MEMORANDUM

TO: Office of Environmental Quality Control

FROM: William W. Paty, Chairperson
Board of Land and Natural Resources

SUBJECT: DOCUMENT FOR PUBLICATION IN THE OEQC BULLETIN - ENVIRONMENTAL ASSESSMENT FOR CONSERVATION DISTRICT USE APPLICATION HA-2055A for Easement over a Section of the Namalahoa Trail between 7-3-9: 3 & 16

The above mentioned Chapter 343 Document was reviewed and a negative declaration was declared based upon the environmental assessment provided with the CDUA.

Please feel free to call me or Don Horiuchi of our Office of Conservation and Environmental Affairs, at 548-7837, if you have any questions.

WILLIAM W. PATY
ENVIRONMENTAL ASSESSMENT

CONSTRUCTION OF ROADWAY ACROSS PORTION OF THE MAMALAHOA TRAIL

KOHANA IKI, NORTH KONA, HAWAII

HELBER, HASTERT & KIMURA, Planners
November 1990
ENVIRONMENTAL ASSESSMENT

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KOHANAIKI, NORTH KONA, HAWAII

Prepared for:
Nansay Hawaii, Inc.

For Submittal to:
Department of Land and Natural Resources
State of Hawaii

Prepared by:
HELBER, HASTERT & KIMURA, Planners
November 1990
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3. "Detail of Easement Area" figure included in June 1987 EA and "Conceptual Plan of Mamalahoa Trail Crossing" figure included in March 1990 Special Management Area Use Petition to the Hawaii County Planning Commission.
1.0 INTRODUCTION AND CONCLUSION/DETERMINATION

1.1 Introduction

This environmental assessment (EA) has been prepared pursuant to Chapter 343, HRS and is intended to amend a Conservation District Use Permit (CDUP) approved by the Board of Land and Natural Resources (BLNR) on December 18, 1987 granting an easement across a Conservation-zoned, State-owned right-of-way known as the Mamalahoa Trail, located in the Kohalaiki ahupua'a, North Kona, Hawaii. Specifically, this EA is submitted in compliance with CDUP File No. HA-6/29/87-2055, Condition No. 1 which states in part:

"The applicant shall file subsequent SMA and CDUA amendments as soon as exact roadway alignments and widths are determined." (Full text of CDUP is included in Exhibit 1).

This report is intended to supplement the June 1987 EA(1) focusing on the construction-related impacts of the proposed improvements. The EA also presents information required by the DLNR "Master Application Form" including: identification of applicant; identification of approving agency; identification of agencies consulted in preparing assessment; general description of the action's technical, economic, social, and environmental characteristics; summary description of the affected environment; identification and summary of major impacts and alternatives considered; proposed mitigation measures; consistency of the proposed action with Chapter 205A, HRS; compliance with Chapter 183-41, HRS and Chapter 13-2-21 Administrative Rules of the Department of Land and Natural Resources; and, determination of significance of proposed action.

1.2 Definition of Terms

Proposed Action: Request for approval of construction plans for a road across a 20-foot wide State-owned right-of-way located in the Kohalaiki ahupua'a, District of North Kona, Hawaii. Approvals for an easement across the trail were approved by the BLNR as noted. Uses of the proposed roadway will include ingress and egress to/from TMK 7-3-09:3 (vehicular and pedestrian movements) and for the below-grade placement of various infrastructure transmission lines, such as sewer, water and power/communication lines.

Applicant: Nansay Hawaii, Inc. is the applicant and is the fee simple owner of the parcels immediately adjacent to the State right-of-way.

Owner: The right-of-way is owned by the State of Hawaii

Easement/Construction Area: The easement area is legally described by a metes and bounds survey completed by registered surveyors Imapa and Associates and submitted to the BLNR by letter dated March 19, 1990. The easement area consists

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of a 100-foot by 24.55-foot parallelogram comprising a total of 2,455 square feet or approximately 0.056 acres.

