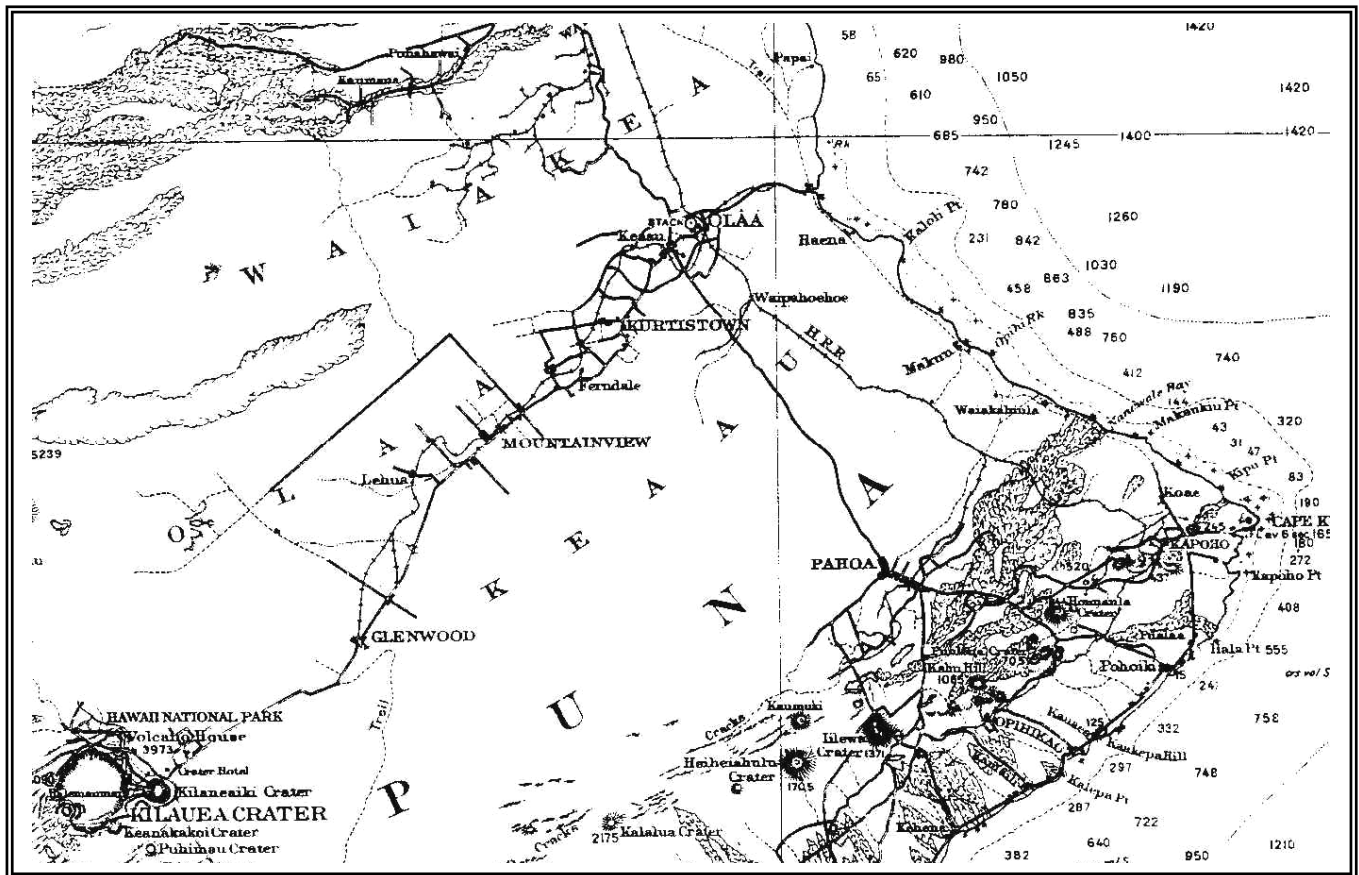


THE HISTORIC PUNA TRAIL – OLD GOVERNMENT ROAD (KEA'AU SECTION)

ARCHIVAL-HISTORICAL DOCUMENTARY RESEARCH, ORAL HISTORY AND CONSULTATION STUDY, AND LIMITED SITE PRESERVATION PLAN Ahupua'a of Kea'au Puna District, Island of Hawai'i



Portion of the District of Puna, Island of Hawai'i – Showing the Old Government Road and Trails
(Portion of U.S. Army map, surveys up to 1932; in Collection of DLNR-DOFAW, Hilo)

Kumu Pono Associates



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OLD GOVERNMENT ROAD (KEA‘AU SECTION)
ARCHIVAL-HISTORICAL DOCUMENTARY
RESEARCH, ORAL HISTORY AND
CONSULTATION STUDY, AND LIMITED
SITE PRESERVATION PLAN**

**Ahupua‘a of Kea‘au
Puna District, Island of Hawai‘i
(TMK:1-6-01 various parcels)**

BY

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PREPARED FOR

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January 11, 1999

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**Kumu Pono Associates
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*Historical & Archival Documentary Research · Oral History Studies · Partnerships in
Cultural Resources Management · Developing Preservation Plans and Interpretive Programs*

EXECUTIVE SUMMARY

At the request of Rodney Oshiro, of the Department of Land and Natural Resources-Division of Forestry and Wildlife, Trails and Access program manager on the island of Hawai'i, cultural resources specialist, Kepā Maly (*Kumu Pono Associates*), conducted a multifaceted study to research and identify cultural-historical resources of the historic Puna Trail or Old Government Road (Kea'au Section) in the district of Puna, on the Island of Hawai'i (TMK:1-6-01 various parcels). The results of that research, reported herein, provides readers with access to an extensive collection of documentation (ranging from traditional accounts to formal government communications) about the Puna Trail and Kea'au. The study also includes documentation pertaining to native traditions, customs, and practices that have been handed down over the generations by individuals who have resided in Kea'au and neighboring lands of Puna. In the absence of detailed archaeological studies for the Kea'au vicinity, this study provides land managers and interested parties with important documentation on some of the significant cultural and natural features of the landscape along the Puna Trail-Old Government Road, and their relationship to other resources of the larger *ahupua'a* (a native Hawaiian land unit) of Kea'au.

The work conducted as a part of this study included three components: (1) research and report findings of archival and historical literature; (2) conducting oral history interviews and consultation with *kama'aina* (native residents) and others with knowledge of the land; and (3) development of a limited preservation plan with recommendations for protection and interpretation of the trail and cultural-historic resources along the trail so that they can be appropriately managed in the future. The latter phase of work sets a foundation for development of long-term protection measures, and is founded on specific recommendations by interviewees and consultation participants and standard practice of the Department of Land and Natural Resources-Historic Preservation Division. Further detailed trail and archaeological site treatment recommendations will also be determined as archaeological site recordation is completed.

In the period between April to November, 1998, the author conducted detailed research of archival-historical literature. The primary documentation cited in this study focuses on government records of roadways, public lands and public facilities which have not received broad exposure in past studies—thus making important historical records available to the interested public. Additionally, a synthesis of previously reported documentation which has bearing on the study is cited as well, with references back to the original studies. The oral historical component of this study was conducted between July to November, 1998, and includes interviews with four individuals in five interviews who have generational ties to the lands of Kea'au, Waikahekahe, and Maku'u.

Study Organization

This study is divided into several primary sections by subject matter, each with accompanying sub-sections. *Section one* provides readers with detailed documentation found as a result of the archival and historical literature research. This section is lengthy as it includes much of the primary documentation that will be necessary for planning future archaeological investigations, and interpreting sites and the relationship of this section of the Puna Trail to the larger regional and island-wide system. *Section two* provides readers with an overview of oral historical interviews and consultation records; and *Section three* presents readers with the limited site preservation plan (including general recommendations

for site interpretation) for the historic trail and its associated resources.

Overview of Primary Recommendations Made by Interviewees and Consultation Participants

The following comments and recommendations come from two primary sources: (1) oral history interviews; and (2) consultation with — Na Ala Hele; DLNR-SHPD; participants at a Na Ala Hele hearing of October 28, 1998; discussions with representatives of W.H. Shipman, Ltd., and Kamehameha Schools-Bishop Estate; and meetings with members of PATH (People's Advocacy for Trails Hawaii). See Section VII for detailed treatment recommendations.

- *Na Ala Hele* should seek out, and make every effort to work with descendants of the native families of Kea'au-Maku'u in the development of formalized site treatment plans, long term management of the historic Puna Trail resources, and identifying traditional based protocols for trail use.
- *Na Ala Hele* should work to facilitate the development of a community based resources management partnership in which native families, the land owner, individuals knowledgeable about trails, and stakeholder agencies can coordinate long term management programs for the Puna Trail resources.
A component of such a management plan might include a resident "trail host" or "stewardship" program (similar to that at the Kekaha Kai or Mālaekahana State Parks). It has been suggested that an individual or family descended from the traditional families of the Kea'au-Maku'u vicinity be sought out for such a position.
- The historic resources need to be respected, people should be informed that entering the sites is inappropriate (exceptions being lineal descendants, cultural practitioners, and those performing preservation tasks).
- All trail users should be informed that damaging the historic resources is inappropriate and punishable by State Law (HRS 6E-11).
- Do not pave the Puna Trail-Old Government Road with asphalt; any restoration should be done in a manner consistent with the historic and natural qualities of the existing landscape.
- If any work occurs on or near the historic resources, prior approval should be obtained from DLNR-SHPD, a plan developed, and work should be monitored. (Stones should not be harvested from one site for use on another site or trail repair.)
- Trail use should be limited to non-motorized transportation.
- Explore options for reestablishing a *mauka-makai* (pedestrian) trail access in Kea'au.
- The trail and adjoining sites should be periodically monitored by *Na Ala Hele*—DLNR-SHPD to ensure that no activities impact the sites, and weekly maintenance schedules should be established to care for sites, grounds, litter, and interpretive needs.
- Interpretive signs should be set in appropriate, unobtrusive locations, to inform the public about: (a) the history and nature of the Puna Trail and adjoining sites; and (b) to inform trail users about the responsibilities that

each traveler has for use of the trail – such as remaining on trail (not trespassing onto private property), and staying off of cultural and archaeological sites.

- Develop an educational program agreement (including field visits) with the Kea'au and larger Puna District schools to help foster awareness and appreciation of the historic trail and natural resources of Puna.
- Sensitive sites (for example–caves and possible burial features) should be avoided, and such sites should not be identified on public documents. (The privacy of confidential information will be protected.)
- If inadvertently discovered, burial remains are to be protected in place (if not immediately threatened with damage from natural or man-made causes). Final disposition of remains should be determined in consultation with DLNR-SHPD, and native Hawaiian descendants of the families of Kea'au-Maku'u. If any burial remains should be discovered, they are to be treated on a case-by-case basis in concurrence with Chapter 6E-43 (as amended by Act 306).

Concerns for Special Natural and Cultural Resources and Private Property

- *Honu* (sea turtles), *'Ilio holo kai* (monk seals), and *nēnē* (endemic geese) are endangered species; the *honu* and *'Ilio holo kai* are known to haul out along the shoreline of the Puna Trail, and the Shipman Estate (Kea'au Bay) is home to the oldest *nēnē* breeding program—established by 1918—in the world (without which it is likely that the *nēnē* would have become extinct). Dogs and other animals should be kept on leashes at all times, and they should be kept away from these unique forms of Hawaiian wildlife. Likewise, people should stay away from them as well – make no move to approach these animals.
- The Shipman Estate is private property. The *loko i'a* (fishpond) has been maintained by the Shipman family for well over 100 years; trail users and visitors to Kea'au Beach should be asked to respect the private property rights of the Shipman family.
- While inviting, the grounds around the Shipman family residences are not a public park facility. All trail users should be asked to refrain from trespassing (trail signage and other interpretive materials will be developed with the necessary messages).

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In addition to photographs of three of the interviewees, the interview transcripts include several unnumbered figures. These figures are: (1) two historic photographs from the family collection of Roy Shipman Blackshear; (2) a rough drawing of Hōpoe (wahine ‘ami o Kea’au) prepared by Roy Shipman Blackshear; (3) several site or feature photographs; (4) a detail map (at the end of Appendix A) showing Kea’au Bay, the old Government Beach Road alignment, Shipman family and employee residences, and associated features (from L.Ct. App. 1053); and (5) an annotated map showing approximate locations of selected sites discussed during the interviews (at end of Appendix A).

Appendix B includes selected sketches from the field note books of historic period surveyors who worked in Kea’au and vicinity.

He Leo Ho’omaika’i —

E nā kupa o ka ‘āina o Puna Aloha, me nā makamaka, a me nā kāko’o mai Hawai’i a i O’ahu — Mahalo nui iā ‘oukou a pau i ka lokomaika’i a me ke kōkua. A eia ka hua o ka hana, he mo’olelo no nā mua aku.

Me ka ha’aha’a a me ke aloha kau palena ‘ole – Kepā Maly

I. INTRODUCTION

BACKGROUND

At the request of Rodney Oshiro, of the Department of Land and Natural Resources-Division of Forestry and Wildlife (DLNR-DOFAW), island of Hawai'i program manager for *Na Ala Hele*¹, cultural resources specialist, Kepā Maly (*Kumu Pono Associates*), conducted a multifaceted study of historical and cultural resources of the Kea'au section of the historic Puna Trail or Old Government Road (also called the "Lower Puna Road") in the district of Puna, on the Island of Hawai'i (TMK:1-6-01 various parcels). While the trail-road alignment is part of a circle-island trail system, this study focuses on the alignment extending from the Kea'au-Waikahekahe-nui boundary to Kea'au Beach (*Figure 1*).

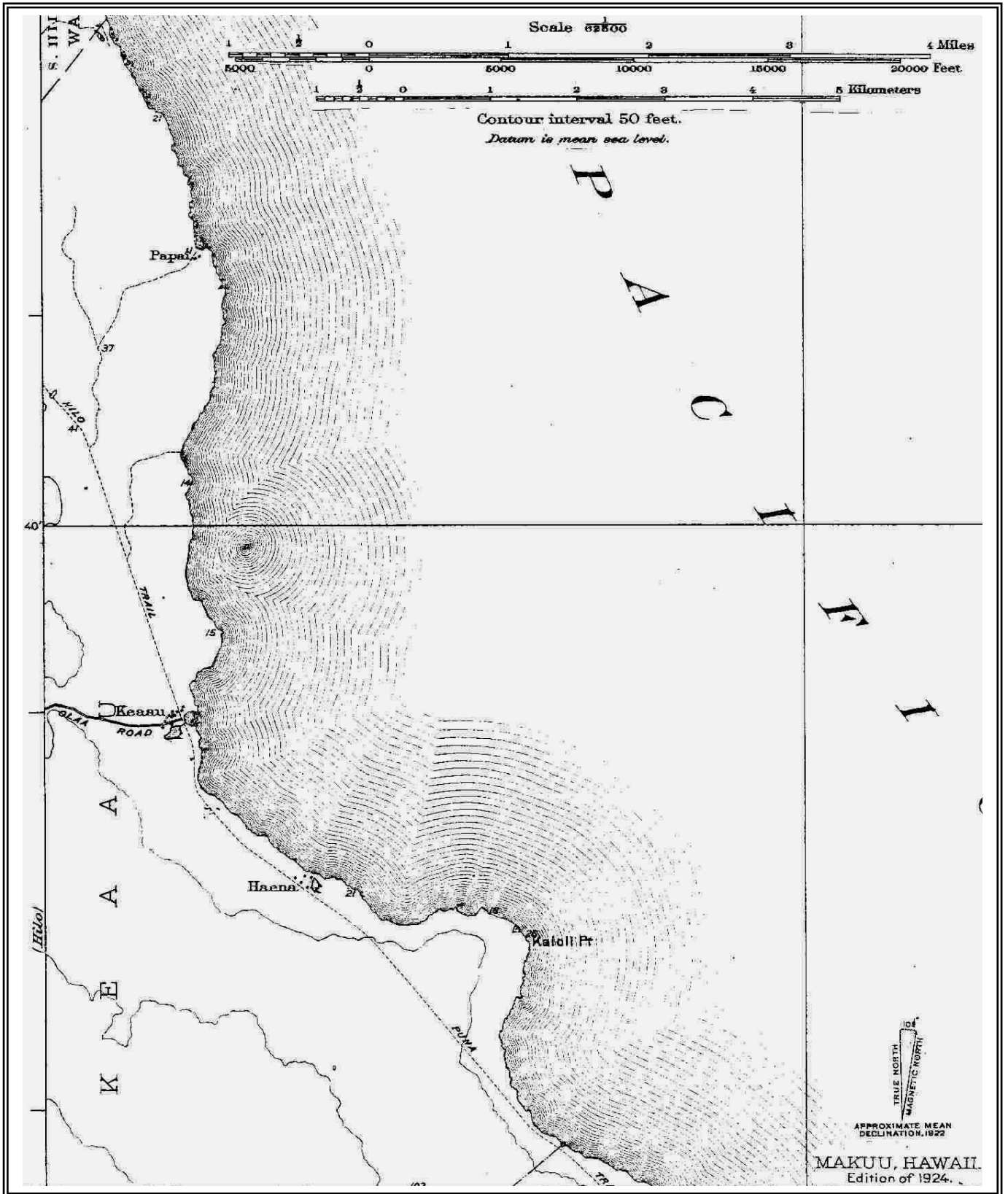
The Kea'au section of the Puna Trail extends for approximately three miles along the coast of Kea'au. At Kea'au Beach, the trail is situated at sea level and is awash in wave action. Traveling on the trail southeast from the beach, the trail proceeds a short distance inland, and is generally within 50 feet to half a mile from the shore. When away from the sea cliffs and rocky shoreline, the trail passes through elevations ranging from 10 to about 40 feet above sea level.

This study was conducted to help answer questions and document further traditions and practices associated with the *ahupua'a* of Kea'au—such as travel along the Puna Trail and *mauka-makai* access—and to identify some of the significant features of the landscape, so that they can be protected, preserved, or appropriately managed in the future. Also, the oral history interview component of the study recorded historical accounts of individuals who traveled the trail from the late 1920s, and elicited recommendations regarding present and future uses of the Puna Trail. As a result of the research and interviews, readers are provided detailed documentation about the history and practices of people who called Kea'au home, and the relationship of coastal resources and communities to those of the uplands.

In 1997, Barbara Lass, Ph.D., while a Professor of Anthropology, at the University of Hawai'i-Hilo and some of her students, conducted a reconnaissance survey of the Kea'au section of the Old Government Road (Lass 1997). During the reconnaissance survey, Lass and crew recorded 15 sites, including the historic Puna Trail (Old Government Road – Site 50-10-36-21273) and other sites of various age, ranging from the pre- or early contact period to the ca. 1940s (ranching and World War II sites). While conducting the field work, some archival research and informal interview work was done as well. Lass' 1997 report set the basic foundation for further archival and interview work, and is part of the basis of the site specific recommendations of the limited preservation plan included in this study.

Importantly, the information cited herein, presents the Division of Forestry and Wildlife – *Na Ala Hele*, native Hawaiians, and community organizations with historical information that will be helpful in the creation of a partnership by which to continue learning about the Puna Trail and developing a comprehensive integrated resources management program for its varied resources.

¹ The Trails and Access Program of the State of Hawai'i.



