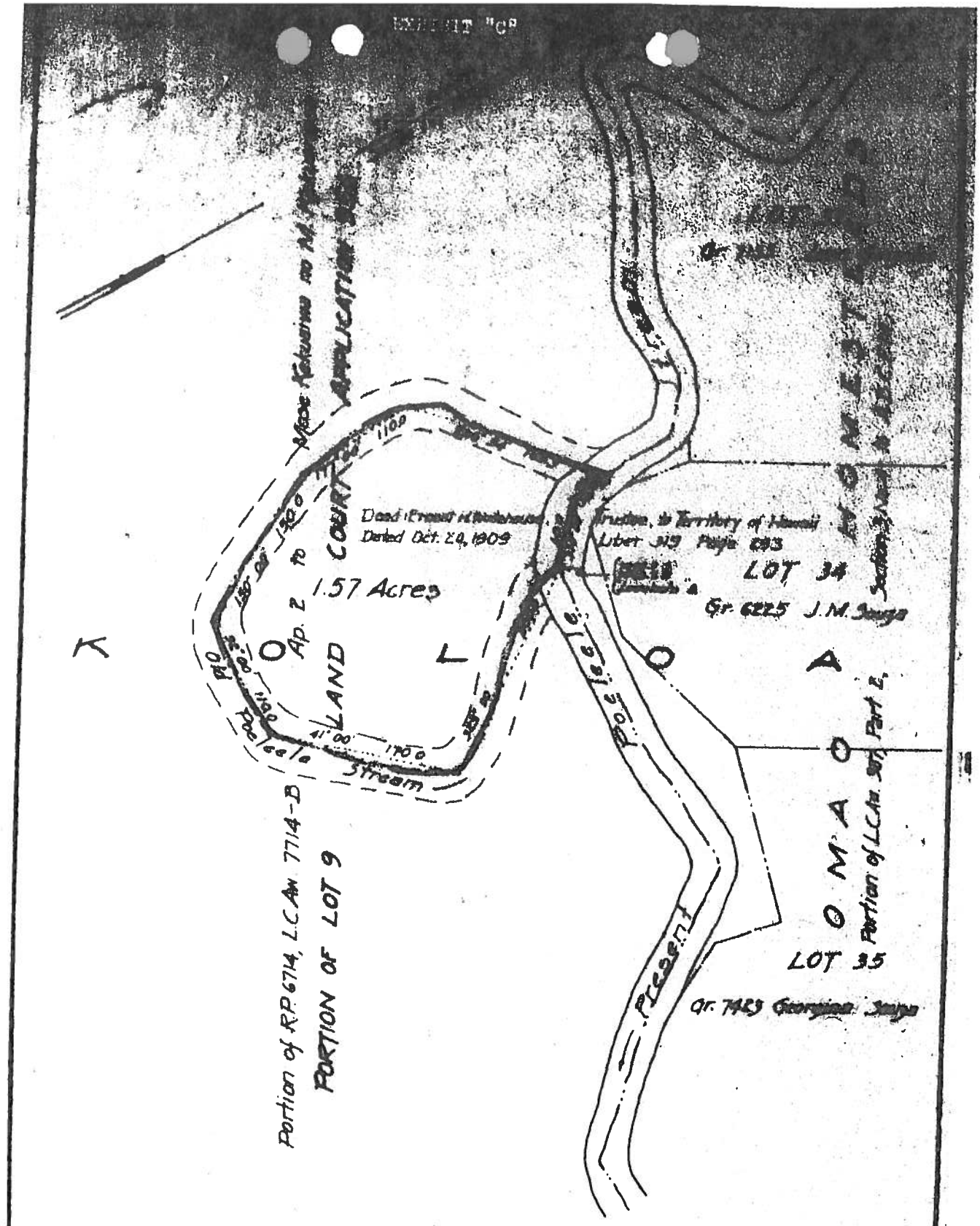
PAGE 248, EXHIBIT "A" (MAP)