1.3 Summary

Applicant: Nansay Hawaii, Inc.
Kamuela Business Center
P.O. Box 111222, Suite 727
Kamuela, Hawaii 96743-0020

Consultant for Environmental Assessment: Helber, Hastert & Kimura, Planners
733 Bishop Street, Suite 2590
Honolulu, Hawaii 96813

Property Location: Kohanaiki ahupua'a, makai of Queen Kaahumanu Highway,
North Kona, Hawaii County

Tax Map Key: Between 7-3-09: parcels 3 and 16

Parcel Size: Approximately 2,455 square feet

Proposed Action: Construction of roadway across Conservation-zoned,
State-owned right-of-way

Accepting Agency: Board of Land and Natural Resources, State of Hawaii

1.4 Alternatives Considered

Alternative access locations were analyzed in the June 1987 location. This report analyzed a no-action alternative and a no-interpretive development alternative to the proposed action. Both alternatives were rejected in favor of the proposed action (Section 7.0).

1.5 Probable Impacts

The major impact associated with the proposed action will be the removal of up to sixty feet of the Mamalahoa Trail to accommodate the proposed access roadways (Section 6.0).

1.6 Mitigating Actions

The location of the roadway was determined in consultation with a qualified archaeologist in consultation with the State Historic Preservation Program (HPP) and the Hawaii County Planning Department (HCPD) to minimize significant adverse impacts to the historically significant Mamalahoa trail. The construction plan incorporates interpretive treatments reviewed by the HPP, Na Ala Hele, and HCPD and the Hawaii County Planning Commission. Finally, a qualified archaeologist will monitor all grading activity associated with construction of the proposed roadway to prevent damage to the adjacent trail areas (Section 9.0).
1.7 Conclusions/Determination

- The proposed action will not adversely impact the environment, including historic resources.
- The proposed action is consistent with Chapter 205A, HRS and Special Management Area Use Permit No. 305 issued by the Hawaii County Planning Commission on November 19, 1990.
- The proposed action is in compliance with Chapter 183-41, HRS and Chapter 13-2-21 Administrative Rules of the Department of Land and Natural Resources.

2.0 STATUTORY/REGULATORY REQUIREMENTS AND CONSULTED AGENCIES

2.1 Chapter 343, Hawaii Revised Statutes

This environmental assessment is prepared pursuant to Chapter 343, HRS and Title 11, Chapter 200, Administrative Rules because the proposed action involves the use of State lands, and because the action is proposed on lands within the Conservation District.2

2.2 Conservation District Use Application

The applicant (Nansay Hawaii, Inc.) is required to submit an amendment to the 1987 CDUP and have it approved by the BLNR prior to the initiation of any construction activities within the Conservation District.3

2.3 Special Management Area Use Permit (SMP) No. 305 Approvals

By written decision dated November 19, 1990, the Hawaii County Planning Commission granted SMP approvals for the development of major resort infrastructure, two hotels, condominiums, single-family residences, a golf course and construction of an access road across the Mamalahoa Trail. The Planning Commission held a public hearing on the SMP application on September 28, 1990.

2.4 Consulted Agencies

The State Department of Land and Natural Resources Historic Preservation Program, Na Ala Hele, and the Hawaii County Planning Department were consulted during the preparation of this environmental assessment.

2. Section 343-5 (1) & (2), HRS and Section 11-100-8 (b) (1) (A) & (B).
3. CDUP File No. HA-6/29/87-2055 Condition No. 11 (See Exhibit No. 1)
3.0 BACKGROUND: KOHANAIKI RESORT

The proposed Kohanaiki Resort Community is a master-planned, integrated resort development located within the coastal portion of the Kohanaiki ahupua'a approximately two-miles south of the Keahole Airport in the District of North Kona, Island of Hawaii (Figure 1). The entire site (approximately 450 acres) now lies within the State Urban District.

The proposed project area is comprised of one large parcel (442.257 acres) within which the resort will be located (TMK: 7-3-09:3), and a smaller parcel (7.752 acres) (TMK: 7-3-09:16) which was purchased for the sole purpose of providing a major access corridor to the resort site (Figure 2). Existing access to the site is substandard and is provided either by a coastal trail entering the property at the northwest corner (Puhili Point) or via an unpaved jeep trail which runs along the northern boundary from the Queen Kaahumanu Highway to the coast.