**Figure 1. Historic Puna Trail-Old Government Road (Kea'au Section),
District of Puna, Island of Hawai'i (Portion of Maku'u Quadrangle – USGS 1924)**

Na Ala Hele – Hawai'i's Trail & Access System

Trails are an integral part of the cultural landscape of Hawai'i. There is a long history of using trails and accesses for local and regional travel, subsistence activities, cultural and religious purposes, and for educational and recreational purposes in Hawai'i. In 1988, the State Legislature formalized its position regarding the need for a comprehensive trail and access system in Hawai'i with improved mountain and shoreline trails and accesses. Through Act 236, the Legislature established *Na Ala Hele*, the Hawai'i Statewide Trail and Access System. A part of *Na Ala Hele's* program vision is the development of a trail and access network and management system which:

1. provides a broad range of recreational, cultural, religious, and subsistence opportunities for all of Hawaii's people, and
2. helps conserve Hawaii's cultural heritage and environment. (DLNR-DOFAW 1991:II-1)

Na Ala Hele has the front-line responsibility for management of trails and accesses, but because of the diversity of trails and the cultural and natural resources through which they pass, other agencies also share oversight and management responsibilities. Historic trails (e.g. *ala hele* and *ala loa*) and highways and roads (the *ala nui aupuni*), have been defined as historic properties, that is "any building, structure, object, district, area or sites, including *heiau* and underwater site which is over fifty years old," (HRS Chapter 6E-2) and they require special consideration in determining proper care, use and long-term treatment (DLNR-DOFAW 1991:IV-12).

This study and the accompanying framework for a limited preservation plan has been undertaken as a part of the process *Na Ala Hele* needs to follow to meet some of the basic management responsibilities of the program. Hawaii Revised Statutes, Chapter 198D — the Hawaii Statewide Trail and Access System Legislation —directs *Na Ala Hele* to ensure proper and respectful management and use of the trails and appreciation of their associated natural and cultural resources. Specifically the law directs *Na Ala Hele* "To preserve the integrity, condition, naturalness, or beauty of the trails or accesses..." (HRS – Chapter 198D-6).

Study Guidelines

The research and interviews were performed in a manner consistent with Federal and state laws and guidelines for such studies. Among the referenced laws and guidelines were the National Historic Preservation Act (NHPA) of 1966, as amended in 1992; the Advisory Council on Historic Preservation's "*Guidelines for Consideration of Traditional Cultural Values in Historic Preservation Review*" (ACHP 1985); National Register Bulletin 38, "*Guidelines for Evaluating and Documenting Traditional Cultural Properties*" (Parker and King 1990); the Hawai'i State Historic Preservation Statue (Chapter 6E), which affords protection to historic sites, including traditional cultural properties of ongoing cultural significance; the criteria, standards, and guidelines currently utilized by the Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) for the evaluation and documentation of cultural sites (cf. Title 13, Sub-Title 13:274-4,5,6; 275:6 – Draft of December 1996); and guidelines for cultural impact assessment studies, adopted by the Office of Environmental Quality Control (November 1997).

Archival and Historical Resources

There have been only a few ethnographic and archaeological studies conducted in or near the Kea'au study area, and only limited information on the historical resources of Kea'au is available. Until publication of Emmett Cahill's "*The Shipmans of East Hawai'i*" (Cahill 1996), very little of the history of Kea'au had been researched and compiled into one source. In order to better understand native Hawaiian customs and historic events in Kea'au, this study also includes documentation recorded for neighboring lands in the district of Puna and in the Hilo-Waiākea region. Through this documentation, combined with that written specifically for the Kea'au study area, we are able to gain a fairly detailed understanding of practices and customs of native residents in the area. And of particular importance to this study, we gain a fairly complete understanding of the history of the Puna Trail-Old Government Road in the Kea'au vicinity.

In preparing the archival-historical documentary report for this study, the author reviewed both published and manuscript references in English and Hawaiian. These references included, but were not limited to: land use records, including Hawaiian Land Commission Award (LCA) records from the *Māhele* (Land Division) of 1848, and Boundary Commission Testimonies and Survey records of the Kingdom and Territory of Hawai'i (ca. 1860-1933); D. Malo (1951); I'i (1959); S. Kamakau (1961, 1964, 1976, and 1991); Wm. Ellis (1963); Titus Coan (1882); Chester Lyman (1924); A. Fornander (1917-1919 and 1973); Thrum (1908); Stokes and Dye (1991); L.A. Henke (1929); J. W. Coulter (1931); M. Beckwith (1919, 1970); Hudson (ms. 1932); Barrère (1959); Handy and Handy with Pukui (1972); McEldowney (ms. 1979); and E. Cahill (1996). The study also includes several native accounts from Hawaiian language newspapers (compiled and translated from Hawaiian to English, by the author), and historical records authored by nineteenth century visitors to the region. This information is generally cited in the chronological order of original publication.

The archival-historical resources were located in the collections of the Hawai'i State Archives, Land Management Division, Survey Division, and Bureau of Conveyances; the Bishop Museum Archives; Hawaiian Historical Society; University of Hawai'i-Hilo Mo'okini Library; private collections; and in the collection of the author. While the author has been compiling historical documentation on the Puna District for twenty years, the specific research on historic roads and community development reported in this study, was conducted between April to November 1998.

Oral History Interviews and Consultation Records of the Kea'au Study

Oral history interviews for the Kea'au study area were conducted between July to November, 1998. A total of five oral history interviews with four participants were conducted. Two of the interviewees participated in two interviews each, the latter interview records recorded during site visits, walking the length of the study area trail. The recorded interviews were transcribed and returned to each of the interviewees and follow up discussions were conducted to review each of the typed draft-transcripts. The latter process resulted in the recording of additional narratives with several interviewees. Following completion of the interview process, all of the participants in the tape recorded oral history interviews gave their written permission for inclusion of portions of their transcripts in this study (*Appendix A*). During the interviews and other communications, several historic maps were referenced, and when appropriate, the general locations of sites referenced were marked on the maps.

That information was in turn compiled on one map, which is cited as *Figure 2*, an annotated interview map at the end of this study.

Additionally during the process of preparing for, and conducting the formal recorded interviews, the author undertook a consultation process, speaking with various land owners and others interested in trail use and protection of cultural resources. Notes written up during some of those conversations were written up as a part of the recommendations section of the preservation plan for the historic Puna Trail-Old Government Road. Additionally, comments from W.H. Shipman, Ltd., are cited at the end of *Appendix A*.

As a result of the above referenced approaches to the study and compilation of historical narratives, this study presents readers with an overview of written documentation that spans more than 175 years—covering many centuries of traditions—and oral historical accounts that span more than 100 years. There is continuity and a number of similarities shared between both forms of documentation. The continuity in the written and oral historical accounts, suggests that there is time-depth in aspects of the cultural knowledge expressed and practiced by members of the present generation.

An Overview of the Ala Loa and Ala Nui Aupuni (Hawaiian Trails and Government Roads) In the Cultural-Historical Landscape

The Puna Trail evolved from a trail system generally known as the *ala loa* or *ala hele* which served not only to provide travelers with access to resources within a given *ahupua'a*², but also passed through the entire district of Puna. The *ala loa* (which later were likened to highways) also connected other districts around the island to one another. It is likely that over the centuries, the *ala loa* in Puna was modified in response to changing landscape and settlement patterns. But in the period of Hawaiian pre-history (generally the period from settlement to the late eighteenth century), it can be safely posited that the general Puna Trail alignment remained basically unchanged once established.

Because ancient trails were established to provide travelers with standardized and relatively safe access to a variety of resources, the trails were (and remain) an important feature of the cultural landscape. The *ala hele* were the link between individual residences, resource collection sites, agricultural field systems, and larger communities. Along Hawaiian trails one may see residences, enclosures and exclosures, agricultural complexes, resting places, resource collection sites, ceremonial features, and other sites which are of significance to families who once lived in the vicinity of the trails. The trails themselves, also exhibit a variety of construction methods which range from ancient—for example worn paths on *pāhoehoe* lava, or cobble stepping stone pavements—to historic curbstone lined roads with elevated stone filled “bridges” that level out the contour of the roadway.

Following the early nineteenth century, western contact brought about changes in the methods of travel (horses and other hoofed animals were introduced, and by the mid century, wheeled carts were being used on the trails). In some cases the old *ala loa*, were realigned (straightened out), widened, and smoothed over, and others were simply abandoned for newer more direct routes. In establishing modified trail- and early road-

² *Ahupua'a* is a traditional term used to describe an ancient Hawaiian land unit, and remains the primary land unit of the modern land classification system.

systems, portions of the routes were moved far enough inland so as to make a straight route, thus, taking travel away from the shore line. By the 1840s, the modified alignments became a part of a system of “roads” called the “*Ala Nui Aupuni*” or Government Roads. Work on the roads was funded in part by government appropriations, and through the labor or financial contributions of area residents (cf. Apple 1973). This was occurring on the Puna Trail, which by the 1840s, became the main Government road in Puna. The Kea’au section of the Government Road connected small coastal residence complexes at Kea’au Beach, Pākī Bay, and Keauhou Bay together. By the roadway, Kea’au residents also gained access to their schools and churches, and people from outside of Kea’au—those residing in neighboring lands of Puna and from the Hilo District—were provided access to Kea’au and beyond. The general alignment of this thoroughfare was documented on a map as early as 1841 by Charles Wilkes of the United States Exploring Expedition (*Figure 3*).

The rapidly changing social and economic system in Hawai’i of the middle nineteenth century, also brought about increased travel between various communities of Puna and the growing town of Hilo (in this period Hilo Town was generally situated on the coastal flats of the lands of Punahoa (extending from Wailuku River to Kukuau). Hilo was an important trade center, with ships regularly calling at port. In this period, many people from the Puna District traveled the *Ala Nui Aupuni* to sell their produce and handcrafts at Hilo. By the 1870s a number of other business opportunities were being developed as well, they included ranching operations, the cultivation and export of ‘awa (*Piper methysticum*) and coffee, woods, and *pulu* (down of the tree ferns), and as a result, further work on the Puna Government Road alignment was undertaken by the Government. Another modified alignment of the road set out in 1875 (survey by J.M. Lydgate – reports cited in this study), and remained in use and under periodic maintenance until about 1895.

By the 1890s, most of the coastal portion of Kea’au had been abandoned. The few remaining native families of coastal Kea’au worked for and moved into housing provided by W.H. Shipman, or moved further inland. In the 1890s, the Government was also opening up large tracts of Homestead lands throughout Puna, which were sold for residential and agricultural use. Because the rich agricultural parcels were generally situated three or more miles inland, above the 400 foot elevation Homestead lands could be better accessed, and their produce better transported by a new and more direct inland route between Puna and Hilo. As a result, the basic alignment of the Kea’au-Pāhoa Highway (now Highway 130) was established and construction underway in 1895.

In between 1895 to 1941, other than maintenance undertaken by the native residents of Kea’au and workers of the Shipman ranch (see oral history interviews in this study), no further work was done on the Kea’au section of the Puna Trail (Old Government Road or Lower Puna Road)³. With the outbreak of World War II, the United States military opened up the Old Government Road from the Waikahekahe-nui boundary to the area just behind Hā’ena. The alignment was smoothed out and four-wheel drive military vehicles were driven

³ Na Ala Hele files include records documenting limited fire-break maintenance on the Puna Trail-Old Government Road from the Waiākea (National Guard Range) to Kea’au boundary in the 1930s (pers comm. P. Thiele; Jan. 19, 1999).

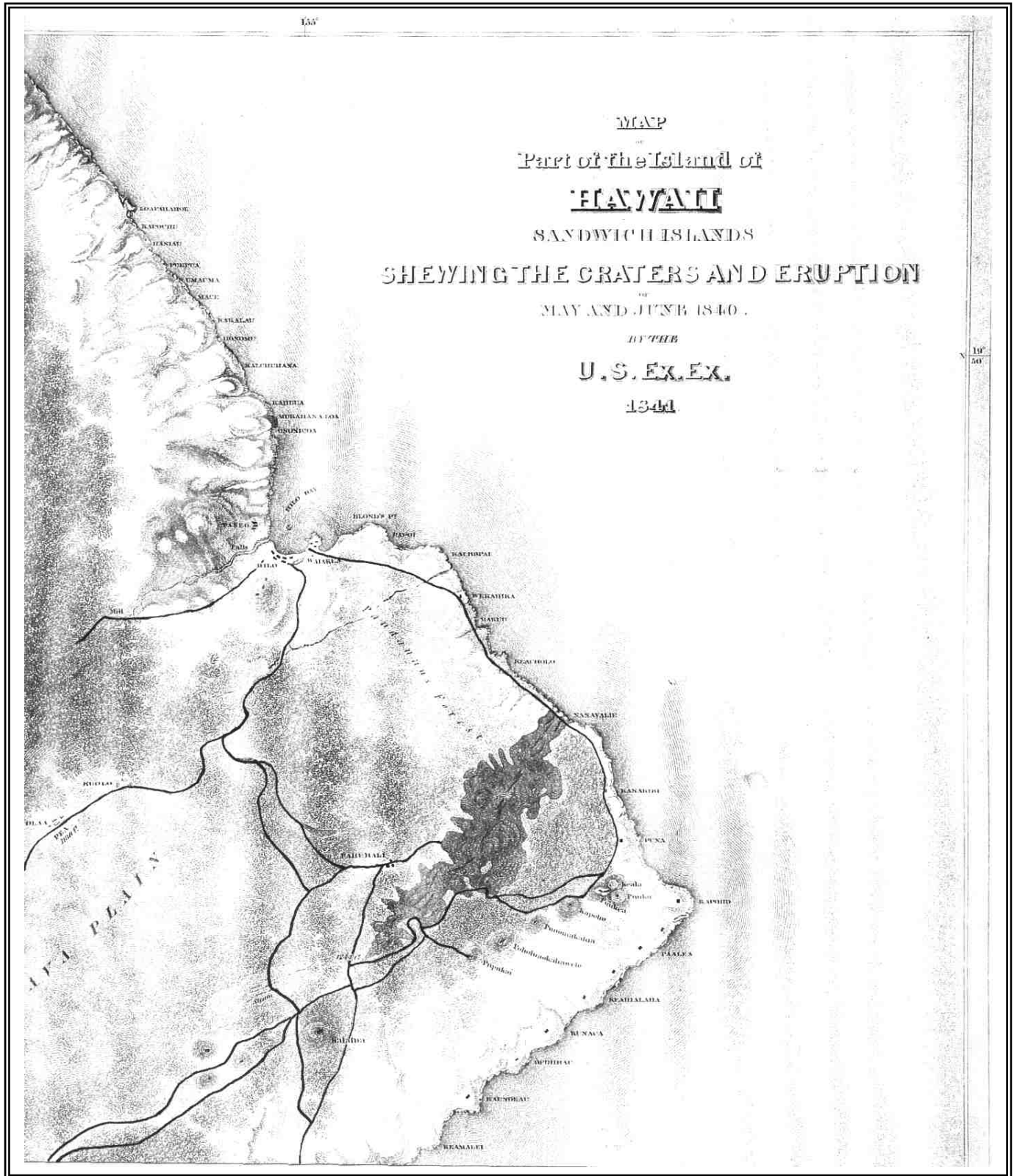


Figure 3. The Puna Trail (trail alignments darkened) – As depicted on Register Map 424 (U.S. Ex. Ex. 1841); State Survey Division

along the corridor for about a four year period. Even though the road supported vehicular activity, much of the stone and pebble paving, bridge work, and curbstone alignments are still visible today. The Department of Land and Natural Resources-State Historic Preservation Division (DLNR-SHPD) has inventoried the Puna Trail- Old Government Road and assigned it State Inventory of Historic Places Number 50-10-36-21273.

As briefly described above, one can see that even though Hawaiian trails and historic roadways are narrow, they are significant parts of the cultural landscape. Just as a trail serves as a link between various settlements and resources necessary for sustaining communities, the historic Puna Trail-Old Government Road is also a pathway through history. With the above foundation set, the following sections of the study provide readers with access to a rich collection of native accounts and historical documentation recorded for Kea'au, the larger district of Puna, and the Waiākea-Hilo vicinity which neighbors Kea'au to the north.

II. PUNA–KA ‘ĀINA O KE KAI NEHE I KA ULU HALA PUNA–LAND WHERE THE SEA WHISPERS IN THE HALA GROVES

This section of the study is separated into several smaller sub-sections. *Section II.a* presents readers with a general overview of the cultural context of the district of Puna, Hawaiian settlement, land use practices, and an introduction to place names of Kea‘au and vicinity. *Section II.b* is a compilation of native traditions, recorded by Hawaiian and foreign authors, about Kea‘au, Puna and neighboring lands. *Section II.c* presents readers with narratives that describe Kea‘au and Puna in the nineteenth century, as recorded in Hawaiian language newspapers and in journals written by individuals who traveled the Puna Trail. Generally, the documentation cited in each of these sub-sections is presented in chronological order, earliest to latest accounts.

II.a. Puna on the Island of Hawai‘i

In the ancient lore of the people of Hawai‘i, there are several things for which the district of Puna is famed—among them are the rising of the sun at Kumukahi; Pele and the geologic-volcanic phenomena; the groves of *pū hala* (pandanus trees); growth of ‘*awa* (*Piper methysticum*); and the beach at Kea‘au where Hōpoe, the woman-turned to stone danced, or rocked in the waves on the shore. Perhaps because of her ever present eruptive and geologic presence, Pele, goddess of the volcanoes is first in the minds of many people today when they think of Puna. But of apparent greater antiquity, Puna is famed for its association with Kāne, a Hawaiian god and ancestor of the chiefs and commoners, a god of sunlight, fresh water, verdant growth, and forests (cf. Pukui 1983).

Puna’s association with Kāne is described in the Hawaiian saying —

Puna, ka ‘āina i ka houpo o Kāne

Puna, the land [held] in the breast of Kāne

(Kihe, Wise, and Desha – In *Ka Hōkū o Hawai‘i*; Sept. 16, 1915)

The saying commemorates Puna, of which it is said that before Pele migrated to Hawai‘i from Kahiki, there was that “no place in the islands was more beautiful than Puna” (Pukui 1983:11, No. 79). More than a god of the verdant forests of Puna, Kāne is also the Hawaiian god of sun light. And the relationship between Kāne, the sun and Puna is significant throughout the Hawaiian Islands. In his role as giver of light, Kāne, also known as Kāne-i-ka-‘ōnohi-o-ka-lā (Kāne-in-the-eyeball-of the sun).

In the context of landscape, Puna is synonymous with the groves of *pū hala* (pandanus trees) with their fragrant clusters of *hua hala* (pandanus fruit born on the female trees) and the *hīnano* (blossoms of the male pandanus). The fragrance of the *hala* permeated the *kula* (plains) and *kahakai* coastal region of most of Puna, hence the saying —

Puna pāia ‘ala i ka hala (Puna, with walls fragrant with pandanus blossoms)

Puna, Hawai‘i, is a place of *hala* and *lehua* forests. In olden days the people would stick the bracts of *hala* into the thatching of their houses to bring some of the fragrance indoors (Pukui 1983:301. No. 2749)

Also, the people who dwelt in Puna were known as master weavers. The most famous mat of Puna was one which was called *puahala* (G.S. Kahanai IN Fornander 1919 Vol. V-Part III:626). This mat was woven from the leaf sheaths of the *pua hīnano* (male pandanus tree blossoms), and it was particularly favored because of its silky texture and pleasant fragrance. To this day, Puna is known for its growth of *hala*, and the floors and furniture of some of the old households are still covered with fine woven mats and cushions. Weaving remains an important occupation of many native families of Puna as well.