SENT BACK TO LAND COURT



Portion of the Gov't Land of Omao
East of Lot 5 Omao Homesteads
Included in Lot 9 Land Court Application 956
Bishop Trust Co Ltd — Applicant
Omao Koloa, Kona, Kauai
Scale 1in = 100 ft

SURVEY DEPARTMENT
TERRITORY OF HAWAII

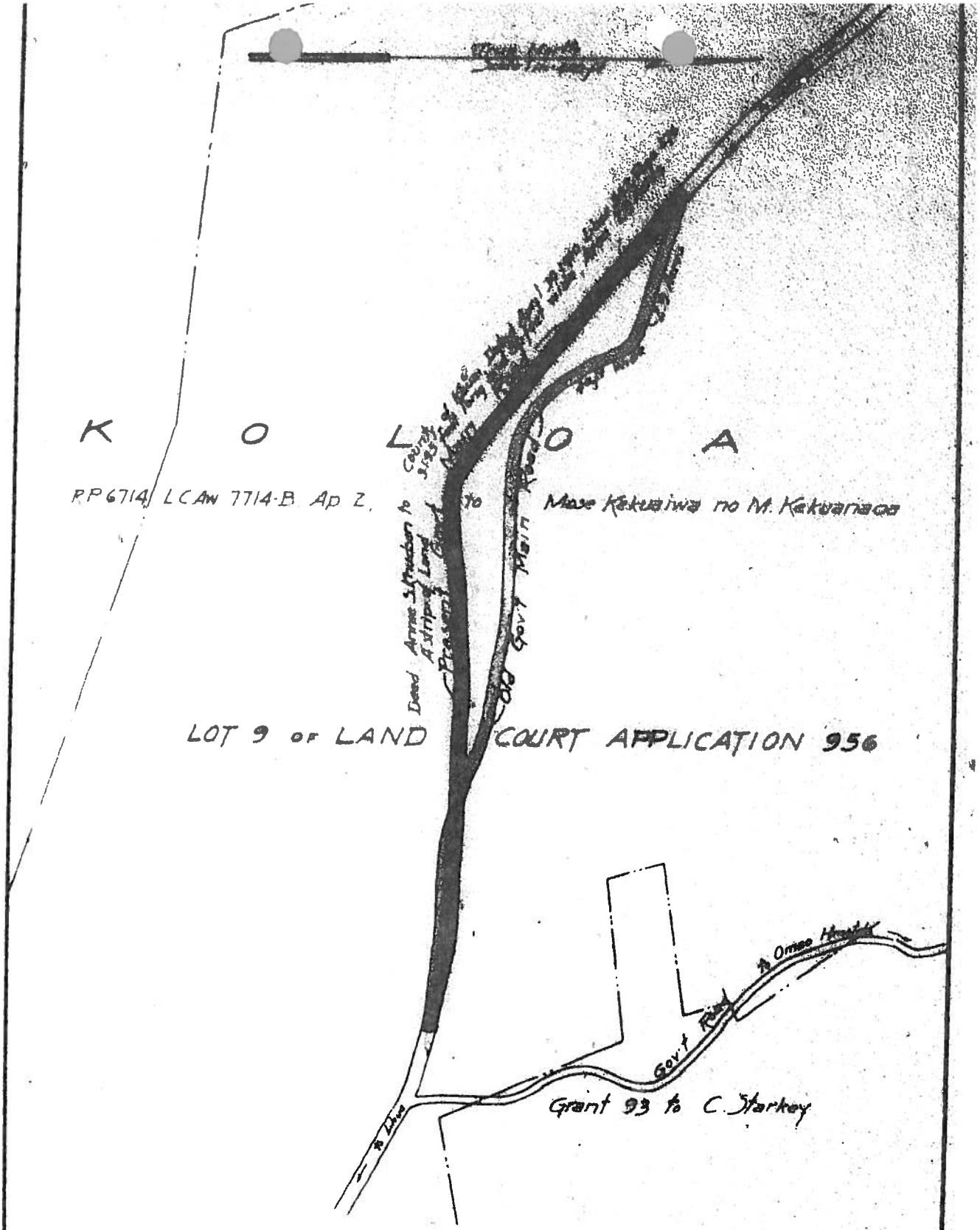


Portion of the Govt Land of Omao
Southwest of Lot 34, Omao Homesteads
Included in Lot 9 of Land Court Application 956
Bishop Trust Co. Ltd. — Applicant
Omao, Koloa, Kona, Kauai
Scale 1 in = 100 ft. 250