4.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT: THE MAMALAHOA TRAIL

The Mamalahoa Trail has been classified by Apple (1965) as a "Type C" trail. These trails were built during the mid-nineteenth century, the post-contact period, primarily by corvee labor under the direction of the island governors. The trails are generally two-horses wide and built in relatively straight lines between major points, thus cutting off lesser coastal communities. The portion of the Mamalahoa Trail traversing the Kohanaiki ahupua'a begins near Kailua-Kona and terminates near Keahole Point. In 1969, the construction of the Keahole Airport destroyed a large segment of the northerly terminus of this segment of the trail.

The Mamalahoa Trail is breached in numerous locations along its length. In the immediate vicinity of the project site, the trail is breached by the Queen Kaahumanu Highway, the Natural Energy Laboratory of Hawaii (NELH) Access Road, and an unpaved access road running down the boundary of the O'oma 2nd and the Kohanaiki ahupua'a. The Waikoloa and Mauna Lani resorts both have roads which breach a similar trail. Both resorts have incorporated tasteful interpretive exhibits at the breach points which explain the significance of the trail in the early development of the Hawaiian economy.

The Mamalahoa trail runs along (and outside of) the eastern (mauka) boundary of the Kohanaiki Resort site, with the exception of an approximately 304-foot long by about 20-foot wide segment which bisects the 7-acre access parcel from the 442-acre main parcel (Figure 3). This segment of trail is described by Donham (1986) as follows:

"The trail/road is constructed of locally available lava rock; its surface varies from smooth, unpaved pahoehoe to crushed stone"

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Nansay Hawaii, Inc.
DETAIL OF EASEMENT AREA
Mamalahoa Trail Crossing
Kohalaiki, North Kona, Hawaii

Figure: 3

Detail from Survey prepared by Imata and Associates for Nansay Hawaii Inc. February 1990.
paving. Sides of the road are lined with flat to chunky boulders that are stacked and faced to varying heights, depending upon local terrain. Average width of the road is approximately 2.0m; widths vary from 1.7m to 2.3m along the project area boundary."

The 304-foot long length of trail lies wholly within the General Subzone of the State Conservation District, is located at approximately 65 feet above mean sea level, approximately 4,500 feet inland from the coast, and 1,300 feet makai of the Queen Kaahumanu Highway (which runs parallel to the trail). There are no structures within the study area other than the trail improvements discussed above. A botanical and terrestrial fauna survey conducted for the Kohalaiki Resort EIS (Helber Hastert & Kimura, Planners 1986) found no endangered or threatened plant or animal species in the area. The local terrain is variegated with small gullies and mounds characteristic of 'a'a and pahoehoe flows.

A detailed field inspection of the 300-foot trail area was made by Rosendahl (1987) to determine the most appropriate breach point(s) (full report included as Exhibit 2). This report formed the basis of the June 1987 EA/CDUA request for the easement. Inspection of the 300-foot trail segment identified the northernmost portion, measuring approximately 85-feet in length, as the area selected and recommended for the roadway crossing. The condition of the trail in this area is relatively poor with the exception of a centrally located 25-foot portion which was found to be in fair physical condition. The southern portion of the inspected Mamalahoa trail section (approximately 215 feet in length) contained well-constructed features, including faced bridge sections, curbstone-lined edges, and/or raised causeways. These features are in good condition and represent particularly good examples of architecture types associated with the Mamalahoa Trail.

Figure 4 presents photographs of the study area taken on March 24, 1987. Photographs were taken of the better sections of trail lying in the southern two-thirds of the study area as well as the construction area at the northern end of the study area where the trail is in relatively poor condition and overgrown with exotic grasses.

5.0 PROPOSED CONSTRUCTION PLAN

The construction plan prepared by Grey, Hong, Bills & Associates, Inc., (October 1990) is consistent with the representations made in the June 1987 EA which formed the basis for the December 1987 CDUP and grant of easement. The construction plan is also consistent with the conceptual plan approved by the Hawaii County Planning Commission which in part formed the basis for its SMP approvals (See Exhibit 3).