An Overview of Hawaiian Settlement

For many years, archaeologists have proposed that early Polynesian settlement voyages between Kahiki (the ancestral homelands of the Hawaiian gods and people) and Hawai'i were underway by AD 300, with long distance voyages occurring fairly regularly to ca. AD 1250. It has been similarly reported that the early Hawaiian population came primarily from the Marquesas and Society Islands (Emory in Tatar 1982:16-18). For generations following initial settlement, communities were clustered along the watered, windward (*ko'olau*) shores of the Hawaiian Islands. Along these *ko'olau* shores, streams flowed and rainfall was abundant, and agricultural production became established. The *ko'olau* region also offered sheltered bays from which deep sea fisheries could be easily accessed, and near shore fisheries, enriched by nutrients carried in the fresh water, could be maintained in fishponds and coastal fisheries. It was around these bays that clusters of houses where families lived, could be found (McEldowney ms. 1979:15). In these early times, the residents generally engaged in subsistence practices in the forms of agriculture and fishing (Handy and Handy 1972:287).

Over the period of several centuries, areas with the richest natural resources became populated and perhaps crowded (by ca. 800 to 1000 AD), and the residents began expanding out into more remote regions of the island. While the Puna study area generally receives ample rainfall (nearly 100 inches annually) and was historically graced by mature forests which could shelter cultivated crops and provide natural resources necessary to life, it was (and remains) also subject to the affects volcanic and other geologic phenomena. Thus, large sections of Puna may not have been actively sought out for long-term residency and investment of labor resources until such time as population demands made it absolutely necessary.

Based on patterns witnessed throughout the Hawaiian Islands (cf. Malo 1951, Ellis 1963, Fornander 1973, Stokes and Dye 1991, Handy and Handy with Pukui 1972, McEldowney ms. 1979, Kirch 1983 & 1985), the following settlement and population expansion pattern may be applied to the study area:

- 1– By the 12th-13th centuries Kea'au and vicinity was being settled. It is likely that the early settlers brought with them those things which were necessary for their survival—e.g., dry- and wet-land *kalo* (taro); *uala* (sweet potatoes), *pi'a*, *uhi*, and *hoi* (yams); *hue* (gourds), *pia* (arrowroot); *'awa* (*Piper methysticum*), *kō* (sugarcanes); *wauke* (paper mulberry); *mai'a* (bananas); *'ulu* (breadfruit); and *niu* (coconuts) etc. Also, as a result of the Hawaiian place- and environment-based religious system, the ancient settlers brought with them their gods and goddesses, as “they were in their minds and souls...” (M.K. Pukui Ms.:2). In this

early time, the primary livelihood focused on near-residence agriculture, and on the collection of marine resources.

- 2 – By the 14th-16th centuries, the population increased, thus, the need to expand agricultural systems to the uplands increased. The *‘ohana* (extended family) system of social, religious, political, and economic values linked coastal and inland inhabitants. The stringent political and religious system introduced during the Pā‘ao-Pili migrations of ca. 1275 A.D. gained increasing control in the islands.
- 3 – By the 16th-18th centuries, there evolved a greater separation between the *ali‘i*, or chiefly class and the *maka‘āinana* (commoners). Concurrently, as the Hawaiian population grew, land use practices expanded and became further formalized. In Puna, residences began expanding away from sheltered bays with near-shore forested zones and ample rainfall, pushing further inland as in ‘Ōla‘a, and southwest towards more arid coastal regions with longer stretches of dry land between the shore and forests.

It was also in the early sixteenth century, that the entire island of Hawai‘i came under the rule of one chief, ‘Umi-a-Līloa, and the native system of land management by district (*moku-o-loko*), smaller land divisions (*ahupua‘a*), and still smaller land units (e.g. *‘ili*, *kō‘ele*, *māla*, and *kīhāpai*, etc.) was formalized. In this system, the land provided the fruits and vegetables for the diet, and the ocean provided most of the protein, and in communities with long-term royal residents, divisions of labor came to be strictly adhered to.

This system of land management established by the late 17th and early 18th centuries, was strictly adhered to, and it also set the basis of Hawaiian land use and distribution through the nineteenth century.

The preceding discussion provides readers with a general overview of Hawaiian colonization and population expansion on the island of Hawai‘i and in the Puna study area. A more detailed discussion on settlement, based on archaeological evidence will become available when further archaeological studies are conducted in Puna, and carbon dating analysis become available.

Hawaiian Land- and Resource-Management Practices

As briefly discussed above, the ancient Hawaiians developed a sophisticated system of land and resources management. By the time ‘Umi-a-Līloa came to rule the island of Hawai‘i in ca. 1525, the island (*moku-puni*) was divided into six districts (*moku-o-loko*). Puna, the eastern-most of the districts on the island of Hawai‘i, is also the smallest district on the island, and is the only one that does not take in a mountain peak. The boundaries of Puna are described by the saying —

Puna, mai ‘Oki‘okiaho a Mawae.

Puna, from ‘Oki‘okiaho to Mawae.

The extent of Puna is from 'Oki'okiaho on the Ka'ū side to Mawae on the Hilo side (Pukui 1983:301, No. 2747)

The large districts like Puna, were further divided into manageable units of land, and were tended to by the *maka'āinana* (people of the land) (cf. Malo 1951:63-67). Of all the land divisions, perhaps the most significant management unit was the *ahupua'a*; these are subdivisions of land that were usually marked by an altar with an image or representation of a pig placed upon it (thus the name *ahu-pua'a* or pig altar). *Ahupua'a* may be compared to pie-shaped wedges of land that extended from the mountain peaks, or in the present case in Puna, some other feature of geological significance (e.g., a rift zone or crater) to the ocean fisheries fronting the land unit. The boundaries of the *ahupua'a* were generally defined by cycles and patterns of natural resources occurring within the lands (cf. Lyons, 1875; In The Islander).

The *ahupua'a* were also divided into smaller, manageable parcels in which cultivated resources could be grown and natural resources harvested. As long as sufficient tribute was offered and *kapu* (restrictions) were observed, the common people, who lived in a given *ahupua'a* had access to most of the resources from mountain slopes to the ocean. These access rights were almost uniformly tied to residency on a particular land, and earned as a result of taking responsibility for stewardship of the natural environment, and supplying the needs of ones' *ali'i* (cf. Malo 1951:63-67; Kamakau 1961:372-377; and Boundary Commission testimonies in this study).

Entire *ahupua'a*, or portions of the land were generally under the jurisdiction of appointed *konohiki* or lesser chief-landlords, who answered to an *ali'i-'ai-ahupua'a* (chief who controlled the *ahupua'a* resources). The *ali'i-'ai-ahupua'a* in turn answered to an *ali'i 'ai moku* (chief who claimed the abundance of the entire district). Thus, *ahupua'a* resources supported not only the *maka'āinana* and *'ohana* who lived on the land, but also contributed to the support of the royal community of regional and/or island kingdoms. This form of district subdividing was integral to Hawaiian life and was the product of strictly adhered to resources management planning.

The Ahupua'a of Kea'au

Kea'au is the northern most of some 50 *ahupua'a* found in the district of Puna. Kea'au extends from the ocean fishery some 26 miles inland, and reaches an elevation of about 3,900 feet. In the uplands, Kea'au is cut off by Keauhou, eastern-most of the *ahupua'a* of the district of Ka'ū. Within the boundaries of Kea'au, are some 60,000 acres of land. In the context of Hawaiian settlement and expansion, Kea'au was one of the favored lands of Puna. Much of Kea'au and its neighbor 'Ōla'a, with which the residents shared a close relationship, has rich soil. Also, the large pond—modified into a *loko i'a* or fishpond—and numerous marshy areas and small ponds between Māwae in the north and Waikahekahe to the east, made Kea'au ideal for coastal settlement. The watered lowlands provided inhabitants with resources—such as fresh water, marine protein resources, and the ability to cultivate vegetable foods year round. The fertile uplands provided residents with access to important agricultural complexes and other natural resources important to sustaining the local and regional community. Historical documentation recorded by nineteenth century residents, early visitors and surveyors document the occurrence of extensive agricultural field systems in the region generally extending from the 400 foot elevation to about the

2,500 foot elevation (cf. Boundary Commission testimonies, Ellis 1963, Handy, Handy and Pukui 1972, and various communications from the 1890s, written A.B. Loebenstein in this study).

Inoa ‘Āina (Place Names)

The occurrence of Hawaiian place names demonstrates traditional knowledge of place, and the broad relationship of the natural landscape to the culture and practices of the Hawaiian people. In 1902, W.D. Alexander, former Surveyor General of the Kingdom (and later Government) of Hawai‘i, wrote an account of “Hawaiian Geographic Names” (1902), under the heading “Meaning of Hawaiian Geographic Names” he observed:

It is very difficult, if not impossible, to translate most of these names, on account of their great antiquity and the changes of which many of them have evidently undergone. It often happens that a word may be translated in different ways by dividing it differently. Many names of places in these islands are common to other groups of islands in the South Pacific, and were probably brought here with the earliest colonists. They have been used for centuries without any thought of their original meaning... (Alexander 1902:395)

History tells us that named locations were significant in past times, and it has been observed that “Names would not have been given to [or remembered if they were] mere worthless pieces of topography” (Handy and Handy with Pukui, 1972:412). In “A Gazetteer of the Territory of Hawaiian,” Coulter (1935) observed that Hawaiians had place names for all manner of feature, ranging from “outstanding cliffs” to what he described as “trivial land marks” (Coulter 1935:10).

In ancient times, named localities served a variety of functions, including — (1) triangulation points such as *ko‘a* (markers for fishing grounds); (2) residences; (3) areas of planting; (4) water sources; (5) trails and trail side resting places (*o‘io‘ina*), such as a rock shelter or tree shaded spot; (6) *heiau* or other features of ceremonial importance; (7) may have been the source of a particular natural resource or any number of other features; or (8) the names may have recorded a particular event that occurred in a given area.

Table 1 below, includes some of the significant place names which have been recorded for Kea‘au, with emphasis on the coastal region through which the Puna Trail passes. Sources for the place names cited below include Boundary Commission testimonies, survey records, historic maps, and oral history interviews. Because place names often describe, or tell a story of a particular area, where possible, the author has included either literal or interpretive translations for place names that lend themselves to such interpretations. Some place names are easily translated—traditions about the name and its meaning have been handed down over the generations—they are either a single word or a compound of two or more words that remain in common usage. Such names are generally descriptive of a landscape or event. Other place names, perhaps a compound of two or more words with several meanings, can lend themselves to various interpretations. But in the absence of a tradition as to the original meaning, “interpretive translations” can be suggested. In the table below, literal or interpretive translations are rendered, when appropriate. But in cases where pronunciation and meanings are obscure, no translation is suggested.

Table 1. Place Names of Kea'au and Vicinity (Features around the Puna Trail)

Place Names (sites and features)	Meaning	Location
<i>Wai-ākea</i>	Literal: Expansive water	<i>Ahupua'a</i> in Hilo.
'Ōla'a	Literal: Sacred, sanctified	Land division (<i>kalana</i>) between Hilo and Puna.
<i>Kea'au</i>	Literal: White current	<i>Ahupua'a</i> in Puna.
<i>Wai-kahekahe</i>	Literal: Flowing water	<i>Ahupua'a</i> in Puna.
<i>Maku'u</i>	Literal: Knob or end piece of a canoe, used for hauling the hull pre-form to the shore – also the knob of a wooden club swung over the head and thrown to strike or trip someone (cf. Ka-Miki 1915; Maly translator).	<i>Ahupua'a</i> in Puna.
<i>Pō-ka-ī</i>	Interpretive: Night of the supreme one (cf. Pukui et al. 1974)	An 'ili of Waiākea, and name of <i>heiau</i> on shore.
<i>Anapuka</i>	Literal: Cave entry or underground passage	An area in the 'ili of Pōkaī (in Waiākea), also a <i>heiau</i> and associated features.
<i>Ka'uleko'u</i>	Literal: The potent penis	On shore between Anapuka and Pakaiea.
<i>Pakaiea</i>	A type of <i>limu</i> (the green sea lettuce)	Shoreline fronting <i>heiau</i> of Pōkaī.
<i>Paukūpahu</i>	Literal: Section of land cut off (cf. Pukui et al. 1974)	An 'ili of Kea'au.
<i>Kāwī-kāwā</i> or <i>Kāwī-o-kāwā</i>	Interpretive: Squeezed through a channel or opening.	<i>Heiau</i> site on shoreward boundary of Waiākea and Kea'au.
<i>Ka-mokuna</i>	Literal: The cut off section	Actual ocean side Boundary between Wai-ākea and Kea'au.
<i>Ke-ahi-lele</i>	Literal: The flying fire (fire ball)	An area near the intersection of the Puna Trail and the boundary wall.
<i>Wai-a-'eli</i> (also written as <i>Waiaele</i>)	Interpretive: Water made (gotten) by digging	Pond near Māwae and Kea'au-Waiākea boundary.
<i>Naue</i>	Literal: Shaking, moving	An area between Māwae and Waiaele – formerly a place of refuge.
<i>Mānowai-po'o</i>	Literal: Source of Water	A pond on the shore at Paukūpahu.
<i>Uhu-nui</i>	Literal: Large parrot fish	Point between Pāpa'i and Kāwīakāwā.
<i>Pōhākau</i>	Literal: Stone to rest on	Point and flat lands in vicinity of Kāwīakāwā; Puna Trail passes inland.

<i>Pāpa'i</i>	Literal: Crab	Old village site on shore of Kea'au, near Paukūpahu.
<i>Māwae</i>	Literal: Fracture, crack	A long fissure in the lava, rising from Pāpa'i Bay proceeding to the vicinity of the Kea'au-Waiākea boundary.
<i>Pā-pua'a</i>	Literal: Pig enclosure	Old village site north of Kahului.
<i>Hina-maka-nui or Wahine-maka-nui</i>	Literal: Big-eyed Hina, or big-eyed woman (Hina is an earth-goddess and fishermen's goddess)	A stone in the ocean north of Kahului.
<i>Ka-hului</i>	Literal: The fishnet bag	Old village site north of Kea'au Bay.
<i>Wahine 'Ami or Wahine 'Ami o Hōpoe</i>	Literal: Dancing woman; Hōpoe the dancing woman	Lava flats on south side of Kea'au Bay.
<i>Hā'ena</i>	Literal: Red hot, raging wrathful (descriptive of the raging sea – pers comm. M.K. Pukui, 1976)	Point and flats fronting C. Fisher's residence.
<i>Nanahuki</i>	Literal: To pull away from	Sea fronting region between Hā'ena and Hōpoe.
<i>Ka-lele</i>	Literal: The leap	South of Hā'ena Point.
<i>Punalu'u</i>	Literal: Diving spring (fresh water gotten by diving into salt water)	South of Kalele.
<i>Keanahe</i>	Uncertain: If pronounced Ke-ana-hē, it may be translated as meaning "The-burial-cave."	South of Punalu'u.
<i>Pākī</i>	Literal: Smashed, broken to pieces	Shoreline bay and village site.
<i>Kaiko'o</i>	Literal: High or rough seas	Area between Pākī and Keauhou.
<i>'Ā'alāmanu</i>	Literal: Dense pebbles [gathered by the] birds	Situated on shore to the south of Kaiko'o.
<i>Pōhaku-'alaea</i>	Literal: Red stone	Point between Pākī and Keauhou.
<i>Kīpaepae</i>	Literal: Stone pavement	Area inland and between Pākī and Keauhou.
<i>Keauhou</i>	Literal: The new current	Shoreline bay and village site.
<i>Ka'īlio</i>	Literal: The dog	Point to south of Keauhou.
<i>Hōpoe</i>	Literal: Fully developed (as <i>lehua</i> blossom); named for a deity of the <i>lehua</i> forest and dancers.	Lava flats and forest, extending between the points of Ka'īlio and Kaloli.
<i>Ka-loli</i>	Interpretive: The changed one	Now reference as the point on which Hōpoe is situated.

<i>Ka-leina-malule</i>	Interpretive: The leaping place of the weak one	On south side of Kaloli.
<i>Keahuakaliloa</i>	Uncertain – if pronounced as Ke-ahu-a-ka-lilo-‘ā, it can be translated as “The mound of the one turned to stone.” See site description given to the Boundary Commission in 1873 (see texts in this study).	Boundary on ocean, Between Kea‘au and Waikahekahe Nui.
<i>La‘ahale</i>	Interpretive: Dedicated house	Boundary on ocean, Between Waikahekahe-nui and Waikahekahe Iki.
<i>Ku‘uwelu</i>	Perhaps a type of <i>limu</i> (<i>Gelidium</i>)	Boundary between Waikahekahe Iki and Maku‘u.

II.b. Mo‘olelo ‘Āina (Traditions of the Land)

Through *mo‘olelo* (native traditions and historical accounts) readers are able to get a sense of the relationship shared between the Hawaiians and their landscape. The *mo‘olelo* explain geophysical features, events that occurred in an area, natural phenomena, and why certain things were, or were not done. While not many traditions recorded specifically for the lands and people of Kea‘au in the period before western contact have survived, there are several larger regional and island-wide narratives that reference the area. The following narratives are excerpted from a collection of *mo‘olelo* that shed some light on the pre-history Kea‘au and the lands that neighbor it.

Kū-ka-‘ōhi‘a-Laka

Tradition relates that in the period of settlement of these islands, the gods themselves also took human forms and resided upon the land. It is recorded that the gods Kū-ka-‘ōhi‘a-Laka and his sister Ka-ua-kuahiwi came from Kahiki (the ancestral home land) to Hawai‘i, and settled at Kea‘au and ‘Ōla‘a, Puna. Kū-ka-‘ōhi‘a-Laka (Kū) and his wife resided near the shore at Kea‘au, and Ka-ua-kuahiwi, her husband and children lived upland in ‘Ōla‘a. Kū’s wife was stingy, and at one time denied Ka-ua-kuahiwi and her family fish that Kū had caught. Out of desperation, Ka-ua-kuahiwi turned her husband and children into rats, and turned herself into a spring of water. When Kū learned of this occurrence, he went to the spring and turned himself into an *‘ōhi‘a* tree (cf. Green and Pukui 1995:19-20; and Beckwith 1970). This *‘ōhi‘a* tree was known as a supernatural tree and the spring and tree were one of the *wahi pana* (special storied places) along the ancient trail leading to and from the volcano area in ‘Ōla‘a. The location of Kū-ka-‘ōhi‘a-Laka was near the 13 mile marker of the old Volcano Road (pers comm. M.K. Pukui 1976).

He Mo‘olelo Ka‘ao No Kepaka‘ili‘ula... (A Story about Kepaka‘ili‘ula...)

This *mo‘olelo* is set in the time of early settlement on the island of Hawai‘i. It is an account of the birth and feats of Kepaka‘ili‘ula, who when born, given up for dead because he was born as an *‘e‘epa* (premature – mysterious formed child). Kepaka‘ili‘ula’s father was Maka-o-Kū, and his mother was Hina-i-ka-malama, both of whom were descended from Kūahailo and Hina the *akua - ali‘i* (god-chiefs) who came to Hawai‘i from Kahiki and established the highest chiefly bloodlines of Hawai‘i. At the time of Kepaka‘ili‘ula’s birth, Makaokū and Hina dwelt near Moku-ola (now called Coconut Island) and ruled the district of Hilo.