SURVEY DEPARTMENT
TERRITORY OF HAWAII

C. S. P. No. 6330

Jan. Nov., 26 & 1933



Portion of Old Govt. Main Road
Included in Lot 9 of Land Court Application 956
Bishop Trust Co. Ltd.-Applicant
Koloa, Kona, Kauai
Scale 1in. = 400 ft.

251

SURVEY DEPARTMENT
TERRITORY OF HAWAII

C. S. F. No.

LAND COURT APPLICATIONS

APPLICATION NO. 956

PAGE 252, EXHIBIT "B" (MAP)

SENT BACK TO LAND COURT

EXHIBIT 6

Transfer Certificate of Title

From Transfer Certificates Nos {14,337 / 15,225} Originally Registered {No. 15,826 / October 30, 1935 / June 25, 1936}

in Registration Books {144 / 153} Pages {181 / 97} for the Registry District of the Territory of Hawaii.

This is to Certify that -TERRITORY OF HAWAII- is the owner in fee simple for road purposes, of those certain parcels of land situate at Koloa, Island and County of Kauai, Territory of Hawaii, described as follows:

LOT NO.	AREA	ROADWAY
33	11.580 Acres)	
43	6.270 ")	
44	7.726 ")	Government Main Road
52	9.221 ")	
56	3.878 ")	
24	1.210 ")	Blake Road
25	0.910 ")	
42	0.710 ")	Cockett or Wailaau Road
18	0.170 ")	
19	6.724 ")	Poipu Short Cut Road
20	0.374 ")	
15	5.850 ")	Poipu Beach Road
16	0.270 ")	
14	0.430 ")	Koloa Landing Road
35	0.224 ")	
36	0.450 ")	Omao (Homestead) Road
26	2.815 ")	
27	0.007 ")	Koloa Mill Road
37	1.327 ")	
48	12.847 ")	Koloa Cut Off (Belt Road)
53	0.012 ")	

All of the above lots are shown on Maps 3, 4 and 5 on file in the Office of the Assistant Registrar of the Land Court of the Territory of Hawaii with Land Court Application No. 956 of Bishop Trust Company, Limited, Trustee for Eric A. and Augustus F. Knudsen, and being portions of the land described in Transfer Certificates of Title Nos. 14,337 and 15,225 issued to Bishop Trust Company, Limited, Trustee.

And it is further certified that said land is under the operation and provisions of Chapter 144 of the Revised Laws of Hawaii, 1935, and that the title of said -TERRITORY OF HAWAII- to said land is registered under said Chapter subject, however, to any of the encumbrances mentioned in Section 5041 of said Revised Laws of Hawaii which may be subsisting, and subject also to:

1. That certain lease made by Bishop Trust Company, Limited, Trustee, to The Koloa Sugar Company, dated March 27, 1924, recorded in Book 716, page 283, Hawaiian Registry of Conveyances, for a term expiring August 15, 1965.

2. Right of way for the erection and maintenance of the electric light and power line and the appurtenances thereto under lease by Annie S. Knudsen to Kauai Electric Company, Limited, dated

January 1, 1917, recorded in Book 453, page 455, said Registry, under assignment to McBryde Sugar Company, Limited, dated December 31, 1921, recorded in Book 626, page 74, said Registry, said right of way being for a term expiring January 1, 1937.