The construction plan (Figure 5) indicates two 18-foot-wide roadways crossing the trail separated by a 16-foot-wide median. The placement of the two roadways coincide with the areas recommended by the consulting archaeologist. The median is located in an area of trail identified as being in "fair" condition. Lava stones

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Nansay Hawaii, Inc.

VIEW ANALYSIS

Mamalahoa Trail Crossing
Kohanaiki, North Kona, Hawaii

Figure: 4
will be imbedded in the roadway pavement to simulate the alignment of the trail. Larger stones or stamped concrete simulating larger stones will match the trail walls and smaller stones will match the trail path. Interpretive plaques will be mounted on both sides of the road describing the historical significance of the trail. The design of the signs and specific wording will be developed as part of the overall resort signage program in consultation with HPP, HCPD and Na Ala Hele. Small parking areas adjacent to the trail (i.e., three cars each side) will be constructed to allow sightseers to view the trail and interpretive materials.

Figure 6 presents roadway sections indicated in the construction plan. Section "A-A" represents a view looking mauka across the trail showing the two 18-foot-wide roadways and the central 16-foot median. A typical section of the proposed Koha'iki Access Road is included to indicate how the trail crossing section relates the overall access roadway design. (Note below-grade potable, brackish and electrical conduits placed under the roadway—although not indicated, these are assumed to continue through the trail section).

Section "B-B" and "C-C" represent typical roadway and median conditions as if viewed from a point on the trail to the north of roadway looking south towards Kailua. Section "B-B" through the median shows the existing trail. As discussed, the intent will be to preserve the existing trail in this area and, under the direction of the HPP and HCPD, reconstruct this segment to its original form. Section "C-C" represents a section through one of the two roadways indicating the integration of the existing trail into the roadway.

6.0 PROBABLE IMPACT

The major impact associated with the construction of the roadway will occur from the removal of up to approximately 60 feet of the Mamalahoa Trail to accommodate the proposed access roadways. This impact was described in the June 1987 EA.

7.0 ALTERNATIVES TO THE PROPOSED ACTION

Two alternative access locations were analyzed in the June 1987 EA to provide access to the resort site. Each alternative was found to be inferior to the recommended alternative which was subsequently approved by the BLNR. For purposes of this amendment, alternative interpretive treatments were analyzed to arrive at the recommended treatment.

For the purposes of this assessment, two alternatives were evaluated: a no-action alternative, and an alternative with no interpretive treatment.

No-Action. This alternative would assume that no amendment to the 1987 CDUP is submitted to the BLNR for review and therefore no approvals for roadway construction are issued. This alternative is not consistent with the main objective of the applicant which is the construction of a roadway for access purposes.

No interpretive treatment. This alternative contemplates crossing the trail in the previously identified locations with no (or extremely limited) provision for
interpretation (i.e., no interpretive signage, no special roadway surface treatment to mark the trail alignment, no provision for public parking in the vicinity of the trail, etc.) This alternative was rejected as it also does not meet the applicant’s development objectives. Where appropriate, the applicant is committed to fostering an awareness of the cultural history of the site as evidenced through appropriate interpretive development of many of the historic sites located within the property. Because of the historic importance of the trail, the recreational potential for longer-term rehabilitation of the trail, and an understanding of the importance of interpretive exhibits of this type in resort marketing, the applicant would like to develop the trail crossing area as represented in the construction plan.

For reasons described above, the no-action alternative and the no-interpretive development alternative have been rejected in favor of the proposed construction plan.

8.0 HISTORICAL SIGNIFICANCE

The historical significance of constructing a roadway across the Mamalahoa Trail has been evaluated by HPP and HCPD. Both concurred with the conclusions and recommendations of the consulting archaeologist regarding further work to be done in relation to the proposed action (Rosendahl 1987). Recommended mitigative actions are discussed below.

9.0 MITIGATING ACTIONS

The location of the roadway was determined by an archaeologist in consultation with the HPP and the HCPD to minimize significant adverse impacts to the historically-significant Mamalahoa trail. The construction plan incorporates interpretive treatments reviewed by the HPP, Na Ala Hele and the HCPD. Finally, a qualified archaeologist will monitor all grading activity associated with construction of the proposed roadway.