Kepaka'ili'ula's birth was accompanied by numerous displays of natural phenomena including fragmented rainbows that rested upon the ocean, rains that poured upon the land, and rivers that overflowed upon the land. His maternal uncles, Ki'inoho and Ki'ihele, took these signs as omens of Kepaka'ili'ula's supernatural nature. Without the knowledge of Makaokū or Hina, Ki'inoho and Ki'ihele rescued Kepaka'ili'ula and raised him while instructing him in all manner of fighting techniques, and in the uses of his supernatural powers. When Kepaka'ili'ula came of age, his uncle Ki'ihele went in search of a suitably beautiful and highly ranked chiefess to whom Kepaka'ili'ula could be married. The journey took him along the *ala loa* (trail) that encircled Hawai'i. Along the way, he met with sacred chiefesses of the island's various districts. The first chiefess met with was Hōpoe, who dwelt on the shore of Kea'au.

The following narratives are translated from the larger account which was published in *Ka Hōkū o Hawai'i* (March 20, 1919 - December 9, 1920). The earliest published accounts of Kepaka'ili'ula date back to ca.1863, and are attributed to David Malo (IN *Ka Hōkū o Hawai'i*, March 13 and 20, 1919):

Ki'ihele departed from Hilo and traveled swiftly along the shore of Puna till he reached the place called Kea'au, where there lived a beautiful woman named Hōpoe. Arriving at the *hale ali'i* (royal compound) of this chiefess of Kea'au, Ki'ihele heard Hōpoe calling him to enter her house and rest, and explain why his journey had him traveling so early in the morning. Ki'ihele told Hōpoe that he could not enter her house, as he was on a journey to seek out a wife for his royal ward. "I have heard of the beauty of Hōpoe, the beautiful woman of Kea'au, thus I have come to visit you."

Hōpoe then asked, "So what do you think, am I the woman for your ward, and are his features comparable to mine?" Ki'ihele answered, "Listen to me oh beauty of Kea'au, there is perhaps no beauty comparable to yours, but I must continue my journey to find if there is anyone else for my royal ward."

Before Hōpoe could answer, Ki'ihele moved swiftly on along the trail and he arrived at Kula, where dwelt the chiefess Waiwelawela... (May 5, 1919)

After completing his journey, Ki'ihele found that the chiefess Mākole'ā of Kahalu'u, Kona was the most beautiful, and it was to her that Kepaka'ili'ula was wed.

Ka U'i Keamalu (The Beauty Keamalu)

There once lived at Paliuli, an upland region of 'Ōla'a, a beautiful chiefess named Keamalu. Keamalu was raised in the seclusion of the forests by her supernatural elders, and until she matured, she was never seen by anyone. A spring in 'Ōla'a is named Punawai o Keamalu, and it was there, that the chiefess went to bathe. One day while at Punawai o Keamalu, a young man came upon her, and he was so taken by her beauty that he asked her to become his wife. She refused, but he would not leave her, and her bird guardians took her away on their wings. Word of Keamalu's beauty went throughout Puna, and the young man's sweetheart, the beautiful Kalehua'ula and her parents spoke disparagingly about Keamalu. Keamalu's guardians were angered by the comments, and a contest was arranged so that all the people of Puna could see and compare the two beauties. Keamalu, adorned with maile and *lehua kea* (white blossomed *lehua*), with *'iwi* flying over her, won the contest. She and the young man were married, and they lived at Paliuli. "As for the

spring of Keamalu, it was hidden and is shown to very few people” (Green and Pukui 1995:32-33).

Pele and Hi'iaka
(Hōpoe and Hā'ena at Kea'au)

Perhaps the most famous of the traditions of Kea'au is found in the epic account of the journeys of the goddess Pele, and later her youngest sister, Hi'iaka, from Hawai'i to Kaua'i and back. The narratives below, are synthesized from two versions of the *mo'olelo*, one compiled by N.B. Emerson (1915), and the other published in the Hawaiian language newspaper, *Ka Hōkū o Hawai'i* (1924 to 1928⁴).

From the *mo'olelo*, comes one of the famous *mele* (chants) that describes the beauty of Puna and Kea'au:

<i>Noho nō Puna i ka nani me ka maika'i</i>	Puna is settled in beauty and goodness,
<i>He hale kipa ia na ke 'ala me ke onaona</i>	It is like a guest house which is filled with fragrance sweet scents
<i>Onaona ka maile, ka hala o Kea'au</i>	Sweetened by the <i>maile</i> and <i>hala</i> groves of Kea'au
<i>Ola ai na kupa o Kaniahiku</i>	Giving life to the natives of Kaniahiku.
(Ka Hōkū o Hawai'i – Sept. 25, 1924)	

One day, Pele called to her sisters and invited them to travel with her from Kīlauea to the shore of Puna, where they fished, collected *ōpihi* (limpets), *wana* (urchins) and *limu* (seaweeds). While relaxing and fishing, Pele saw the women Hōpoe and Hā'ena dancing near the shore. Pele asked her sisters if some of them might dance for her, but none of them could dance. The youngest sister, Hi'iaka-i-ka-poli-o-Pele (Hi'iaka), had not yet joined Pele and her other sisters at the shore, as she was gathering *lehua* blossoms to weave into *lei* (garlands). When Hi'iaka arrived Pele inquired of her, if she might have a *mele* (chant) and hula (dance) with which to entertain them. Hi'iaka said she did have a *mele*, and as she adorned Pele and the other sisters with the lei *lehua*, she chanted:

<i>Ke ha'a la Puna i ka makani, Ha'a ka ulu hala i Kea'au.</i>	Puna Dances in the wind, The pandanus groves of Kea'au dance as well.
<i>Ha'a Hā'ena me Hōpoe, Ha'a ka wahine, 'Ami i kai o Nānāhuki, la— Hula le'a wale, I kai o Nānāhuki, e!</i>	Hā'ena and Hōpoe dance, The women are dancing. Turning at the sea of Nānāhuki— Gleefully dancing, At the shore of Nānāhuki!

Pele greatly enjoyed this *mele* and asked Hi'iaka if she would present another one. So

⁴ The *Ka Hōkū o Hawai'i* version of the *mo'olelo* (translated by the author), ran in serial form for four years. While the account follows the general line of Emerson's narratives, there are many places at which additional *mele* and site references (including how place names came about) than the Emerson version. Unfortunately, the issues for the period between November 20, 1924 to may 21, 1925—which cover the beginning of Hi'iaka's journey and travel through Kea'au are missing—thus Emerson's account is cited as well.

Hi'iaka chanted:

O Puna kai kuwā i ka hala.

*Pae ka leo o ke kai,
Ke lū la i nā pua lehua.
Nānā i kai o Hōpoe,
Ka wahine 'ami i kai
O Nānāhuki la.
Hula le'a wale,
I kai o Nānāhuki e!*

The sea of Puna is heard rumbling
through the pandanus grove.

The voice of the ocean moves inland,
Scattering the blossoms of the *lehua*.
Look to the shore of Hōpoe,
The woman who dances at the sea
Of Nānāhuki.
She dances joyfully
At the shore of Nānāhuki!

When Hi'iaka completed her dance, she went to visit her friend and companion in hula, Hōpoe. It was at that time, that Pele went to a cave on the *pāhoehoe* and slept. From the cave, her spirit form traveled across the islands to Hā'ena, Kaua'i where she met the chief Lohi'au...

...After a long period of what her sisters took to be sleep, they sent for Hi'iaka to come and awaken Pele with a chant. From Hōpoe's house, Hi'iaka saw the approaching messenger, so she prepared to depart from Hōpoe, and called farewell to her in a *mefe*. When she finished her song, Pā'ū-o-pala'ā arrived, and Hi'iaka departed. Having been awakened, and returning home to Kīlauea, Pele asked her sisters if one of them would go to Kaua'i to bring Lohi'au back to her. The older sisters were all afraid to agree to the journey, but the youngest, Hi'iaka agreed. As Hi'iaka prepared to go on the journey she called to Pele saying:

"If during my absence you go forth on one of your raids, you are welcome to ravage and consume the lands that are common to us both; but see to it that you do not consume my forests of lehua. And, again, if the fit does come upon you and you must ravage and destroy, look to it that you harm not my friend Hopoe."

Pele agreed to this, and Hi'iaka made ready to depart from Kīlauea with her two traveling companions. Walking through the forest of 'Ōla'a and into Kea'au, Hi'iaka *mā* (and her companions) stopped at the village at Kū'olo for the night. When morning came, Hi'iaka was greeted by a young woman named Pā-pūlehu, who was a member of an important family of the area, and together, they began to continue on their way... (Emerson 1915:1-29)

Emerson then records the presence of a fishing village near Hā'ena, at the place called Pāpa'i, and describes it as such:

Their journey still lay through Puna. They were at Kalalau, not far from Hā'ena (at the place where, centuries afterwards, Kamehameha was struck with that well-nigh fatal blow by an outraged fisherman). Some fishermen were hauling in their nets full of fish. The sight was too much for Pā-pūlehu. "I hunger for fish," she exclaimed. "These fish belong to my father. Oh, if only I were home! How I would eat until I was satisfied!"

Hi'iaka thought it best to indulge the appetite of this novice in her service. From a little knoll overlooking the ocean, she saw the canoe of the fisherman named

Pahulu out at the fishing ground, already well stocked with fish. Hi'iaka used her power and drove away the school of fish that would have come to his net. Pahulu was so busy with his fishing that he did not notice the women on the shore, but his assistant called out, "Look at the beautiful woman standing on the shore and watching us!" When the two fishermen came ashore they willingly shared some of their catch with Hi'iaka *mā*... Pā-pūlehu cooked and ate the fish, but because of her poor manners in preparing and cleaning up after herself, she was later consumed by Pele...

Now from Puna, there were two trails which might be taken into Waiākea, one went *makai*, below the forest, and the other went directly through the forest of Pana'ewa. While the *makai* trail was longer, it was the one most often traveled by those who went to and from Puna. The trail through Pana'ewa was a treacherous one, for the mo'o-god Pana'ewa lived there and was in the habit of waylaying travelers and eating them... Hi'iaka entered into battle with Pana'ewa and won, thus the trail through Pana'ewa became safe to travel... (Emerson 1915:30-46).

The account continues with lengthy descriptions of the journey across Hawai'i, Maui, Moloka'i, O'ahu, and on to Hā'ena, Kaua'i. Once at Hā'ena, Hi'iaka found that Lohi'au had died, and she brought him back to life. From Kaua'i, Hi'iaka, her companions, and the chief Lohi'au began their journey to Hawai'i. Because of all the things that had occurred on the journey, it had taken Hi'iaka a great deal of time to begin the trip home, and Pele became agitated, causing lava flows to pour across Puna. When Hi'iaka arrived at Pōhākea, overlooking the Honouliuli plain of 'Ewa, her supernatural sight let her see what was transpiring at Kea'au. When Hi'iaka reached the top of Pōhākea, she looked to Hawai'i and saw that her companion Hōpoe and the *lehua* forests had been consumed by the lava flows of Pele.

One of Hōpoe's body-forms was that of a tall *lehua* tree in full blossom. As a result of Pele's impatience with Hi'iaka and the return of Lohi'au, the beautiful Hōpoe was turned into a stone that lay on the shore of Kea'au, and swayed or danced when the waves washed up against her. Thus Hōpoe is also known by the name Wahine 'Ami—a site marked on early survey maps and pointed out during oral history interviews conducted as a part of this study—(Emerson 1915 and *Ka Hōkū o Hawai'i* Dec. 14, 1926).

Kea'au—ka lūhe'e ana (Octopus lure fishing at Kea'au)

One of the earliest datable references to an event in the Kea'au vicinity comes from the time of when 'Umi-a-Līloa succeeded in unifying the districts of the island of Hawai'i under his rule in the mid 16th century. Kamakau (1961) tells readers that at Kea'au, there lived a man named Kea'au, who possessed two supernatural *leho*, or cowry shell lures (*lūhe'e*) that were irresistible to *he'e* (octopus). When exposed in the canoe, these octopus lures, called Kalo-kuna, attracted the *he'e* which simply climbed out of the water onto the canoe of Kea'au. The fame of Kalo-kuna spread, and 'Umi ordered that Kea'au give them to him (Fornander 1971:18). Kea'au greatly missed his cowry *he'e* lures, and the mo'olelo, which includes island-wide references, describes how Kea'au came to reclaim them with the help of a clever thief (Fornander 1971).

***Ka'ao Ho'oniua Pu'uwai no Ka-Miki
(The Heart Stirring tale of Ka-Miki)***

The “*Ka'ao Ho'oniua Pu'uwai no Ka-Miki*” was published in the Hawaiian newspaper, *Ka Hōkū o Hawai'i* between 1914 to 1917 (translated by the author). The *mo'olelo* is about two supernatural brothers, Ka-Miki (The quick, or adept, one) and Maka-iōle (Rat [squinting] eyes), who traveled around the island of Hawai'i along the ancient *ala loa* and *ala hele* (trails and paths) that encircled the island. During their journey, the brothers Ka-Miki and Maka-iōle competed alongside the trails they traveled, and in famed *kahua* (contest arenas) and royal courts, against *'ōlohe* (experts skilled in fighting or in other competitions, such as running, fishing, debating, or solving riddles, that were practiced by the ancient Hawaiians). They also challenged priests whose dishonorable conduct offended the gods of ancient Hawai'i. Ka-Miki and Maka-iōle were empowered by their ancestress Ka-uluhe-nui-hihi-kolo-i-uka (The great entangled growth of *uluhe* fern which spreads across the uplands), a reincarnate form of the goddess Haumea (the creative force of nature; also called Papa and Hina; who was also a goddess of priests and competitors).

The story is set in about the 1300s, at the time when Pili-a-Ka'aiea (Pili) was sovereign chief of all Kona. It was while on this journey that the brothers came to be at Koa'e, where Ka-Miki competed at the royal compound of the chief Pū'ula. Because of his exceptional skills in all manner of fighting, another form of contest was selected between Ka-Miki and Kahauale'a was called to represent Puna (December 30, 1915). Excerpts of the account which describe resources of coastal Kea'au, and the upland regions of Kea'au and 'Ōla'a are cited in the following narratives:

...The lands of Kahauale'a were named for Kahauale'a, one of the famous warriors and *'ōlohe* of Puna. As Kahauale'a prepared to enter the *kahua* [contest arena] Pū'ula called out in a chant in which he spoke of Puna —

<p><i>...Pa'a 'ia ka hanohano o Puna i ke kai Kōloa E nū mai la i ka ulu hala o Kea'au I ka lā puka i Ha'eha'e I ka lae oni o Kūki'i a me Makanoni Oni mai o Mauna loa me Kūlilikaua Nā lae ani makani o Kaniahiku Huki iluna ka papa lohi o 'Āpua...</i></p>	<p>...Secured is the glory of Puna along the sea of Kōloa The sea that rumbles through the pandanus grove of Kea'au (Puna) the source of the sun rising at Ha'eha'e (Puna) of the protruding points of Kūki'i and Makanoni Mauna loa appears above with [the mist of] Kūlilikaua The points of Kaniahiku wave in the breeze Pulled upon the glistening plain of 'Āpua...</p>
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It was agreed that Kahauale'a and Ka-Miki would compete in three contests; *uma* (hand wrestling), *kūpahu* (pushing one's opponent from the arena), and *kūkini* (running) contests. In the *kūkini* contest, Ka-Miki and Kahauale'a were to required to gather certain famous items to prove that they had actually reached the designated places. These things were: [1] the sacred water of the goddess *Waka-keaka-i-ka-wai* and accurately describe the nature of the spring Keakaikali'ulā and forest of Pali-uli; [2] a valuable bark-cloth sheet—*kuina kapa*

'*Ōūholowai-o-La'a* for which Puna was famed; [3] ten *olonā* (*Touchardia latifolia*) leaves of 'Ōla'a; [4] one of Puna's famed *moena makali'i pua hīnano* (fine mesh mats woven from the pandanus flower sheaths); and [5] to bring back living 'o'opu 'ai lehua (*Gobidae* fish) of Hi'ilawe and 'anae momona (fat plump rich mullet) which swam in the waters of Pāka'alana. [January 6, 1916]

At the outset of the competition, Keahialaka provided the *kapa*, *olonā* leaves, and *moena*, thus eliminating Ka-Miki's need to gather those items. The two competitors then participated in the *uma* and *kūpahu* contests and the roar of the crowd was heard from the shore to the depths of the *waokele*, the upper forests of Kali'u and Malama [c/3]. Kahauale'a was defeated in both of those contests. Then the *kūkini* contest between Kahauale'a and Ka-Miki began. Ka-Miki was carried to Pali-uli [in the uplands of 'Ōla'a and Kea'au] on '*Ōhi'a-nui-moe-awakea* [one of the body forms of Ka-uluhe]. Thus, he arrived at the spring Keaka-i-ka-li'u-lā which was the dwelling place of Lā'ie-wai (who came to be called Ka-wahine-i-ka-li'ulā) and Lā'ie-lohelohe, the sacred chiefesses and wards of Waka-ke-aka-i-ka-wai and Ka-puka-i-haoa-ka-lā-o-lalo. This was an exceedingly sacred area. Guarded by Waka, it was encircled by rainbows, filled with the songs of 'i'iwi, and 'ō'ō birds, and surrounded by all manner of plants. On the lands around the spring were grown the prostrate sugar cane called *Mikioi-o-lehua*, the bananas called *Mānai-'ula-i-ka-wao*, the taro called *Pāpākole-koa'e-o-lele-kea*, and the 'awa called *Waimaka-a-ka-manu o Puna*.

Ka-Miki took a leaf of the *pāpākolekoa'e* taro, and folded it into a cup ('*āpu lā'alo*) to hold the water...and returned to Pū'ula mā. Ka-Miki presented the water to Pū'ula and described the beauty of Paliuli to those assembled. Kahauale'a had been unable to reach Paliuli and the spring of Keakaikali'ulā, so instead, he brought the water of Wai-uli, at Kapu'euhi. His deception was detected, because of the dark nature of the water, thus Ka-Miki won this part of the *kūkini* contest... [January 13, 1916]

After gathering the water of Keakaikali'ulā at Pali-uli, '*Ōhi'a-nui-moe-awakea* lifted Ka-Miki high atop Pali-uli where he could look out across all the lands of Puna. Then *Ka-'ohu-kolo-mai-iluna-o-ka-lā'au* caused a mist to settled upon the forest, stretching from Pali-uli to the shore (of Kea'au) at 'Ā'alāmanu⁵. The scene was described with the saying —

...*Mai uka o Pali-uli a hō'ea i kai o nā 'ili'ili nehe o 'Ā'alāmanu i ka wai ko'olihilihi o Hōpoe, e ho'olewa ala i Hā'ena* – From the uplands of Pali-uli all the way to the sea which nestles the pebbles of 'Ā'alāmanu, there in the water which props up the eyelashes of Hōpoe who dances at Hā'ena... [February 3, 1916]

...In the end, Ka-Miki won all the contests, and Kahauale'a surrendered, giving his thanks to Ka-Miki and acknowledging Ka-Miki's superior skills... [February 10, 1916]

Also, when participating in 'awa ceremonies (preparation of the drink made from the *Piper methysticum*), a saying which mentioned Puna, Hōpoe, Hā'ena, and Kea'au was spoken in praise of a choice drink of 'awa —

⁵ Pukui 1983:152 No. 1405 notes the 'Ā'alāmanu was one of the choice places in Puna to gather 'ili'ili (pebbles), used for the game of *kōnane* (checkers).