3. As to Lots 33 and 36 only, to the right of McBryde Sugar Company, Limited, under agreement with The Koloa Sugar Company, dated January 31, 1925, recorded in the Hawaiian Registry of Conveyances in Book 756, page 275, to maintain the presently existing ditch or tunnel crossing said Lots 36 and/or 33.

4. As to Lot 33 only, to a perpetual easement to maintain, operate, repair and use a ditch approximately 10 feet wide known as the "Smith Ditch" as presently existing on the ground as shown and described on the map accompanying the application as Easements R and S, together with the necessary and reasonable rights of ingress and egress in the lands immediately adjacent thereto for the purpose aforesaid.

5. As to Lot 56 only, to an easement for a ditch right of way known as "Huleia Weoweopilau Ditch", as particularly shown and designated on Map 3 of said Land Court Application No. 956 as Easement BB, being the same Easement BB registered in Land Court Application No. 1087, for a term expiring October 1, 1940.

6. As to Lot 48 only, to an easement to be used in common with Bishop Trust Company, Limited, Trustee aforesaid for E. A. and A. F. Knudsen, pursuant to the terms and provisions of the grant from The Koloa Sugar Company, dated May 7, 1935, for the free flowage of water in, upon, across and over said Lot 48, through that certain ditch, pipe line, flume, tunnel or other conduit, shown and designated on the map herewith as "McBryde Sugar Company, Limited, Ditch", and being the same easement registered under paragraph C as appurtenant to Lot 1 of said Land Court Application No. 1087, for a term expiring August 14, 1965.

The encumbrances listed above as "1" to "6" inclusive, being mentioned in Transfer Certificates of Title Nos. 14,337 and 15,225 to which reference is hereby made.

Witness, the Honorable A. M. Cristy, Judge of the Land Court, at Honolulu, in the City and County of Honolulu, Territory of Hawaii, the 29th day of October in the year nineteen hundred and thirty-six at 8 o'clock and 06 minutes in the fore - noon.

Attest, with the Seal of Said Court,

George C. Ashford
Acting *Assistant Registrar.*

MEMORANDA OF ENCUMBRANCES ON THE LAND DESCRIBED IN THIS CERTIFICATE.

Document Number	Kind	Running in Favor of	Terms	Date of Instrument	Date of Registration: Year & Month	D.	H.	M.	A.M. or P.M.	Signature of Assistant Registrar	Discharge
Land Court Order No. 2760	Subdivision of		Lot 48 into Lots 48-A & 48-B; Lot 53 into Lots 53-A & 53-B; Lot 52 into Lots 52-A & 52-B; map 6	May 14, 1937	May 1937	18	11	15	A.M.	M. McEldowney	
290628	Partial Surrender of Lease	Bishop Trust Co., Ltd., Tr.	Lease recorded in Liber 710, page 283; reserving right to keep & maintain presently existing ditches & tunnels across or under the within premises	Oct. 16, 1956	May 1962	25	10	20	A.M.	Cynthia Ledward	
Land Court (Order No. 20,123)	Subdivision and ly	of Lot 19 into Lots	19-A, 19-B, 19-C, 19-A; Map 28	May 29, 1962	June 1962	1	1	55	A.M.	Cynthia Ledward	
291325	Quitclaim Deed	State of Hawaii	all right, title & interest of Grove Farm Co., Ltd. in Lots 15-B, 18, 19-A and 19-B	May 22, 1962	June 1962	8	3	50	A.M.	Cynthia Ledward	
291326	Exchange Deed	Waldemar L. Knudsen Estate, Tr.	Lots 15-B, 18 and 19-A	June 8, 1962	June 1962	8	3	50	P.M.	Cynthia Ledward	
(Land Court Order No. 38709)	Designation of Easement	Easement 5 over & across Lot 56 — Map 46		Nov 16, 1973	Nov 1973	20	11	57	AM	Leimana A. McTeague	
Land Court Order No. 60380	Subdivision	of Lot 24 into Lots 24-A & 24-B — Map 73		Jul 20, 1981	Jul 1981	21	8	01	AM	Leimana A. Chun	
1186998	Grant	Kauai Electric Company	utility easement across Easement 5 within LOT 56	Jul 15, 1983	Aug 1983	18	1	28	PM	Lynette Ajimine	
2856282	ASSIGNMENT	KAUAI ISLAND UTILITY CO-OP	GRANT 1186998, EASEMENT 5, LOT 56	NOV 1, 2002	OCT 2002	31	8	01	AM	Nalani E. Fujimoto	
2856282	MORTGAGE	UNITED STATES OF AMERICA & NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION	GRANT 1186998 EASEMENT 5, LOT 56	NOV 1, 2002	OCT 2002	31	8	01	AM	Nalani E. Fujimoto	
3057862	RELEASE	MORTGAGE 2856282		JUN 1, 2004	AUG 2004	27	8	01	AM	M. Kehaulani Kauwe	