In fulfillment of CDUP Condition No. 10, a fire contingency plan has been prepared for implementation during and after construction of the roadway. The plan, submitted to the Division of Forestry and Wildlife for review by letter dated October 3, 1990 is reprinted below.

Potential Impacts. The natural conditions within the proposed roadway area consist mainly of unvegetated slabs of pahoehoe and a’a lavas, and dry grasses and other combustible vegetative materials. Due to the relatively arid conditions of the area, a potential fire hazard therefore exists from the proposed development activities. Potential sources of ignition starts include catalytic converters attached to motor vehicles and inadvertent actions of construction personnel.

Contingency Plan. Fire prevention practices will be established by the contractor to minimize the potential for fire starts. Areas will be appropriately cleared of combustible materials prior to commencement of construction activities. Personnel working in the area will be advised of the fire hazard potential and instructed on how to avoid ignition starts. In recognition of the potential fire hazard, personnel will be trained in the use of fire suppression methods and how to avoid injury.
from the fire. Water sources such as tanker trucks used for dust control will be a primary source of immediate suppression. Should a fire actually break out, the Kona Fire Department will be notified immediately.

10.0 CONSISTENCY WITH CHAPTER 183-41, HRS AND CHAPTER 13-2-21, ADMINISTRATIVE RULES OF THE DEPARTMENT OF LAND AND NATURAL RESOURCES

The proposed roadway construction described herein is consistent with the provisions of Conservation District Use Permit File No. HA-6/29/87-2055 approved by the Board of Land and Natural Resources on December 18, 1987. This EA is prepared in partial fulfillment of Condition No. 1 of the referenced CDUP to describe exact roadway alignments and widths.

Any uses allowed within the Conservation district are subject to Chapter 183-41, HRS and conditions imposed in Chapter 13-2-21, Administrative Rules of the Department of Land and Natural Resources. Relevant conditions are cited below in italics followed by a brief comment regarding the conditions applicable to the proposed action.

(1) The use shall be compatible with the locality and surrounding areas, and appropriate to the physical conditions and capabilities of the specific parcel or parcels of lands;

Comment: The proposed roadway will be compatible with the locality and the surrounding areas and appropriate to the physical conditions and capabilities of the specific parcels of lands.

(2) The existing physical and environmental aspects of the subject area, such as natural beauty and open space characteristics, shall be preserved or improved upon, whichever is applicable;

Comment: As noted, the Mamalahoa Trail represents a cultural resource with potential to be a recreational resource. The proposed action, construction of a roadway across a portion of the Mamalahoa Trail to provide access to the resort site, will increase the visibility of the trail to visitors and thereby enhance the amenity value of the trail to the greater Kona community.

(3) All buildings, structures, and facilities shall harmonize with physical and environmental conditions stated in this rule;

Comment: No buildings or structures other than roadway improvements and below-grade infrastructure improvements are planned for the easement area. The roadway has been designed to harmonize with the surrounding physical and environmental features of the area.

(4) Provisions for access, parking, drainage, fire protection, safety, signs, lighting, and changes in the landscape shall have the approval of the chairperson and/or authorized representative.
Comment: This EA presents construction drawings, including information on roadway improvements, grading, signage, and fire protection and other information in compliance with this condition.

(5) **Obstruction of public roads, trails, and pathways shall be minimized. If obstruction is unavoidable, the applicant shall provide roads, trails, or pathways acceptable to the department.**

(6) **Except in the case of public highways, access roads shall be limited to a maximum of two lanes.**

Comment: The proposed action involves the crossing of the Mamalahoa Trail, a public trail. North-south lateral access along the trail will not be affected as provisions will be made to accommodate pedestrian movements across the proposed access roadway. As described herein, the proposed access road consists of two lanes separated by a central median containing a segment of the Mamalahoa Trail.

(7) **All applications shall be reviewed in such a manner that the objectives of the subzone are given primary consideration.**

Comment: The easement area lies within the General Subzone. The objective of the General Subzone is to designate open space where specific conservation uses may not be defined, but where urban uses would be premature. The subzone functions largely as a "holding" land-use designation in which the timing of development is a major factor. The 20-foot wide State-owned right-of-way encompassing the Mamalahoa Trail is bordered by State Urban lands to the east and west as it passes above the Kohanaiki Resort site. Given the proximity of urban lands, the proposed action is deemed to be consistent with the objectives of the General Subzone.