...He 'awa 'ona, 'ona a'ole i kana mai, ke iho mai ka 'ona moe mālie i ka hone a ke kai Kōloa o Puna e 'uhene ana i ka pua o ka hīnano a me ka pua 'a'ala o ka hala o Kea'au ... A 'ike aku ho'i paha i ka wahine ho'olewa i Hā'ena, i ka oni mālie a ka wahine ho'olewa o Hōpoe i ke ehū a ke kai...

[It is] an intoxicating 'awa, intoxicating like no other, which brings about a comfortable sleep nestling the drinker in the gentle whisper of the sea of Kōloa, Puna; [the sea] which caresses the *hīnano* (pandanus) grove and the fragrant pandanus flowers of Kea'au ... And perhaps one might dream of Hōpoe the woman who gently moves, dancing in the ocean spray of Hā'ena... [June 22, 1916]

...Prior to the contests at Koa'e, Kapu'euhi who lived in the uplands of Kea'au, had attempted to deceive Ka-Miki and his brother—it was Kapu'euhi's habit of killing all who traveled along the upland *ala loa* through Puna. Ka-Miki defeated Kapu'euhi, and nearly left him to die, but in the end, he allowed Kapu'euhi to live. When Ka-Miki *mā* departed from the compound of Kapu'euhi, they descended the *ala loa* towards Hilo to continue their journey.

The travelers arrived at a large compound and community, where they saw a man coming towards them with a club. This man was Kūkulu-a-hāne'e-a-hinapū [Kūkulu]. Kūkulu was a guardian of the chiefess and lands called Pana'ewanui-moku-lehua [Great Pana'ewa of the *lehua* forest]. Pana'ewa was a sacred chiefess of Hilo, the sister of the chiefs Waiākea and Pi'ihonua.

The chiefess' compound and surrounding community were forbidden to strangers, and Kūkulu regularly killed unaware travelers [thus the name "Unjust place]. Kūkulu challenged Ka-Miki *mā* but he was quickly defeated, and Ka-Miki left him there as an example to other 'ōlohe and to receive his due justice. Ka-Miki *mā* then continued their journey into Hilo, seeking out 'Ūpēloa, Ku'u-ahohilo-loa, and Haili-kula-manu, unjust competitors of Waiākea and vicinity... [February 17, 1916].

Puna: Political Alignment and Chiefly Associations

As a result of her extensive research on Puna, ethnographer, Dorothy Barrère (1959) offered the following summary of Puna's political environment in pre-contact Hawai'i:

...Puna, as a political unit, played an insignificant part in shaping the course of history of Hawai'i island. Unlike the other districts of Hawai'i, no great family arose upon whose support one or another of the chiefs seeking power had to depend for his success. Puna lands were desirable, and were eagerly sought, but their control did not rest upon conquering Puna itself, but rather upon control of the adjacent districts of Ka'ū and Hilo (Barrère 1959:15).

By the time of Līloa (ca. 1475), Hawai'i had been divided into the six major district that remain intact today. While each of the districts were ruled by independent chiefs, all of them recognized Līloa as the supreme chief (Kamakau 1961:1). When 'Umi-a-Līloa, the son of Līloa ascended to the throne of his father (ca. 1525), he brought all of the districts directly under his rule, subjugating rebel chiefs. Kamakau (1961) reports that:

Hua-‘a was the chief of Puna, but Puna was seized by ‘Umi and his warrior adopted sons... Hua-‘a was killed by Pi‘i-mai-wa‘a on the battle field of Kuolo in Kea‘au, and Puna became ‘Umi-a-Liloa’s... (Kamakau 1961:17-18)

Fornander (1996) also notes that at this time, parts of Puna came under the rule of the famed, blind chief ‘Ī-mai-ka-lani, of Ka‘ū. It was only after lengthy battles, that ‘Umi was able to secure all of Puna and Ka‘ū under his rule (Fornander 1996:34). Another one of the early “legendary” accounts which discusses Puna, documents the relationship between various *ahupua‘a* of the district, and ties Puna’s history to that of other islands, was collected by Abraham Fornander prior to the 1880s (Fornander 1919). The legend is titled “*Ka‘ao no Halemano*,” and is set in the period of ca. 1500, just before ‘Umi’s rise to power.

Halemano was the royal son of Kukaniloko and Wahiwā, of the O‘ahu line of chiefs. In his dreams, Halemano met with the sacred chiefess Kamalālāwalu of Puna. Kamalālāwalu was the daughter of Hanaka‘ulua and Ha‘eha‘e, and they were the chiefs of the land of Kapoho. Falling in love with Kamalālāwalu, Halemano’s health began to fail, because he could not locate the chiefess. Laenihi, the supernatural sister of Halemano instructed Halemano how to learn the whereabouts of Kamalālāwalu. And when he did, Laenihi consented to travel to Puna and make preparations for Halemano to meet with her.

At this time, Hua‘a was the king of Puna, and Kulukulu‘a was the king of Hilo. Both of these kings were courting Kamalālāwalu, giving her large quantities of properties from Puna and Hilo, with the idea that in time one of them would win her hand and take her as a wife... When Laenihi arrived at Kapoho, she learned that Kamalālāwalu loved to surf at Kaimū, and she devised a plan to meet Kamalālāwalu and her brother, Kumukahi on the shore there. Hearing of the good surf at Kaimū, Kamalālāwalu traveled there to go surfing. She was able to befriend Kumukahi, and in that way, she met Kamalālāwalu, and arranged a meeting between Halemano and the Puna chiefess... (Fornander 1919 Vol. V-Part II:228-232).

Barrère (1959) also reported that Puna remained generally under the control of outside chiefs from the time of ‘Umi, through the rule of Alapa‘i-nui, which ended in c. 1752. Alapa‘i-nui was succeeded by Kalani‘ōpu‘u, and shortly before his death in 1782, Kalani‘ōpu‘u’s rule of Puna and portions of Ka‘ū were challenged by the Puna chief, ‘Ī-maka-kōloa, a descendant of ‘Ī-mai-ka-lani. Fornander (1996) reported Kalani‘ōpu‘u had arranged his “worldly and spiritual affairs,” and then:

...started with his chiefs and warriors for Hilo, in order to subdue the rebel chief of Puna. In Hilo, Kalaniopuu consecrated the *Heiau* called Kanowa, in Puueo, to the service of his war-god; then took up his abode at Ohele, in Waiakea, and then the war with Imakakoloa commenced. The rebel chieftain fought long and bravely, but was finally overpowered and beaten. For upwards of a year he eluded capture, being secreted by the country-people of Puna. In the meanwhile Kalaniopuu moved from Hilo to the Kau district, stopping first at Punaluu, then at Waiohinu, then at Kamaoa, where he built the *Heiau* of Pakini in expectation of the capture of Imakakoloa. Finally exasperated at the delay, and the refuge given to the rebel chief by the Puna people, Kalaniopuu sent Puhili, one of his Kahus, to ravage the Puna district with fire, i.e., to burn every

village and hamlet until Imakakoloa should be found or the people surrender him. Commencing with the land of Apua, it was literally laid to ashes... (Fornander 1996:201-202)

One indication of the importance of Kea'au as a food producing land is found in the writings of John Papa I'i (1959). I'i reports that following the death of Kalani'ōpu'u in 1782, the island of Hawai'i was to have been ruled by Kīwala'ō, Kalani'ōpu'u's son, while the gods and *heiau* were to be cared for by Kamehameha I. Disagreements arose over the division and redistribution of lands following Kalani'ōpu'u's death. I'i records that while the division of lands to be made by Kīwala'ō was being discussed, his half brother, Keōua, was told by one of his advisers:

... "Perhaps you should go to the chief and ask that these lands be given to us. Let Waiakea and Keaau be the container from whence our food is to come and Olaa the lid⁶." Keoua did so, but the other Kau chiefs objected to this and spoke disparagingly to him. When Keoua returned, his advisor asked, "How was your venture?" When Keoua told him all that had been said, the man remarked seriously, "A break in a gourd container can be mended by patching, but a break in the land cannot be mended that way." (I'i 1959:14)

Within days of Keōua's request, the chiefs were at war at Moku'ōhai, in South Kona. Kamehameha's uncle Ke'eaumoku (later, his father-in-law), killed Kalani'ōpu'u's heir, Kīwala'ō. Discord among the remaining chiefs, saw the island of Hawai'i divided into three chiefdoms — Kamehameha I had Kona, Kohala, and a portion of Hāmākua; Keawemauhili had the remaining portion of Hāmākua, Hilo, and part of Puna; and Keōua-kuahu-'ula had the remainder of Puna, and Ka'ū. By 1793, Kamehameha I brought all of the island of Hawai'i, including Puna under his control (cf. Kamakau 1961:121,151,153,157).

Perhaps one of the most famous events recorded for the land of Kea'au occurred while Kamehameha I was working to fulfill his quest of gaining control over the entire island of Hawai'i. In ca. 1784, Keawemauhili of Hilo and Keōua of Ka'ū, joined forces in Hilo, and there was no place for Kamehameha I to encamp along Hilo Bay. Writing in the Hawaiian newspaper *Ku 'Okō'a*, Kamakau told readers how the famous *Kānāwai Māmalahoa* (Law of the Splintered Paddle) came to be proclaimed. While spying on events around Hilo, Kamehameha and his companion Kahaku'i secretly paddled from Laupāhoehoe to Kea'au:

Holo akula o ia ma Papai, ma Keaau i Puna, e lawaia ana kekahi poe kanaka a me kekahi mau wahine, a he wahi keiki uuku i ke kua o kekahi kanaka. A ike o Kamehameha i ua poe lawaia nei e makaukau ana e hoi, o kona lele akula no ia mai luna aku o kona waa, me ka manao e kii i kela poe kanaka e pepehi, aka, ua holo kekahi poe me na wahine, a koe iho elua kanaka i hakaka me Kamehameha, aka, ua luuluu kekahi kanaka i ke keiki ma ke kua. O ka hakaka ihola no ia, e poholo iho ana ka wawae o Kamehameha i ka mawae pohaku, a paa loa ihola, no laila, hahau ia ihola kona poo i ka hoe a ka poe lawaia. A no ka luuluu o ua kanaka lawaia nei i ke keiki, a no ka ike ole ia no hoi kekahi o Kamehameha keia e hakaka pu nei, ina ua make loa o Kamehameha i ia la. Ua

⁶ The reference to 'Ōla'a as the "lid," may be taken to imply that the fine resources of bird feathers, *olonā* fiber for cordage, and the famous *kapa* (bark cloth) called '*ō'ū-holo-wai-o-La'a* were the wealth which covered the needs of the chiefs.

kapa ia ka inoa o ia hakaka ana o Kaleleiki. O ka pa ana hoi o ke poo o Kamehameha i ka hoe, ua lilo ia i Kanawai Mamalahoa no Kamehameha... [Ku Okoa March 16, 1867]

...Ua kau o Kamehameha i ke kanawai, "E hele ka elemakule a me ka luahine a me ke keiki a moe i ke alanui..." [Ku Okoa November 23, 1867]

He [Kamehameha] went to Papa'i, at Kea'au, Puna, and he came upon some men and women who were fishing, and a little child rested on the back of one of the men. Seeing the fishermen preparing to go away, he leaped from his canoe intending to catch and kill them, but, some of the men and the women fled, two of the men stayed to fight with Kamehameha, but one man was burdened with the child on his back. During the fight, Kamehameha slipped and caught his foot in a crevice of the rock and was securely held, the fishermen then struck him over the head with a paddle. It is only because one of the men was hampered with the child, and that they did not know that it was Kamehameha that they were fighting with, that Kamehameha was not killed that day. This fight was named Ka-lele-iki. And from the striking of Kamehameha's head with a paddle, the law of Māmala-hoe (Broken Paddle) was made for Kamehameha... [Ku Okoa March 16, 1867; cf. Kamakau 1961:126]

...Kamehameha issued the law, "Let the old men and women and children go in peace and sleep [in safety] on the trails..."

In regards to this law that governed travel along the *ala hele* of Hawai'i, Kamakau (1968) also observed:

This became the law over the whole Hawaiian group in the time when Kamehameha ruled over the kingdom. He gave the name of Mamalahoa to the law for his escape from death when he was beaten by the fishermen at Papa'i in Kea'au... And because he escaped from death, he named the *kanawai* Mamalahoa; it was the great life saving law... [Kamakau 1968:15]

This significant native Hawaiian law and practice—directly tied to travel along the Puna Trail—was documented in other accounts as well. Two additional variations of the narratives are included here. One account was recorded by a native Hawaiian who lived in the time of Kamehameha I, the other was recorded by Eben Low, as told to him by an elderly Hilo native in 1932:

Eia ka'u ike ana i ko Kamehameha au. Eia ka noho ana o ko Kamehameha au, a'u i ike ai me ke kanawai o kona aupuni... Eia keia, ua hookapu ia, eia ka luahine a me ka elemakule e hele no ka luahine a moe i ke alanui a me ka elemakule...

Here is what I saw in the time of Kamehameha. Here is how the people lived in the time of Kamehameha as I know it, and the laws of his kingdom... Here is this, he placed a restriction on the old women and old men, that the elderly women and elderly men were able to go and sleep along the trail sides and not be molested... (Interior Department Document No. 139, Box 401-1-12 — "Customs and Practices;" narrator unknown, ca. 1848).

Kanawai Mamalahoa

E na kanaka e malama oukou i ke Akua a e malama hoi i kanaka nui, a me kanaka iki, e hele ka elemakule, ka luahine, a me ke kama, a moe i ke ala, aohe mea nana e hoopilikia. Hewa no, make!

O people, respect the Gods, respect also the important man and the little man, and the aged men and aged women, and the children sleep along the trailside, and not be bothered by anyone. Failure to do so is death! (As told to Eben P. Low by an aged Hawaiian from Hilo – recorded June 9, 1932.)

‘Ahele Manu (Bird Snaring)

H.B. Nalimu (ca.1921)

While reviewing ethnographic place name records in the collections of the Bernice Pauahi Bishop Museum, the author found one reference of particular interest to forested lands of Kea‘au-‘Ōla‘a in regards to the practice of bird catching (BPBM Archives–SC Kelsey; Box 1.5). Ethnographer Theodore Kelsey collected a story in ca. 1921 from Reverend Henry B. Nālimu in Hawaiian (translated by the author of this study). The following account describes the native customs associated with snaring birds for their feathers:

AHELE MANU

Po‘e kia manu o Laa, oia ka po‘e ahele manu, kekahi me ka laau a kekahi me ka lehua. O ka mea ahele manu ma ka lehua malaila ka puka e hanai kokoke i ka lehua, he puka paa ke-ia. Kekahi piko o ke kaula ma ka la-la o ka ‘ohi‘a e paa ai. Elima, eono paha anana ka lo-ihi o ke aho mai ka puka mai a hiki i ka lima o ke kanaka e paa nei i ka piko o ke aho. A o ka puka aia ma kahi kokoke i ka lehua e kiko aku ai ka manu i ka lehua. I ka wa e lele mai ai ka manu lele no a ku maluna o ke-ia puka e kiko aku i ka lehua. A ia manawa e huki ai ke kanaka i ka piko o ke kaula a paa ka wawae o ka manu. Pii ke kanaka iluna a lawe i ka manu a hana hou aku i kela puka malaila. O ka akakane a me ka ‘iwi, a me ka ‘o-o‘ iluna o ka pua lehua. Ahele me ke aho olona makalii. Maluna o ka mai‘a pala e ahele i‘ ai ka manu o-u‘.

KĀWILI KĒPAU. *O ke kepau oia ke kohu o ka ‘ulu. E ‘oki-oki ai i ka ‘ulu a kahe mai ke kohu ke‘oke‘o, a i ka wa e maloo ai ua kohu ‘la i ke ahiahi alaila ua paa a‘e ua kohu la. Hele oe e ho-ulu-ulu ke-ia kohu a pau. Ho-ulu-ulu a nui, alaila lilo a‘e‘la ua‘ kohu nei i kepau. Alaila hele oe e ‘ohi i hookahi kukui maka a hemo kona iwi ‘a ‘o kona ‘i‘o malama ‘oe kela. Hele hou oe i ka pa-ihi ku-kepau (kind of clover) he pa-ihi ‘ele-ele ia, a hoohui me ke kukui maka, alaila nau a wali ke kukui maka me ka pa-ihi. Hookomo iloko o ke kapa wauke (he mea uaua ia), alaila ‘uwi i ka wai o ke kukui a me ka pa-ihi iloko o ka ‘opihī, oia ka “ipuhao” e kupa ‘ai iluna o ke kapuahi. I ka wa e hoomaka ai e paila alaila ‘oki-oki i ke kepau a liilii a hookomo iloko o ke-ia wai kukui me ka pa-ihi i paila ia. Kii elua ni-au ai ‘ole ia, mau laau liilii paha e koali ai iloko o ke-ia wai paila. Pela e hanai a pau kela wai a mo‘a kela kepau. Hookomo iloko o ke poho ‘opihī a i ‘ole he la-i‘ a wahi i ka la-i‘. Kāwili ‘iuka a‘e nei o Mokau-lele. Neenee ke pulu ‘ohi‘a o ia wahi ilalo o ka pahoehoe.*

Ilalo no oe e ku ai o ka pahoehoe a hana oe i ke kepau iluna o ka pua lehua. Ina ekolu, eha‘ pua lehua au i kāwili ai i ke kēpau alaila i ka wa e pili ai kekahi pua lehua i ka manu alaila alualu a loaa. Pee hou oe iloko o ka pulu ‘ohi‘a (kāhi o ka lau ‘ohi‘a e luhe ana ilalo, oia ka pulu ‘ohi‘a) a pili hou kekahi manu. Opa

ke poo o ka manu a make. Hookomo iloko o kekahi eke. Hola ekolu paha alaila ho'i, nui ka manu, i hookahi kaau, iwakalua, kanakolu paha. A kela manu makalii; ua momona---kuhikuhi kona i'o, momona. Oia ke kawai kēpau.

LAAU KIA MANU. Ekolu, eha' paha anana ka lo-ihi o ka laau. Kau ia ka pua lehua iluna o ia laau nei mai kekahi 'ao-ao o ka laau a hiki i kekahi poo o ka laau. Hana elua kanaka, kekahi ma kekahi laau a kekahi ma kekahi. Kepau maluna o ka laau a he mau pua lehua mawaena o ke-ia mau kēpau---he laau kia manu ia [_____]. Olaa ka aina kia manu a me Piihonua. Nui ka manu o-o ma Puu O-o. Malaila ka po'e kia manu e hele ai a loa na lei hulu no na lii. O Pana-ewa kekahi wahi kia manu.

Huki ka laau kia manu iluna mawaena o na 'ohi'a elua. Hana me ka 'upena kekahi. Huki ia iluna ka 'upena, hookahi laau maluna, hookahi laau malalo. He 'upena 'olona' maka hakahaka, a he kaula 'olona' ma na poo. 'Elima, eha', ekolu paha anana kela' 'upena palupalu. Lele no ka manu, paa ka wawae, paa ka pekekeu. Ina hookahi, elua manu, waiho no pela, oia na manu e kahea ana i na manu e a'e. Nui ka manu, hookuu ilalo ka 'upena a huki hou iluna. He ulu 'ohi'a ma kekahi 'ao-ao a me kekahi 'ao-ao. Oia ka hana ana o ka po'e lawai'a manu. Ho'i i ka hale e wehe ai ka hulu o ka manu 'o-o'. Piha ke po'i i ka hulu a haku lei. Malalo o ka po-ae-ae o ka o-o' oia ka hulu a-a, a maluna o ka puapua oia me pue.