[See Over]

L A N D C O U R T C E R T I F I C A T E O F T I T L E
(State of Hawaii)

From Certificate No. 14,337
Document No.

No. 15,826

I hereby certify that pursuant to Chapter 501 of the Hawaii Revised Statutes, the REGISTERED OWNER below is the owner in fee simple of the LAND described, subject, however to encumbrances mentioned in Section 501-82 of the Hawaii Revised Statutes and subject also to such exceptions, encumbrances, interests and entries as may appear under ENCUMBRANCES.

Issued: 10/29/1936

CONTRACT
Assistant Registrar

REGISTERED OWNER

-TERRITORY OF HAWAII-

LAND

Situate at Koloa, Kauai

LOT NO.	AREA	ROADWAY
33	11.580 Acres)	
43	6.270 ")	
44	7.726 ")	Government Main Road
52	9.221 ")	
56	3.878 ")	
24	1.121 ")	Blake Road
25	0.910 ")	
42	0.710 ")	Cockett or Wailaau Road
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26	2.815 ")	
27	0.007 ")	Koloa Mill Road
37	1.327 ")	
48	12.847 ")	Koloa Cut Off (Belt Road)
53	0.012 ")	

Maps 3, 4 and 5,
Land Court Application 956 of the Trustee for Eric A and Augustus F Knudsen

ENCUMBRANCES

Lot/Int.(%)	Document#	Class	In Favor Of / Terms
			Lease to The Koloa Sugar Company, exp 8/15/65, in Book 716, Pg 283
			L/R/W to Kauai Electric Company, Limited, exp 1/1/37, in Book 453, Pg 455
			A/L to Mc Bryde Sugar Company, Limited, in Book 626, Pg 74
			Agm between Mc Bryde Sugar Company, Limited & The Koloa Sugar Company, in Book 756, Pg 275, re ditch or tunnel across Lots 33 & 36
		CONT'D	
	2760	LCO	Subdivision of Lot 48 into Lots 48-A & 48-B; Lot 53 into Lots 53-A & 53-B & Lot 52 into Lots 52-A & 52-B, Map 6 [MH]
	20123	LCO	Subdivision of Lots 15 & 19 into Lots 15-A thru 15-C, 19-A & 19-B, Map 28.....[MA]
	290628	SURRENDER	Lease in Liber 716, Pg 283; Reserving right to existing ditches.....[MA]
	291325	QUITCLAIM	State of Hawaii, all rights, titles & int of Grove Farm Co., Ltd., in Lots 15-B, 18, 19-A & 19-B.....[MA]
	291326	DEED	Valdemar L Knudsen etals Trs, Lots 15-B, 18 & 19-A.....[MA]
24	60380	LCO	Subdivision of Lot 24 into Lots 24-A & 24-B, Map 73.....[RC]
33			Easements R & S across Lot 33, for operation & maintenance of a ditch
48			Easement for free flowage of water through ditch across Lot 48
56			Easement BB for ditch across Lot 56
56	38700	LCO	Easement 5, Lot 56, Map 46.....[LM]
56	1186998	GRANT	Kauai Electric Company, Easement 5, Lot 56, for utility.....[LA]
56	2856272	ASG	Kauai Island Utility CO-OP, Grant 1186998, Eas 5, Lot 56.....[NF]
56	2856282	MTG	United States of America, and National Rural Utilities Cooperative Finance Corporation, Grant 1186998, Eas 5, Lot 56.....[NF]
56	3157862	RESTATED	Mtg 2856282.....[MK]