11.0 **CONSISTENCY WITH CHAPTER 205A OBJECTIVES AND POLICIES AND COUNTY SPECIAL MANAGEMENT AREA RULES AND REGULATIONS**

The Hawaii County Planning Commission has reviewed the proposed roadway improvements as part of a comprehensive Special Management Area Use Permit Petition(6) submitted by the applicant. The Planning Commission held a public hearing on the SMP petition on September 28, 1990, and approved the petition subject to conditions enumerated in its November 19, 1990 written decision (copies of SMP application and the Planning Commission's written decision were submitted to DLNR via letter dated November 20, 1990). The Planning Commission approval indicates consistency with Chapter 205A HRS Objectives and Policies and County Special Management Area Rules and Regulations.

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12.0 REFERENCES


Hawaii, County of, Planning Department. Preliminary Draft County General Plan. May 1986.

"Rule 9, Special Management Area Rules and Regulations of the County of Hawaii."


Coastal Zone Management. Hawaii Revised Statutes. Chapter 205A.


EXHIBITS


3. "Detail of Ensement Area" figure included in June 1987 EA and "Conceptual Plan of Mamalahoa Trail Crossing" figure included in March 1990 Special Management Area Use Petition to the Hawaii County Planning Commission.
EXHIBIT 1

Conservation District Use Permit File No. HA-6/29/87-2055
State Board of Land and Natural Resources
Kona Beach Development Venture, L.P.
841 Bishop Street, Suite 1050
Honolulu, Hawaii 96813

Gentlemen:

We are pleased to inform you that your Conservation District Use
Application for an easement across a Conservation-zoned State-owned
right-of-way was approved on December 18, 1987 subject to the following conditions:

1. The applicant shall file subsequent SMA and CDEA amendments
   as soon as exact roadway alignments and widths are determined;

2. The applicant shall provide public access for fishermen and
   recreational users of the trail during the period of
   easement construction, with occupancy of the easement to
   include the right of entry;

3. Any interpretative text to be displayed by signs at the
   breach must undergo review and approval by the State's
   Historic Sites Section and by the Hawaii County Planning
   Department to ensure accuracy. The same agencies must also
   verify successful execution of the mitigation plan;

4. A qualified archaeologist shall monitor all grading
   activity connected with easement construction. Detailed
   recording of the affected trail section and inspection of
   the final selected easement corridor can be completed prior
   to and in conjunction with monitoring of grading activities;

5. The applicant shall comply with all applicable statutes,
   ordinances, rules and regulations of the Federal, State
   and County governments, and applicable parts of Section
   13-2-21, Administrative Rules, as amended;
6. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim or demand for property damage, personal injury and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors and agents under this permit or relating to or connected with the granting of this permit;

7. Since this approval is for use of conservation lands only, the applicant shall obtain appropriate authorization through the Division of Land Management, State Department of Land and Natural Resources for the occupancy of State lands;

8. If any unanticipated sites or remains of historic or prehistoric interest (such as shell, bone or charcoal deposits, human burials, rock or coral alignments, paving, or walls) are encountered during construction, the applicant shall stop work and contact the Historic Preservation Office at 548-7460 or 548-6408 immediately;

9. The applicant shall comply with all applicable Public Health Regulations;

10. A fire contingency plan, acceptable to the Division of Forestry and Wildlife, Department of Land and Natural Resources, shall be implemented during and after construction of the easements and infrastructure;

11. Any construction, alteration, moving, demolition and repair of any easement, infrastructure or other improvement on lands within the Conservation District, authorized by the Board, shall be subject to the building and grading codes of the respective counties in which the lands are located; provided that prior to the commencement of any construction, alteration, or repair of any easement, infrastructure or other improvement, four (4) copies each of the final location map, plans, and specifications shall be submitted to the Chairperson, or his authorized representative, for approval of which three (3) copies will be returned;

12. Any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use, and all work and construction must be completed within three (3) years of the approval of such use.
13. That failure to comply with any of these conditions shall render this Conservation District Land Use application null and void; and

14. Other terms and conditions as prescribed by the Chairperson.

Please acknowledge receipt of this permit with the above noted conditions in the space provided below. Please sign two copies. Retain one and return the other.