BIRD SNARING (OR TRAPPING)

Bird catchers (*kia manu*) of 'Ōla'a were people who snared ('*ahela*) birds. Some with branches and others with *lehua* blossoms. The individual who snared birds among the *lehua* made a snare (lasso) close to the *lehua* flower, the snare was secured there. One end of the line was securely fastened on the branch of the 'ōhi'a. The cord of perhaps five or six fathoms long, extended from the lasso (on the branch) to the man's hand where the end of the line was held tightly. The snare was placed close to a *lehua* blossom, where the bird would step (*kīko'o*) to the *lehua*. At that time, the man would then pull the end of the cordage and secure the feet of the bird. The man then climbed the tree, took the bird, and he would make the snare there again. The '*akakane* ('*apapane*), the '*iwi*, and the '*ōō* were caught up in the *lehua*, snared with fine *olonā* cordage. The '*ōū* bird was snared while it was on the ripe banana fruit.

PREPARING BIRD LIME TO KĀWILI, OR ENSNARE BIRDS. The bird lime (*kēpau*) is made from the sap of the breadfruit. Cut the breadfruit bark and the white sap flows, and when the sap is dry, say in the evening, the sap is hardened. You go and gather the sap. When enough has been gathered, the sap can be made into bird lime. Then you go and gather some raw *kukui*, removing the shell, you keep its meat. You then go and get the "clover" for making bird lime ('*ihi-ku-kēpau*, the *Nasturtium samentosum*), it is a black *pā'ihi*, and you mix it with the raw *kukui*. Then you chew it, and the *kukui* and *pā'ihi* become slimy. This is put into a *wauke* bark cloth (it is a tough piece), then the juice of the *kukui* and *pā'ihi* are squeezed into the '*ōpihi* (shell), it is the "pot" for cooking the broth over the fire. When it starts to boil, the ('*ulu*) gum is cut into small pieces and put in the juice of the *kukui* and *pā'ihi* so it can boil. Then get two coconut mid-ribs or perhaps little sticks to stir this boiling juice. This is how it is done until the juice is cooked and becomes the birdlime. It is

then placed into the empty *‘ōpihi* or a ti leaf, wrapped up in ti leaves. Kāwili is in the uplands adjoining Mokaulele. Then go to where there is low branching *‘ōhi‘a* (*pulu ‘ōhi‘a*), where the *pāhoehoe* is below.

You are below on the *pāhoehoe*, and you apply the birdlime above around the *lehua* flowers. Now you *kāwili* (twist, i.e. apply) this bird lime in among three or four *lehua* flowers, then when a bird is stuck by one of the *lehua* that blossoms, you free it and it is caught. You then hide again among the low *‘ōhi‘a* branches (a place where the *‘ōhi‘a* tops droop down, that is the *pulu ‘ōhi‘a*), and catch another bird. You squeeze the birds head and it is killed. It is placed into a bag. Returning (home) perhaps around three ‘o clock, there are many birds, perhaps forty, twenty, or thirty. Those small birds; when fat---the meat is tasty and sweet. That’s how one prepares *kāwili kēpau*, or bird lime to ensnare birds.

SNARING BIRDS ON BRANCHES. The (decoy) branch is perhaps three or four fathoms long. *Lehua* blossoms are placed on this branch, from one side of the branch up to the tip of the branch. Two men do this job, one at one (end of the) branch and one at the other. Bird lime is placed on top of the branch along with many *lehua* blossoms in between this bird lime---this is a bird catchers (*kia manu*) branch [drawn] |_____|. ‘Ōla‘a and Pi‘ihonua are lands of bird catchers. There are many *‘ō‘ō* birds at Pu‘u ‘Ō‘ō. It is there that the bird catchers go to get the feathers for adornments (*lei*) of the chiefs. Pana‘ewa is also a place of the bird catchers.

The bird catchers (decoy) branch is pulled in between the *‘ōhi‘a lehua* trees. One (person) uses the net. The net is pulled up , one branch is above, one branch is below. It is an open (wide) meshed *olonā* net (*‘upena olonā maka hakahaka*), and *olonā* cordage at the tip. It is a soft (pliable) net perhaps five, four, or three fathoms long. As the birds fly their feet are caught, or their wings caught. Now if there are one or two birds, they are left, these are the birds that call out to the other birds. When there are many birds the net is let down (the birds taken), then the net is pulled up again. *‘Ōhi‘a* growth is all around. So this is the work of the “bird-fishers,” or *lawai‘a manu*. They return to the house and then remove the feathers of the *manu ‘ō‘ō*. When the container is filled with feathers, a *lei* is made. Below the wing-pit is where the male *‘ō‘ō* bird feathers are, and above on the back by the tail, are the pale yellow feathers.

II.c. Puna Described by Visitors, Explorers, and Residents – 1823 to 1930

The following narratives are excerpted from journals, diaries, and articles written by individuals who traveled the coast Puna Trail from 1823 to 1930. The authors included clergy, scientists (naturalists and archaeologists), tourists, government agents (surveyors), and native Hawaiians. Their narratives document travel along the old Puna Trail, later the government road, the nature and make up of the scattered villages, and some of the customs of the native residents of Puna.

The Journal of William Ellis

Following the death of Kamehameha I in 1819, the Hawaiian religious and political systems began undergoing radical changes. Just moments after his death, Ka‘ahumanu proclaimed herself “*Kuhina nui*” (Prime Minister), and within six months the ancient *kapu* system was overthrown in chiefly centers. Less than a year after Kamehameha’s death, Protestant

missionaries arrived from America (cf. I'i 1959, Kamakau 1961, and Fornander 1973). In 1823, British missionary William Ellis and members of the American Board of Commissioners for Foreign Missions (ABCFM) toured the island of Hawai'i seeking out communities in which to establish church centers for the growing Calvinist mission. Ellis' writings (1963), generally the earliest detailed accounts of settlements around the island of Hawai'i, offer readers important glimpses into the nature of native residency and history at the time. Ellis and his party provide us with a few specific references to Kea'au (written Kaau in text) and neighboring lands, both in Puna and Hilo (Waiākea).

Having entered Puna from the south, at Kīlauea, Ellis and party walked the ancient trail (*ala loa*) near the shore of Puna. In southern Puna, Ellis reported on the practice of people living near the shore, even along the “desolate coasts,” more so than in the more “fertile tracts” to the inland (Ellis 1963:190). Commenting on this, he observed that it was a:

...circumstance we can only account for, by supposing that the facilities which the former afford for fishing, induce the natives to prefer them as places of abode; for they find that where the coast is low, the adjacent water is usually shallow. [Ellis 1963:190]

Historical and oral historical documentation record that it was generally the custom, throughout the islands, for the people to live near the coast, where rich marine resources could be procured. In more arid areas, or places where the soil was sparse, as in sections of Puna, the residents also maintained inland residences—and at times more formalized communities depending on the sustainability of the resources—where diverse agricultural endeavors could be undertaken.

Once past Kumukahi, the party traveled the *ala loa* which was near the shore through the various native settlements between Kula and Kea'au, and into Waiākea (*Figure 4*). The following excerpts from Ellis' journal describe his journey along the old Puna Trail at that time:

At half-past four we reached Kahuwai, where we sat down and took some refreshment, while Makoa was engaged in bringing the people of the place together. About one hundred and fifty assembled... After conversing some time, we travelled in an inland direction to Honoruru, a small village situated in the midst of a wood, where we arrived just at the setting of the sun...

We arose early on the 8th, and...we left Honoruru soon after six a.m. and travelling slowly towards the sea-shore, reached Waiakaheula [Waiakahi'ulā] about eight, where I was obliged to stop, and lie down under the shade of a canoe-house near the shore. Messrs. Thurston and Bishop walked up to the settlement about half a mile inland, where the former preached to the people...

Mr. Bishop hoping to reach Waiakea in a few hours, left Mr. Thurston and the natives with me, and proceeded thither. He was much deceived as to the distance; for it was three o' clock in the afternoon when he arrived at Kaau [Kea'au], where the natives tried to persuade him to stay till morning, as they did not think he could reach Waiakea before night. However, he kept on with increased speed, in hopes of getting at least a sight of Waiakea before dark. But in this he was disappointed, for the sun sunk behind Mouna-Kea, and darkness overshadowed the landscape before he passed the wilderness of

pandanus, that stretched along the eastern shore, between Kaau and Hiro. He began to think of resting for the night beneath the shelter of the surrounding bushes; but the path becoming more beaten, indicated his approach to a village... [Ellis 1963:211-212]

[The Trail from Waiakahi'ulā to Kea'au]

Being somewhat recovered by noon, I was able to proceed with Mr. Thurston. The country was populous, but the houses stood singly, or in small clusters, generally on plantations, which were scattered over the whole country. Grass and herbage were abundant, vegetation in many places luxuriant, and the soil, though shallow, was light and fertile.

Keaau Described

Soon after five p.m. we reached Kaau, the last village in the division of Puna. It was extensive and populous, abounding with well cultivated plantations of taro, sweet potatoes, and sugar-cane; and probably owes its fertility to a fine rapid stream of water, which, descending from the mountains, runs through it into the sea. It was the second stream we had seen on the island. [presumably, the first was Waipāhoehoe and the second, was the outflow from the ponds at Kea'au]

Having quenched our thirst, we passed over it by stepping on some large stones, and directed our way to the house of the head man, where we put up for the night. He was absent in the mountains, with most of his people, and Makoa could procure us no provisions. We, however, succeeded in purchasing a fowl and some potatoes, and made a comfortable supper...

Early on the 9th the house was crowded with natives, and a little before sun-rise morning worship was performed as usual.

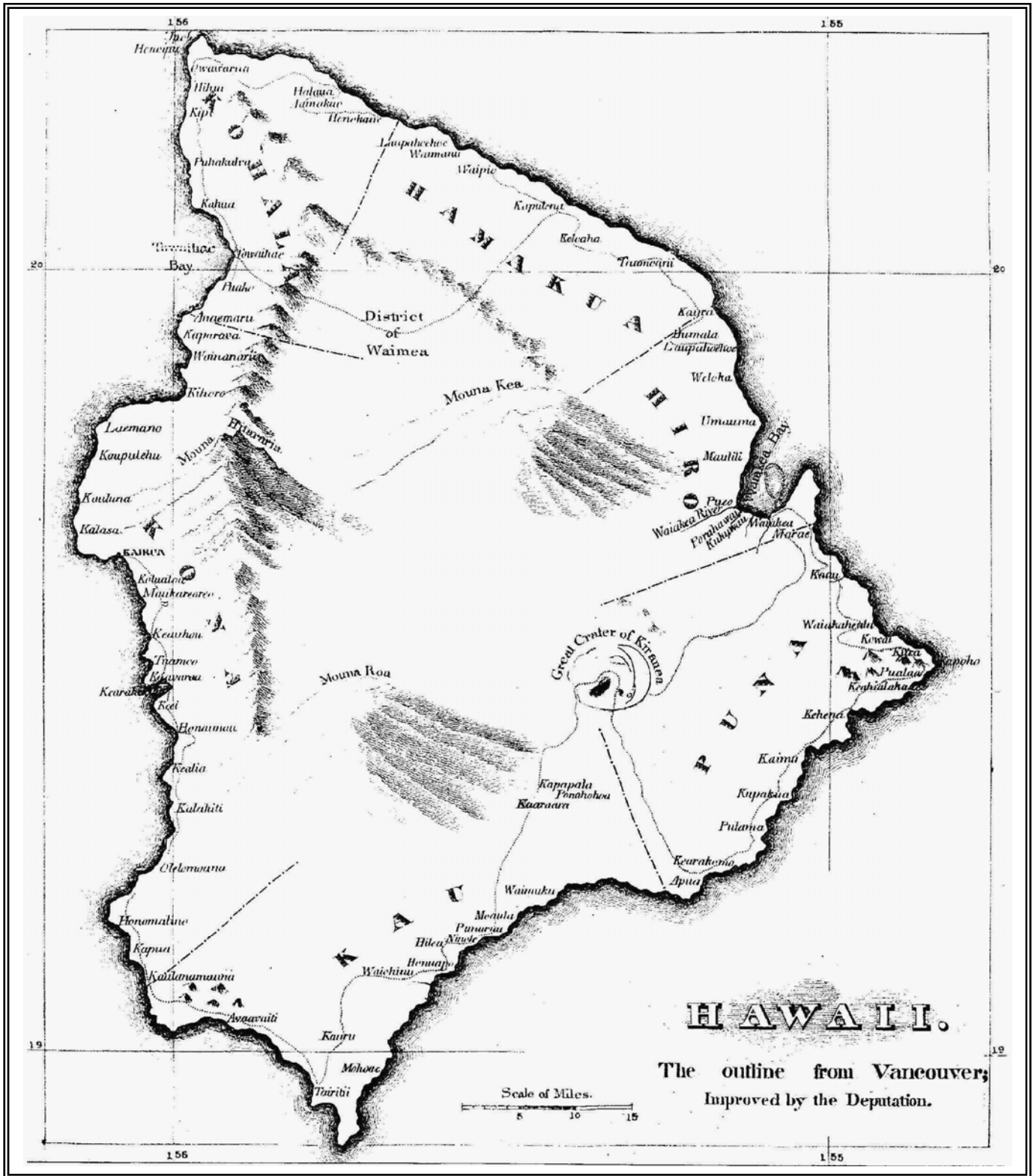
Some of the natives observed, in conversation, "We shall never obtain the things of which you have told us, for we are a wicked and unbelieving people."

leie Root Baskets—Making Fire by Friction

Before we left the place, the people offered for sale some curious deep oval baskets, with covers, made of the fibrous roots of *ie*. We purchased two, intending to preserve them as specimens of native ingenuity.

Leaving the village of Kaau, we resumed our journey, and after walking between two and three hours, stopped in the midst of a thicket to rest, and prepare some breakfast.

The natives produced fire by rubbing two dry sticks, of the *hibiscus tiliaceus* [*hau*], together; and having suspended over it a small iron pot, in gypsy style, upon three sticks, soon prepared our food. At half-past ten we resumed our walk, and passing about two miles through a wood of pretty large timber, came to open country in the vicinity of Waiakea... [ibid.:212-213].



**Figure 4. Island of Hawaii Showing the Ala loa through Puna-Waiākea
(Ellis' Narrative - American Edition 1825; in Fitzpatrick 1986:87)**

From Waiākea, Ellis and some of the party traveled to ‘Ōla‘a (Ora) , and on to the volcano at Kīlauea. Describing ‘Ōla‘a, the community situated inland of the beach community at Kea‘au, Ellis’ narratives provide us with descriptions of the landscape, and the method of construction of shelters at “Ka-pu-o-ka-ahi”:

...The soil is generally rich and fertile, and the face of the country, though more uniform than some parts which we passed over...is varied by occasional undulations.

We travelled through two or three extensive woods, in which were many large trees, and saw also several pools and small currents of excellent fresh water.

The construction of the swineherds’ houses at the village of Ka-pu-o-ka-ahi, (the hill of the fire), was singular. There were no walls, nor upright posts along the sides, but the rafters were fixed in the ground, united at the top, and thatched about half way down (Ellis 1963:213-214).

As a result of the missionary tour, Hilo was selected as the main church center in the region, with smaller outlying churches in the district of Puna. The outlying churches included a site at Kea‘au, in the vicinity of Pākī (see further documentation in *Section IV – Government Records*).

J.J. Jarves, Editor of the Polynesian (1840)

J.J. Jarves, editor of the *Polynesian* wrote a series of articles documenting a journey around the island of Hawai‘i. In his narratives are found several references to the land of Kea‘au and the neighboring region. While walking to Hilo (Waiākea) from Kīlauea Volcano, Jarves and party observed the flumes rising from the source of the Nānāwale-Kaniahiku lava flows (which he described in subsequent issues of the paper), and described the inland community of ‘Ōla‘a. Departing from Kīlauea, Jarves wrote:

...The descent was so gradual as to be hardly perceptible, and after a brisk walk of eleven miles, we came in sight of the smoke and flames arising from the new streams of lava. They were about twelve miles east of us. At noon we arrived at Olaa, a neat little hamlet upon the border of the wood, with considerable cultivation about it. The population ran out to greet us...urging us to pass the night... Being anxious to arrive at Hilo, we declined... [*Polynesian – Aug. 22, 1840:42*]

The above excerpt is important as it describes an inland agriculture based community at ‘Ōla‘a, which is not far from the present-day town of Kea‘au. It is very likely that individuals living at ‘Ōla‘a made regular use of the *mauka-makai* trails to coastal Kea‘au for fishing purposes and other excursions.

In the next issue of the *Polynesian*, Jarves described the journey to see the eruption at Nānāwale, Puna, situated about 25 miles from Hilo. Departing Hilo, Jarves informs us that at that time, there was a “middle Puna road.” This road was an inland trail, by description, perhaps not far from the alignment later surveyed by A.B. Loebenstein (see account below). After viewing the eruption, Jarves and party then traveled along the coastal Puna Trail to return to Hilo.

[June 8th –Wednesday] ...After retracing our steps on the road to the volcano

for ten miles, we diverged to the south east, upon what is called the middle Puna road. The night was passed in a small hut, a short distance farther on. Early next morning we continued our route over a country much broken up by lava streams, covered with a light soil, and a scanty forest of stunted ohias, which species bore no fruit. At twelve o'clock, when about twenty-five miles from Hilo, we came upon the first traces of the devastations of the burning lava... [Polynesian – Aug. 29, 1840:]

Jarves provides readers with detailed descriptions (his own and those of Titus Coan) of the eruption, various lava flows and entry into the sea. The explosions from the flow were heard 25 miles away. Jarves learned that on June 5th, following the lava flow's entering the sea:

...With such rapidity and to such a degree was the water heated that the following day (June 5th), the fish floated when dead, as far as Keaau, fifteen miles distant, where the water was hot to the touch... [Polynesian – Aug. 29, 1840:46]

On July 10th, Jarves and party traveled along the Puna coastal trail from the Honolulu vicinity to Kea'au and on to Hilo. In his narrative, he compared the setting to that at the time of James Cook's arrival—with native hamlets scattered along the coast and the inhabitants employed in fishing—though he observed that the party saw no *heiau* while on the journey:

July 10. – Our course led us along the shore, formed by a wall of twenty feet in height, on which the surf rolled heavily, and loudly. The country bordering it was very picturesque with native hamlets amid shady groves. They were in primitive style, and the inhabitants appeared poor and destitute. Civilization had evidently made but little progress in this direction, and the whole scene, probably differed but little from what it appeared in the days of Cook, excepting that we saw no *heiau*, or signs of idolatrous worship, or any rudeness or incivility among the people. It has the air of repose and happiness which was very gratifying, particularly in contrast with the dreary spectacle we had recently left. The men were mostly employed in fishing, but assembled readily at the sound of a conch, to attend meetings which Mr. L. [Lyman] discoursed at every village we passed through. From the traces of cultivation, the numerous stone pavements and terraces, and the care bestowed in the erection of their houses, now old and out of repair, this was once no doubt a populous district⁷. It is so now in comparison with others, but the inhabitants appear to be borne down by oppression and slavery. This cannot be attributed to missionary enterprise, for they seldom see a preacher, or attend meetings. Their labors being limited to

⁷ In an 1857 article series title "Sketches of Life in the Hawaiian Islands. – No. 3; Hilo, Hawaii," narratives written by Jarves were published and he added the following comments to his discussion on the depopulation of certain districts:

From the traces of cultivation, the numerous stone pavements, and terraces partially overgrown with vines and trees, and the care bestowed in the erection of their habitations, now old and out of repair, this evidently was once a populous and flourishing district. The wars of Kamehameha drained it of able-bodied men, and a series of oppressive governors have consummated its desolation... (Jarves in the Pacific Commercial Advertiser; July 2, 1857)

an occasional tour through the district, and the attempt to form schools among the children, which are, however dependent upon native teachers... [Polynesian – Aug. 29, 1840:46]

Commander Charles Wilkes:

The United States Exploring Expedition of 1841

In 1841, Commander Charles Wilkes of the United States Exploring Expedition, toured the Hawaiian Islands (Wilkes 1845, Vol. IV). Wilkes' narratives provide readers with documentation of the landscape and practices of the natives living in the region between Kapoho to Kea'au—marked by the name “Kai Hopai” (i.e. Kai Hopoe) on his map (*Figure 3*). Of interest Wilkes' map of the region, includes the general alignment of the Puna Trail and others of the district as well.