Rev. 08/27/2004

M. Kekua-Kaluniak
Assistant Registrar

A true copy as of OCT 30 2007
Attest: [signature]
Assistant Registrar
Land Court

DECLARATION OF THEODORE KAWAHINEHELELANI BLAKE

I, Theodore Kawahinehelelani Blake, under penalty of perjury hereby state the following is true and accurate to the best of my knowledge and belief:

1. The statements below are based upon my personal knowledge.

2. I am a Native Hawaiian.

3. I was born and raised on Kaua`i and am currently living on Kaua`i.

4. My ancestors lived and died in the ahupua`a of Kōloa.

5. My great great grandfather was George Kaukahilau Charman. He was also Native Hawaiian.

6. My family has told many stories about George Kaukahilau Charman's work which required him to travel on Hapa Trail to make deliveries in the mid to late nineteenth century. There were no cars back then.

7. Judge Henry Kawahinehelelani Blake was my grandfather. He was Native Hawaiian.

8. The report "Hapa Road as an Historic Property, Kōloa, Ahupua`a, Kona District, Island of Kaua`i" by Hallett H. Hammatt and Cultural Surveys of Hawai`i prepared for the Eric A. Knudsen Trust, states, "Judge Henry K. Blake, a longtime resident of Kōloa Village, drew two sketches of the Kōloa area, one as the town was in 1938, and one as he remembered it in 1888. Hapa Road, labeled as the road 'To Catholic Church and Poipu' is shown on this 1888 map (Figure 3). The road is thus at least 120 years old, and probably older."

9. This report also reveals that the first automobile was brought to Kaua`i in 1908.

10. As a child, during my grammar school days at Kōloa Elementary School, I walked on the Hapa Trail (known then as Hapa Road).

11. My children, brother and cousins have walked on Hapa Trail.

12. For the past few years, my family and I have been actively taking care of Hapa Trail by weeding it and cleaning up rubbish.

13. Walking on Hapa Trail is one of my traditional and customary practices.

14. At the heart of Hawaiian culture is malama `aina, or care for the land, a traditional and customary practice of Native Hawaiians who inhabited the Hawaiian Islands prior to 1778.

15. I engage in native Hawaiian traditional and customary practices in the ahupua`a of Kōloa, Weliweli, Pa`a and Māhā`ulepū.

16. I have a cultural obligation and hereditary obligation to ensure that Hapa Trail is restored, cared for and protected.

17. One of my traditional and customary practices is to take care of Hapa Trail.

18. Walking on Hapa Trail reminds me of my roots and what life used to be like.

19. On portions of Hapa Trail, I experience the natural and cultural environment uninterrupted by contemporary society.

20. Walking on Hapa Trail provides me a respite from modern day life.

21. I have environmental, recreational and historic preservation interests in maintaining the integrity of Hapa Trail and the Hapa Trail experience.

22. Granting a vehicular easement to the Eric A. Knudsen Trust and/or Stacey Wong to cross Hapa Trail will adversely affect my (a) traditional and customary practices; (b) recreational interests; (c) historic preservation interests; and (d) environmental interests.

23. The authenticity and integrity of Hapa Trail will be irreparably compromised if a vehicular easement to cross Hapa Trail is granted to the Eric A. Knudsen Trust and/or Stacey Wong.

24. My use and enjoyment of Hapa Trail will be diminished if a vehicular easement to cross Hapa Trail is granted to the Eric A. Knudsen Trust and/or Stacey Wong.

I declare under penalty of perjury that the foregoing is true and correct.

DATED: Kōloa, Hawai`i, January 20, 2012.

THEODORE KAWAHINEHELELANI BLAKE