Should you have questions on any of these conditions, please feel free to contact our Office of Conservation and Environmental Affairs staff at 548-7837.

Very truly yours,

WILLIAM W. PATY, Chairperson
Board of Land and Natural Resources

Receipt acknowledged:

Applicant's Signature

cc: Hawaii County Board Member
    Hawaii District Land Agent
    Hawaii County Planning Dept.
    DSR/OEPC/EH/DBED/CHA
EXHIBIT 2

Archaeological Field Inspection Report.
Paul H. Rosendahl, Ph.D., Inc.
April 7, 1987
PAUL H. ROSENDAHL, Ph.D., Inc.
Consulting Archaeologist

Report 269-032487

Mr. Tom Fee, Planner
Helber, Hastert & Kimura
733 Bishop Street
Honolulu, Hawaii 96813

April 7 1987

Subject: Archaeological Field Inspection
Mamalahoa Trail Section
Land of Kohana-Iki, North Kona, Island of Hawaii
(TM#13-7-3-09:3,16)

Dear Mr. Fee:

At the request of Helber, Hastert & Kimura, Planners (HH&K), Paul H. Rosen Dahl, Ph.D., Inc. (PHRI) conducted an archaeological field inspection of the Mamalahoa Trail section situated between TMK:3-7-3-09:3 and 3-7-3-09:16, Kohana-Iki, North Kona, Island of Hawaii (see attached Figure 1). Inspection field work was carried out by PHRI Supervisory Archaeologist Alan T. Walker on March 24, 1987, who was accompanied by yourself.

The basic objective of the field inspection was to select an easement over and across a portion of the Mamalahoa Trail to provide access to TMK:3-7-3-09:3. The proposed easement would consist either of one section, 7.3 m (c. 24 ft) wide, or of two sections totaling 14.6 m (c. 48 ft) wide and separated by a median (Exhibit "A" attached to letter of October 9, 1986, from James Funaki, attorney for Kona Beach Development Venture, L.P. to State of Hawaii, Department of Land and Natural Resources).

The section of the Mamalahoa Trail inspected by PHRI measures 91.5 m (c. 300 ft) in length and is situated 139.0 m (c. 456 ft) south of the northeast corner of TMK:3-7-3-09:3. This portion of the Mamalahoa Trail was identified in the field using a 50.0 m metric tape and an aerial photo and maps provided by HH&K. In addition, tentative corner boundary markers identifying the west edge of TMK:3-7-3-09:16 were located in the field.

Inspection of the 91.5 m Mamalahoa Trail section identified the northermost portion which measures 25.9 m (c. 85 ft), as the area selected and recommended by PHRI for easement access. Within this 25.9 m trail section, a centrally located 7.6 m (c. 25 ft) portion of the Mamalahoa Trail was found to be in fair physical condition. In comparison with other sections of the Mamalahoa Trail, this 7.6 m section does not appear to represent a particularly unique feature of this trail. Continued physical preservation of this section is not considered essential, but if possible, this portion could be preserved as part of a median, flanked by two 9.1 m (c. 30 ft) wide access easements. Based on the present field investigation and on the previously conducted full archaeological reconnaissance survey (Donham 1986), the overall negative impact of breaching the Mamalahoa Trail within this 25.9 m section appears to be minimal.

305 Mohouli Street • Hilo, Hawaii 96720 • (808) 969-1763 or 966-8038
The southern portion of the inspected Mamalahoa Trail section (c. 65.6 m/215 ft) contained well-constructed features, including faced bridge sections, curbside-lined edges, and/or raised causeways. These features are in good condition and represent particularly good examples of architecture types associated with the Mamalahoa Trail. The negative impact of breaching the Mamalahoa Trail within this southern section would appear to be considered significant.

The significance of archaeological remains can be defined in terms of potential scientific research, interpretive, and/or cultural values. Research value refers to the potential of archaeological resources for producing information useful in the understanding of culture history, past lifeways, and cultural processes at the local, regional, and interregional levels of organization. Interpretive value refers to the potential of archaeological resources for public education and recreation. Cultural value, within the framework for significance used here, refers to the potential of archaeological resources for the preservation and promotion of cultural identity and values.