In speaking of Puna and the success of the missionary efforts at converting the native inhabitants from past beliefs and repetition of their history, Wilkes wrote:

...Almost all of the hills or craters of any note have some tradition connected with them; but I found that the natives were now generally unwilling to narrate these tales, calling them “foolishness...” [Wilkes 1970, Vol. IV:186]

Approaching Kapoho from the south, Wilkes reported:

As we approached the sea-shore, the soil improved very much, and was under good cultivation, in taro, sweet-potatoes, sugar cane, and a great variety of fruit and vegetables... [Wilkes 1970, Vol. IV:186]

[The Puna Trail Described—Kapoho to Kea'au and Hilo]

...Previous to our departure [from Kapoho], all the tenantry, if so I may call them, came to pay their respects, or rather to take a look at us. We had many kind wishes, and a long line of attendants, as we wended our way among the numerous taro patches of the low grounds, towards Puna; and thence along the sea-coast where the lava entered the sea, at Nānāwale [Nānāwale]. The whole population of this section of the country was by the wayside, which gave me an opportunity of judging of their number; this is much larger than might be expected from the condition of the country, for with the exception of the point at Kapoho, very little ground that can be cultivated is to be seen. The country, however, is considered fruitful by those who are acquainted with it, notwithstanding its barren appearance on the roadsides. The inhabitants seemed to have an abundance of bread-fruit, bananas, sugar-cane, taro, and sweet-potatoes. The latter, however, are seen to be growing literally among heaps of stones and pieces of lava, with scarcely soil enough to cover them; yet they are, I am informed, the finest on the island.

At Puna, there is a large church [Koa'e-Pū'ula]; but no appearance of a village, the houses being much scattered. The church, it is said, will contain two or three thousand persons... [At the sand hills of Nānāwale] ...The natives had been planting sweet-potatoes near the foot of the sand-hills, but there was little prospect of their succeeding in raising a crop. We passed several hours here, and then proceeded on our way through Makuu Wekahika [Waikahekahe] to Keaau, where we arrived at sunset. The school-house of Keaau was appropriated to the men and natives; but I preferred to occupy the tent, as I

was well aware of the peculiar trials to be undergone in the native houses, although it was newly built.

Here we found a delightful spring of fresh water upon the shore, and within the flow of the tide at high water. It enabled us to enjoy a bath, which we had not had the means of doing for forty days...

In some places they have taken great pains to secure a good road or walking path; thus, there is a part of the road from Nanavalie to Hilo which is built of pieces of lava, about four feet high and three feet wide on the top. The largest and best pieces are places on the top; but not withstanding this, the road is exceedingly fatiguing to the stranger, as the lumps [i.e., cobblestone pavement] are so arranged that he is obliged to take a long and short step alternately; but this the natives do not seem to mind, and they pass over the road with great facility, even when heavy laden...

On the 23d of January we were up betimes, being desirous of reaching Hilo before noon, and started leaving the baggage to follow. Our route diverged somewhat from the sea-shore, and lay most of the way through a thick wood of pandanus...When the pandanus forests are in full bloom, the whole air for miles around is scented with fragrance [Wilkes 1970, Vol. IV:188-193]

The Journal Chester Lyman (1846)

In 1846, Chester S. Lyman, "a sometime professor" at Yale University visited Hilo, Hawai'i, and stayed with Titus Coan (Lyman ms., in the collection of the Hawaiian Historical Society). Lyman provides readers with observations of Coan's work. His narratives provide readers with a brief description of a meeting at Kea'au village, in which 90 to 100 people participated. The narratives also describe several other native communities, farther east, which he visited while traveling along the coastal alignment of the Puna Trail:

Tuesday July 7th [1846]:

At 10 A.M. started with Mr. Coan on a tour through Puna, the southern district of his Diocese. These tours he makes through his whole field, which is nearly 100 miles in length, about once a quarter – holding meetings, baptizing, marrying, attending to Church discipline, &c., &c. He calls the roll of the Church members, and inquires the whereabouts and character of each individual. Puna contains between 3000 and 4000 inhabitants.

Our course the first part of the way lay about S.E. through a level lava country, with very light soil. The groves of Pandanus were very beautiful, and are the principal tree of the region. There is some grass and ferns, and many shrubs; but the soil is very scanty. Potatoes are almost the only vegetable that can be raised, and these seem to flourish well amid heaps of stone where scarcely a particle of soil could be discovered. The natives pick out the stones to the depth often of from 2 to 4 feet, and in the bottom plant the potato – how it can expand in such a place is a wonder.

Nearly all Puna is like this. The people are necessarily poor – a bare subsistence is all they can obtain, and scarcely that. Probably there are not \$10 in money in all Puna, and it is thought that not over one in five hundred has a single cent. The sight of some of these potatoe patches would make a discontented N.E. farmer satisfied with his lot. Yet, I have no where seen the people apparently more contented & happy...

The walking over these lava fields is very rough and unpleasant, and makes sad havoc of shoes – a pair will often last but a few days.

7 or 8 miles from Hilo we passed a cave just by the path. It is formed in lava, and but a few yards in extent; the top is drusy and wet. At half past 2 P.M. we reached Keaau, 12 miles from Hilo, on a plain at the head of an indentation of the sea. The surf breaks beautifully on the broken lava shore. The plain contains several ponds of brackish water which rise and fall with the times. In one of these we bathed, and found it very cold.

Having dispatched our dinner, Mr. Coan commenced his meeting at 4 ½. Seven were admitted to the Church, some of them baptized, and one child. The Lord's supper was administered – the bread being distributed in a tin plate and the cover of a tin pail from our stores, and the water in two small earthen mugs which we have with us. There were from 80 to 100 present, besides several dogs – all but the latter were orderly and attentive; but besides disturbing the meeting, one of the canines during the meeting found his way into our calabash at the house and devoured all our fresh beef, which we had allotted for several fine meals – leaving, however, for manner's sake, a piece of broiled salmon which lay on the bottom of the pan.

After meeting, we passed along a spot of smooth white sand on the beach, and were struck with the facility and readiness with which a lad drew with a bit of stick an off-hand sketch of a full-rigged cutter. It would have done credit to an accomplished draughts man...

Wed. July 8th, 1846:

Rose at 5 – Thermometer 68°. Started a little before 6 and walked 2 miles to a few houses on the shore, where we breakfasted in the school house [probably Pākī – School Grant 3 Lot 8]. The path most of the way was on a lava bed immediately on the margin of the sea – the surf dashing beautifully at our feet. Five miles further on we came to Makuu, a small scattered village at 9 o'clock A.M... [Lyman ms. Book III:2-4]

Not to be Mistaken Again! (J.W.H. Kamohai, 1864)

One of the earliest accounts written by a Hawaiian visitor to the District of Puna, and published in the Hawaiian newspaper, *Ku 'Okō'a*, was published in 1864. Kamohai described some of the famous places of Puna—including Hōpoe and Hā'ena—that he had only previously heard of, and apparently not believed to be true:

On the 3rd of February, 1864, we went to Hilo and then to Kula, Puna on the 5th. We stayed at the house of one of the natives there and on the 7th, I went to see Waiakaea and Kamiloholu. Waiakaea is a fishpond and Kamiloholu is where the *milo* trees encircle the edge of the fishpond with the leaves (falling) within the pond. Thus, it is called "Kamiloholu at Waiakaea," and it is a famous place...

...Then on the 19th of that month I heard the call of the rain *huki-he'e nehu* of Hilo calling me to return, and on the way, I saw the *lehua* trees moving [spread out] upon the plain of Hopoe, and extending down to Haena. Thus bringing to mind thoughts of wonder upon seeing Wahine-ami. The length of this stone

[*Hopoe, ka wahine ami i ke kai*] is about like the height of a person and it is there in the sea. So finished is this account of the new things I've seen. [*Ku Okoa* April 30, 1864:3/c3]

Titus Coan – Earthquakes of 1868

Titus Coan arrived at Hilo, Hawai'i in 1835. From Hāili Church, he *directed* the Protestant congregations of Hilo and Puna. During his tenure, he traveled throughout Puna, and in his autobiographic journal (Coan 1882), he recorded various aspects of the work he undertook. Coan also commented on the native communities and districts through which he traveled. Intent upon the conversion of the Hawaiian populous, Coan wrote little of native customs or practices, but from his narratives we find a few references that are perhaps relevant to the present study. In particular, writing of the great earthquakes in March and April 1868, and their impacts on the native communities of Puna and Ka'ū, Coan recorded that on:

April 2d, a terrific shock rent the ground, sending consternation through all Hilo, Puna, and Kau. In some places fissures of great length, breadth, and depth were opened... Stone houses were rent and ruined, and stone walls sent flying in every direction... ...the sea rose twenty feet along the southern shore of the island, and in Kau 108 houses were destroyed and forty-six people drowned... Many houses were also destroyed in Puna, but no lives were lost. During this awful hour the coast of Puna and Kau, for the distance of seventy-five miles subsided seven feet on average, submerging a line of small villages all along the shore. One of my rough stone meeting houses in Puna [Kapoho-Koa'e], where we once had a congregation of 500 to 1,000 was swept away with the influx of the sea, and its walls are now under water... [Coan 1882:314-316]

Whitney's Hawaiian Guide Books (1875 and 1890)

In 1875, Henry M. Whitney, editor of the Hawaiian Gazette, published a "Hawaiian Guide Book." The publication was produced as one of the early promotional guides to encourage visitation to the Hawaiian Islands, and included descriptions of the islands, harbors, agriculture, plantations, scenery, volcanoes, climate, population, commerce, and places to stay while visiting. His publications of 1875 and 1890 provide readers with interesting commentary on travel via the old roadways, from Hilo through the district of Puna. As seen in the excerpted texts below, Whitney describes two routes to Kīlauea. The first one is the old coastal trail (road) between Hilo and Puna, taken primarily along the coast, once at Kea'au (written as "Kaea"). The second route is inland, via 'Ōla'a village and the half-way house (presumably Hawelu's half-way house).

To The Volcano Kilauea [1875]

Two routes may be taken to the crater Kilauea, on the slope of Mauna Loa, one by Puna, the other by Olaa. It will be advisable to combine both, by going one way and returning the other. Time being an object, the trip to and from the crater via Olaa can be accomplished in three days, which will give one day and two nights at the volcano house.

The Puna route leaves Hilo by way of the bay beach, through cocconut groves, bamboo thickets and fish ponds across the Waiahuma [Waiolama] and the Waiakea bridge, through the bread-fruit orchard, out of Hilo village into the uneven pasture land of Waiakea, whose broad acres soon become thickly set

with the pandanus (screw palm), and after four or five miles enters the forest that stretches from the ocean to the limit of vegetation on Mauna Loa. The vegetation throughout this tract is fully luxuriant as that near Panama...it is perhaps the most accessible to strangers of any tropical jungle on the islands and forms one of the wonders of the volcanic trip. In its flowering season the forest is gay with red and yellow, and the parasitic creepers, the *ieie*, seem aflame with color. Birds, native and imported, keep this flower garden alive with motion and with song: noteworthy the black oo whose wings hide the rare, yellow feathers used for the royal mantles of the ancient chiefs. Some of the *ohia* trees are 60 or 80 feet high, and are often seen in full bloom to the very tops, while the undergrowth of strawberries and ferns is next to impenetrable. This continues for three or four miles, and then follow groves of the pandanus, and at Kaea [Kea'au] the ocean appears and the houses in Puna. Cocoanut trees here begin to form a prominent part of the landscape, clustered in groups of hundreds and thousands.

Twenty-five miles of fair riding will carry the traveler to the comfortable ranch of Capt. Eldarts, who entertains guests for a reasonable compensation... [Whitney 1875:78-80]

...The short route to Kilauea Crater, leads out of Hilo village by Volcano street, adorned with white cottages... The road soon becomes densely fenced with the *ohia* bushes, then crosses the end of the famous Waiakea fish ponds and only fairly starts in the wilderness after passing Gov. Lyman's cattle ranch in Waiakea. It is no macadamized thoroughfare and will try the patience of most travelers. Ten miles bring the traveler into the magnificent woods...

Fifteen miles from Hilo Olaa is reached, the half-way stopping place. The intermediate territory is covered with *ti* plants and ferns, while the road consists mostly of *pahoehoe* lava, covered with bunch grass and occasional bushes and trees.

"The Half-way House" at Olaa is merely a cluster of grass houses, a passable rest for visitors... Although this point is 1138 feet above the sea level, and ten miles from Keaau, (the nearest point on the sea shore) the roar of the sea may be distinctly heard during a heavy surf... [ibid.:80-81]

In 1890, Whitney published once again, an account of the journey between Hilo and Puna along the coastal road. He observed:

This district presents some features which are well worth the exertion which the traveler will have to make in order to see them. The general appearance from the road is sterile, especially in the southern part... The northern part of the district is covered with a dense *lauhala* forest and is thinly inhabited. The road is thus very monotonous. Some 18 miles from Hilo the country begins to improve, and away from the main road, upon the slopes of the mountain there are many acres of excellent land, suitable for coffee and fruit growing... The south eastern part of Puna has some celebrity for its groves of cocoanuts, the trees being more abundant here than in any other part of the islands...

The tourists selecting to go through Puna should obtain letters for either Kapoho or Pohoiki, where the first night would be spent... The road from Hilo skirts along the Bay, passes over the Waiakea river and very shortly plunges

into a thick belt of forest which extends as far as Keaau, nine and a quarter miles from Hilo. From thence the road goes in almost a straight line through long tracts of *lauhala* groves, with occasional glades affording glimpses of the seas. A few scattered houses are passed and at Makuu, 15 miles from Hilo, there is quite a little settlement. Some four miles further on the flow of 1840 is crossed... [Whitney 1890:64]

“A Sabbath in Puna” (O.P. Emerson, 1890)

In the following article Rev. O.P. Emerson, editor of “The Friend,” informed readers of his recent visit to Puna, Hawai‘i. In describing the journey along the coast of Puna, the only active church he referenced between Hilo and Kapoho, was the Pū‘ula Church at Koa‘e:

From the town of Hilo to Captain Eldart’s in Puula, Puna is 21 ½ miles by Mr. J.M. Lydgates survey. But one-half and more of the way is easily three time the length of the rest by the watch, and that make it about 40 miles does it not? Puna needs roads as badly as Kona. It would be a country to live in, if it were not hard to get in and out of. There are rich coffee lands there, I am told, but at present there are no roads to them. But at the Captain’s, one finds an oasis and too, fat turkey well served, and kind friends and balmy air. The Pastor at Puula is fortunate in having the hearty support of this entire household, and they too are fortunate in him. As one of the sons of the house said: “We knew him well as one of our skillful and trusted Paniolos (cow boys). By and by he took it into his head to go to the Theological Institute at Honolulu...”

By and by when the church at Puula wanted a pastor, they called their quick witted countryman. And since he has settled with them... On going to church we found a congregation largely composed of young men whom the Pastor had fathered. He has been greatly helped in winning his way with them by his musical talent... (The Friend – December 1890:95)

Government Surveys in Puna (A.B. Loebenstein, 1892)

By 1892, the population of Puna had undergone dramatic changes. Vast tracts of land—both government and privately owned—was relatively uninhabited. There were no more than a hand full of native tenants at Kea‘au, and they were employed by W.H. Shipman, living primarily at Kea‘au Beach and Pākī. The Hawaiian Government sought out ways to improve access to the land resources of Puna, and instructed A.B. Loebenstein to survey a new inland route through the district. In 1892, following completion of the initial road survey and survey of selected homestead lots, Loebenstein was apparently interviewed by the Advertiser regarding Puna. The Hawaiian Gazette also published the article, and the following excerpts provide readers further documentation on his work and the development interests of the Hawaiian Government at the time:

WONDERS OF PUNA

Mr. Loebenstein Gives a Few Pointers on the District It Will Fetch Tourists Thousands of Acres of Coffee and Tobacco Land—Ancient Burial Caves of Hawaii— Pit Craters and Tree Ferns—A Monster Petition for a New Road.

Mr. A.B. Loebenstein, who has been in town for the past few days, has for a long time been engaged in making surveys in Puna, and has acquired in consequence a more thorough knowledge of that district than perhaps anyone else in the group... Asked his opinion on the agricultural resources of Puna.

Mr. Loebenstein said: "There is an extensive acreage in Puna suitable for cultivation of different products, particularly of coffee and tobacco."

"How much is there of it?" asked the reporter. "Well, it is scattered... Sometimes there are large tracts and sometimes pieces of a few hundred acres only. Twenty-two miles from Hilo, by the new road survey above Kapohu [Kapoho], on the lands of Rycroft and others, there must be 10,000 acres of the finest coffee land. This land can't be plowed—it is rocky, but very rich. Most of the good lands are covered with a dense forest, but there are open spots called *kipuka*, covered with a growth of the *ki* plant, tree-ferns, sugar cane etc., which are patches cultivated by the natives in ancient times, and were called by them "*kihapai*" and "*mahinaai*."

"What do you think of Puna as a coffee district?"

"It is the coffee district... The climate is dry and the drainage perfect. It is good for tobacco too... There is plenty of tobacco growing wild, which has received no cultivation for years. It grows where the soil is very thin, in crevices of stone walls and rocky localities..." [Hawaiian Gazette , March 22, 1892]

When asked about arable government lands in Puna, Loebenstein described the land and spoke of the work being done to survey the new Puna Road:

"The arable belt of Puna is from three to six miles from the sea coast, and is consequently unexplored. It is a wonderful country and I could talk of it by the hour. It only lies in the hands of the Government to develop it. Everything depends on an appropriation being made for the road, of which the preliminary survey has been made."

"Is the line of the survey the best?"