In our opinion, archaeological remains identified within the northernmost 25.9 m portion of the Mamalahoa Trail selected and recommended by FHRI for easement access are, for the most part, of limited research value but, at the same time, are of high interpretive and cultural values. According to State of Hawaii general significance assessments, this portion does not appear significant for information content, but is culturally significant and is an excellent example of a site type at the local, regional, island, state, and/or national level.

Upon completion of inspection field work, findings and preliminary conclusions—including tentative evaluations and recommendations—were discussed (March 25, 1987) with Virginia Goldstein, staff planner and historic sites specialist in the Hawaii County Planning Department, and with Dr. Ross Cordy, staff archaeologist in the Hawaii State Department of Land and Natural Resources. They concurred with the conclusions and recommendations presented here regarding further work to be done in relation to the proposed easement access road breaching the Mamalahoa Trail at Kahoma-i'i.

Based on the findings of the inspection field work, which resulted in evaluations of high interpretive and cultural significance, it is recommended that: (a) some level of interpretive development be done for the Mamalahoa Trail and that; (b) a qualified archaeologist monitor all grading activity associated with construction of the proposed easement access road. Detailed recording of the affected trail section (plan mapping), as recommended in Donham (1986:101,106), and inspection of the final selected easement access corridor, can be done prior to and in conjunction with monitoring of grading activities. Furthermore, Ms. Goldstein indicated the Mamalahoa Trail right-of-way should be physically delineated over and across the proposed easement access road, similar to what was done for a similar situation at Waikaloa Beach Resort. The Mamalahoa Trail right-of-way at Waikaloa Beach is constructed of rounded waterworn boulders, bisecting and set into the resort access road.
If you have any questions concerning our field inspection, or if we can be of any further service, please contact me at our Hilo office.

Sincerely yours,

Paul H. Rosendahl, Ph.D.
President and Principal Archaeologist

cc: Dr. Ross Cordy, Chief Archaeologist
    Department of Land and Natural Resources

Ms. Virginia Goldstein
Hawaii County Planning Department

Reference Cited

Donham, Theresa K.
Figure 1.

Mamalahoa Trail Easement Project Area
Land of Kohana-Iki, North Kona, Island of Hawaii
(TMK: 3-7-3-09:3 and 3-7-3-09:16)
PHRI Project 86-269 March 1987
EXHIBIT 3

"Detail of Easement Area" figure included in June 1987 EA and
"Conceptual Plan of Mamalahoa Trail Crossing" figure included in March 1990 Special Management Area Use Petition to the Hawaii County Planning Commission.
Mamalahoa Trail Crossing Easement

DETAIL OF EASEMENT AREA
Kohana-ili, North Kona, Hawaii

Figure: 6

HELBER, HASTERT & KIMURA
KOHALOA CENTER • PH TOWER • 250 BISHOP STREET • SUITE 2550
HONOLULU, HAWAII 96815 • TELEPHONE 808-345-3350

From June 1987 EA
From March 1990 Special Management Area
Use Permit Petition

LEGEND
Easement Area

EXISTING TRAIL
STATE PROPERTY
ACCESS EASEMENT BOUNDARY
OTHER OWNERS

PARKING (3 CARS)
INTERPRETIVE PLAQUE
A.C. PAVEMENT
MEDIAN

TO RESORT

SMALLER FLAT LAVA STONES IMBEDDED IN PAVEMENT TO MATCH TRAIL PATH
LARGE FLAT LAVA ROCKS IMBEDDED IN PAVEMENT TO MATCH TRAIL WALLS
ACCESS EASEMENT BOUNDARY
INTERPRETIVE PLAQUE
A.C. PAVEMENT
TO HIGHWAY
PARKING (3 CARS)
STATE PROPERTY

Nansay Hawaii, Inc.
CONCEPTUAL PLAN OF MAMALAHOA TRAIL CROSSING
Kohanaiki, North Kona, Hawaii

Figure: 11

0 10 FEET