"Since I have begun on the detail survey of the district of Puna I find it can be changed in some particulars to advantage. I certainly believe that road is of the utmost importance. Nawahi is in favor of it, and a monster petition for it is being got up in the district. The road begins at the edge of the Ramie camp, one mile from the edge of the woods—nine miles from Hilo. It follows the old road for a mile and a half more, and is to extend to Kaimu on a new survey... I met with ancient trails showing traces of a dense population and cultivation in early times. The road, if opened, will afford beautiful scenery to tourists, as there are natural wonders all along, lava trees, pit craters and lava tunnels extending for miles which formed ancient burial places. There are natural benches formed by the lava, where the dead were placed, and on these are bones, skulls and sometimes complete skeletons. These tunnels are from 25 to 30 feet wide and about the same in height, and of course pitch dark..."

From the ninth to the nineteenth mile the road is over *pahoehoe*, the arable land lying about a mile and a half above... There is considerable sandal wood growing on the *pahoehoe*, but the ranchers are too indolent to drive cattle, so they make a fire and burn off the brush, which kills the sandal wood. It is a shame. There are no wild cattle in Puna, except lizards..." [Hawaiian Gazette, March 22, 1892]

Section IV (Government Records) includes detailed documentation from Loebenstein's field records and further descriptions from surveys of Kea'au and vicinity.

C.W. Baldwin in Hawaii's Young People (1902)

In a series of articles published in *Hawaii's Young People*, Baldwin described roadways of the Hawaiian Islands. Among his articles was the following description of the new Puna Road and access to remote areas of Puna.

Roads

In travelling around other islands of the group, we usually follow the seashore, but with Hawaii the case is different, for, to avoid the waste regions and to accommodate the inhabitants, the road goes far inland in places. As the Government could not afford to build more than one road around the "big" island, that one was put where it would be of the most use to the greatest number of people... Of course everyone who goes around Hawaii leaves out nearly the whole of Puna, going by the Volcano House to Hilo. There is a good road from nine miles as far as Kapoho and a branch road extending from Pahoa to a point three miles above Kalapana—beyond this there are only trails... (1902:46-47)

Keaau Ranch (L.A. Henke, 1929)

In August 1929, the University of Hawaii printed Research Publication No. 5, "A Survey of Livestock in Hawaii," written by L.A. Henke. By the time W.H. Shipman began acquiring title to the lands of Kea'au and Waikahekahe in 1882, ranching operations were becoming established in the area. In the coastal zone, on lands through which the Puna Trail (Lower Puna Road) passed, cattle were grazed from as early as the 1850s to the 1960s. Henke (1929) published the following history of Keaau Ranch and description of operations at the time of writing.

Keaau Ranch, with an area of about 50,000 acres, 40,000 held in fee simple and 10,000 leased from the Government and private parties, extends from the sea to an elevation of 1,800 feet. The ranch formerly included lands in the Waiakea and Keaau sections now planted in sugar cane.

Much of this land is *pahoehoe* and *aa* lava (undated flows) sufficiently decomposed and covered with thin soil in many places to afford mediocre pasturage. Fruit trees do particularly well in these partially decomposed *aa* flows.

The ranch carries about 4,000 grade Herefords with about 100 bulls, 25 purebred and the other high grade. All cows except those kept for breeding cows are spayed. The rough character of many parts of the ranch necessitates more bulls than would otherwise be needed.

The ranch has about 70 miles of fences, both stone and wire. Holes for posts have to be blasted in the lava. The region has rather heavy rainfall, 106 inches in 1925, 85 inches in 1926 and 196 in 1927 at the ranch headquarters on the sea at Haena and this provides sufficient streams and pools of water for the cattle.

Cattle from Keaau Ranch are often sent to a higher ranch, Puu Oo, belonging to the same owner, when about one year old and only about 150 are marketed annually direct from Keaau. The combined ranches with about 8,000 head market about 1,200 a year when 2 to 2 ½ years old, when they dress out to be about 550 pounds. About 300 head a year are shipped to Honolulu, often

driving them over the slopes of Mauna Kea to Kawaihae, where they are loaded on the steamers. The balance are slaughtered at the slaughter house of the Hilo Meat Company in Keaau...

The ranch is owned by W.H. Shipman, Ltd., and managed by W.H. Shipman and his son, H.C. Shipman. W.H. Shipman purchased the ranch in 1877. It was started about 1875 by Rufus Lyman, C.R. Bishop, P.C. Jones, and John Paty and others... [Henke 1929:32-33]

Additional historical accounts regarding ranching operations are cited in *Section IV*.

Archaeology Field Studies (A. Hudson, 1930)

Early archaeological studies of sites in Hawai'i (i.e., Thrum 1908 and Stokes and Dye 1991 [a survey conducted 1906-1907]) fail to mention any sites for Kea'au. In 1930-1932, Alfred Hudson conducted a survey of sites of East Hawai'i for the Bishop Museum (Hudson Ms. 1932). Hudson offers some discussion on sites of the Kea'au area. He notes that the Puna-Ka'u trail between:

...Keaau and Kapoho, though overgrown in some places,...is generally in an excellent state of preservation... (Hudson Ms. 1932:218).

Walking along the coast line through Keaukaha past Lelewi, Hudson entered Puna in the land of Kea'au. Hudson's Site 74., a "Walled, paved and terraced platform; about an eighth of a mile on the Hilo side of Papai" (ibid.:295), is identified as a possible *heiau*. It is possible that this site is the *heiau* called "Kawiakawa," referenced in the Boundary Commission testimonies and survey records cited in this study. Hudson also reviews the account of Kamehameha's experience at Māwae, which eventually led to the chief's proclamation of the "Law of the Splintered Paddle" (ibid.: 297-298). Hudson describes several sites in the vicinity of Pāpa'i, near the shore (cf. Hudson Ms. 1932: 299-303).

Hudson noted that it was difficult to obtain information about the sites in Puna, and that:

Most of them are located along the coast between Keaau and Kapoho where no one now lives, and it is difficult to locate descendants of the former Hawaiian population of the area who might be able to shed light on the nature and function of certain sites (ibid.:304).

He also noted:

Back from the sea the land is under cultivation in cane, used for pasturage, or covered with dense vegetation which can be penetrated only with difficulty (ibid.).

Hudson did learn of one stone near the shore of Kea'au beach which was sacred:

...fishpond fed by fresh water springs. An upright stone, a little over 2 feet high, is sacred to the fish god Keakuaualo... (ibid.:306-307)

Though the name of the stone, a *kū'ula*, is not remembered, Roy Shipman Blackshear and descendants of the Shipman family, as well as members of the Ka'iewe and Ha'a families—who have lived on the land for generations—and other unidentified fishermen still care for—some leaving *ho'okupu* or offerings—the *kū'ula* (Figure 5).

Hudson's last reference to features of the land of Kea'au is a citation of an account of the stone form of the lehua grove goddess Hōpoe, who was a companion of Hi'iaka-i-ka-poli-o-Pele. The fishpond mentioned above, and the stone form of Hōpoe are in the vicinity of the shore line fronting the Shipman beach house. Hudson reported that the:

“...dancing woman, Wahine Ami o Hopoe, [which] lies in the breaking surf. This is a large triangular rock with a round head-like projection, which is said to dance up and down in the surf... Nearby stands her servant, a cubicle block of basalt. These are the petrified remains of characters in the famous legend of Pele and Hiiaka.” (ibid.:307).



Figure 5. *Kū'ula* at Kea'au Bay

Another interesting account recorded by Hudson, pertains to Waikahekahe. While speaking with a Mr. Kaomea of Pohoiki about the *heiau*, Mahinaakaaka Heiau in Keahialaka, Mr. Kaomea informed Hudson that there was another *heiau* of the name Mahinaakaaka, on Mauna Kea. Mr. Kaomea told Hudson that “The stones for this *heiau* were carried to Mauna Kea from Waikahekahe.” (Hudson ms. 1932:370). No further documentation was recorded.

III. LAND TENURE

As described in *Section II.a.*, settlement and residency in Kea‘au and greater Puna was in part determined by the nature of the landscape and the availability of the resources necessary to sustain a growing population. While there was a sophisticated system of land and resource management in place, the system was place based. The environment was not only physical, but also spiritual.

In Hawaiian culture, natural and cultural resources are one and the same. Native traditions describe the formation of the Hawaiian Islands and the presence of life on and around them, in the context of genealogical accounts. All forms of the natural environment, from the skies and mountain peaks, to the watered valleys and plains, and to the shore line and ocean depths were the embodiments of Hawaiian gods and deities. One Hawaiian genealogical account, records that Wākea (the expanse of the sky) and Papa-hānau-moku (Papa—Earth-mother who gave birth to the islands)—also called Haumea-nui-hānau-wā-wā (Great Haumea—Woman-earth born time and time again)—and various gods and creative forces of nature, gave birth to the islands. Hawai‘i, the largest of the islands, was the first-born of these island children. As the Hawaiian genealogical account continues, we find that these same god-beings, or creative forces of nature who gave birth to the islands, were also the parents of the first man (Hāloa), and from this ancestor, all Hawaiian people are descended (cf. David Malo 1951:3; Beckwith 1970; Pukui and Korn 1973).

The following sub-sections, III.a (Records of the Māhele of 1848) and III.b (records of the Boundary Commission) provide readers with the detailed documentation that was recorded in the nineteenth and early twentieth centuries regarding the *ahupua‘a* of Kea‘au and lands that neighbor it. Much of the documentation was provided by native Hawaiian residents of the land, who learned about the landscape, natural resources, land use, and traditional customs and practices associated with the land, from their elders. The information brings to light, the changes that occurred in land tenure and residency, and the formalization of a foreign system of land ownership.

III.a. Ka Māhele ‘Āina: The Land Division of 1848

In pre-western contact Hawai‘i, all land and natural resources were held in trust by the high chiefs (*ali‘i ‘ai ahupua‘a* or *ali‘i ‘ai moku*). W.D. Alexander, Surveyor General of the Hawaiian Kingdom wrote:

...It is admitted that under the ancient feudal system, the allodium of all land belonged to the King, not, however, as an individual, but “as the head of the nation or in his corporate right...” (Alexander; Survey Letter Book No. 9, September 30, 1891:107. Hawaii State Archives)

The use of lands and resources were given to the *hoa‘āina* (native tenants), at the prerogative of the *ali‘i* and their representatives or land agents (*kono‘hiki*), who were generally lesser chiefs as well. In 1848, the Hawaiian system of land tenure was radically altered by the *Māhele ‘Āina* (Division of Land). This change in land tenure was ardently sought after by the growing Western population and business interests in the island kingdom—generally individuals were hesitant to enter business deals on lease-hold land.

The *Māhele* defined the land interests of Kamehameha III (the King), the high-ranking chiefs, and the *kono‘hiki*. As a result of the *Māhele*, all land in the Kingdom of Hawai‘i came

to be placed in one of three categories: (1) Crown Lands (for the occupant of the throne); (2) Government Lands; and (3) *Konohiki* Lands (Chinen 1958:vii and Chinen 1961:13).

Laws in the period of the Māhele record that ownership rights to all lands in the kingdom were “*subject to the rights of the native tenants*,” those individuals who lived on the land and worked it for their subsistence and the welfare of the chiefs (*Kanawai Hoopai Karaima... {Penal Code} 1850:22*). The 1850 resolutions in “*Kanawai Hoopai Karaima no ko Hawaii Pae Aina*,” authorized the newly formed Land Commission to award fee-simple title to all native tenants who occupied and improved any portion of Crown, Government, or Konohiki lands. These awards were to be free of commutation except for house lots located in the districts of Honolulu, Lāhainā, and Hilo (cf. Penal Code, 1850:123-124; and Chinen 1958:29). After native Hawaiian commoners were granted the opportunity to acquire their own parcels of land through the Māhele, foreigners were also granted the right to own land in 1850, provided they had sworn an oath of loyalty to the Hawaiian Monarch (Kame‘eleihiwa 1992:300).

In order to receive their awards from the Land Commission, the *hoa‘āina* were required to prove that they cultivated the land for a living. They were not permitted to acquire “wastelands” (e.g. fishponds) or lands which they cultivated “with the seeming intention of enlarging their lots.” Once a claim was confirmed, a survey was required before the Land Commission was authorized to issue any award (ibid.). The lands awarded to the *hoa‘āina* became known as “*Kuleana* Lands.” All of the claims and awards (the Land Commission Awards or LCA) were numbered, and the LCA numbers remain in use today to identify the original owners of lands in Hawai‘i.

By the time of its closure on March 31, 1855, the Land Commission issued only 8,421 *kuleana* claims, equaling only 28,658 acres of land to the native tenants (Kame‘eleihiwa 1992:295). It is noted here, that except for the islands of Kaho‘olawe and Ni‘ihau, no other land division of its size—Puna consists of c. 325,120 acres—had fewer claims for *kuleana* from native tenants, than the district of Puna. Only three claims are recorded for the *ahupua‘a* of Kea‘au. One of the awardees was the *alii*, William Charles Lunalilo, the son of chiefess Kekāuluohi and the chief Charles Kana‘ina. On his mother’s side, Lunalilo was closely tied to the genealogy of the Kamehamehas, she was the daughter of Kaleimamahū, Kamehameha’s half brother and Ka‘ahumanu’s sister Kaheiheimālie). Preceding the Māhele, Kana‘ina was the Konohiki of the land of Kea‘au for his wife Kekāuluohi (cf. *Buke Māhele*, Volume 5:82 and 83), this right of claim was transferred to Lunalilo and the entire *ahupua‘a* of Kea‘au was awarded to Lunalilo in LCA 8559-B Por:16. In the period between 1872 to 1874, William Lunalilo served as King of Hawai‘i. The other Māhele awardees in Kea‘au were Hewahewa, in LCA 8081 (an agricultural plot), and Barenaba in LCA 2327 (an agricultural plot) (*Figure 6*).

To the southeast, the *ahupua‘a* of Waikahekahe Nui was awarded to Kale Davis in LCA 8522-B, and the *ahupua‘a* of Waikahekahe Iki was awarded to Kini Lahilahi in LCA 8520-B; it does not appear that any native tenants registered claims in these *ahupua‘a*.

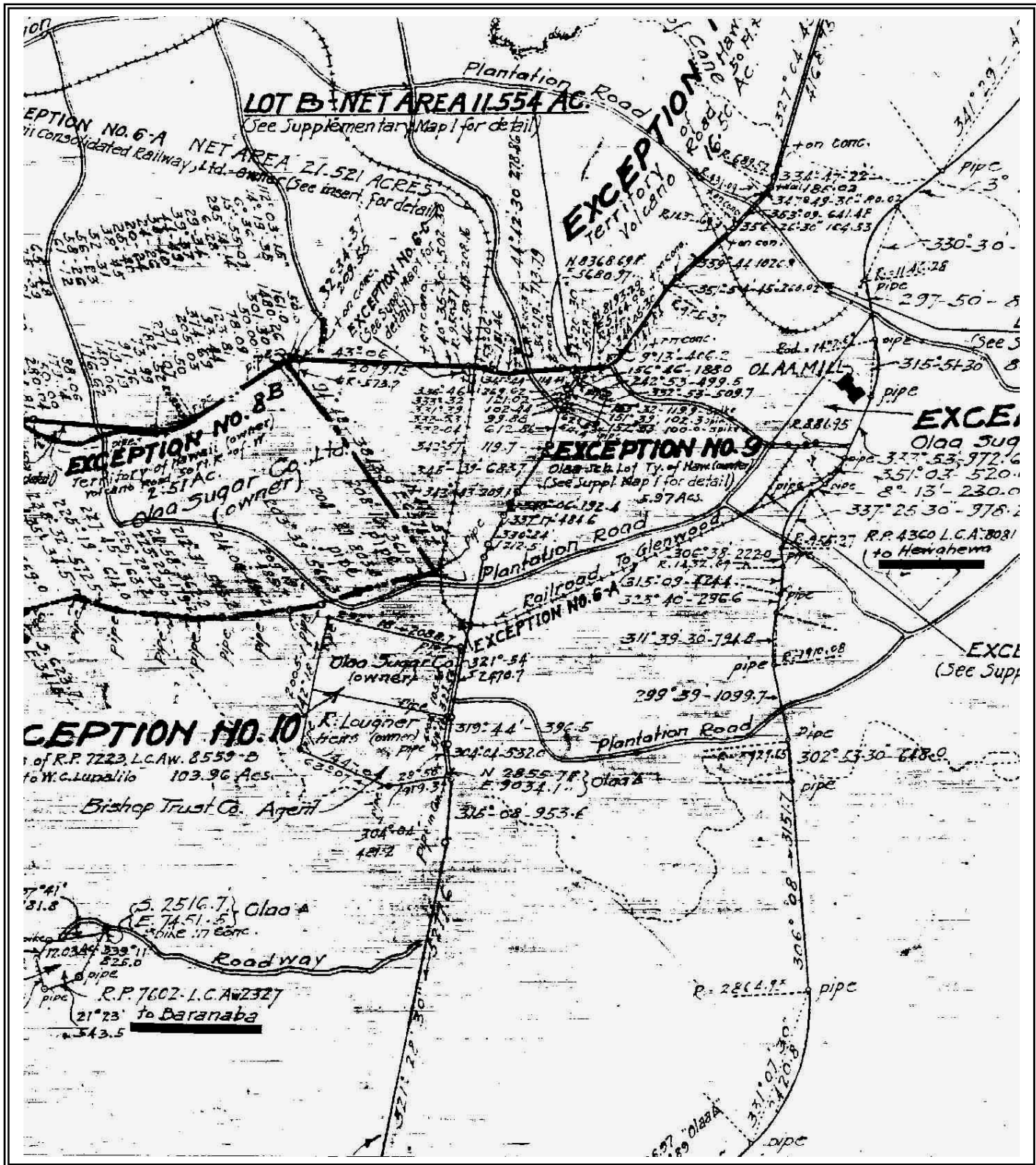


Figure 6. Portion of Land Court Application Map No. 1053
(Showing locations of Land Commission Awards)

While to the northwest, 'Ōla'a⁸ and the *ahupua'a* of Waiākea in Hilo, were retained by the King, Kauikeaouli (cf. *Buke Mahele*, and Native and Foreign Register and Testimonies {1848-1855}; and Indices of Awards {1929}).

The following documentation was recorded at the time of the Māhele for the claims of Hewahewa and Barenaba:

Hewahewa LCA 8081

Native Register Volume 8:704

[Keaau] ...*Auheā oukou e na luna hoona kuleana aina, he wahi kihapai kope 30 anana ka loa, 18 anana ka laula. Ma Keaau, o Hapaiolaa ka inoa oia wahi o Keaau.*

...Hear yea, o commissioners who quiet title land claims, there is an area cultivated with coffee, 30 fathoms long and 18 fathoms wide. It is at Keaau, Hapaiolaa is the name of that place at Keaau.

Hewahewa LCA 8081

Native Testimony Volume 4:471-472

[Keaau] ...*Apana elua: aia i ka ili aina o Halauloa, Keaau, Puna, Hawaii; hookahi kihapai.*

Mauka konohiki. Ma Hilo, ko Keawemakalio aina. Makai no konohiki. Ma Ka'u, ko Meheula aina; 1 kihapai, ua mahiia, aole hale...O ka lua, Keaau, loa 1842 no Meheula. Aole mea keakea...

Hooikiia o Kahalehau a olelo mai la: Ua ike no au i keia aina e like me Kapuaa hai ana mai nei.

[Keaau] ...Parcel 2: there in the land section of Halauloa, Keaau, Puna, Hawaii; is one cultivated parcel.

To the uplands is the [land of the] Konohiki. Towards Hilo is the land of Keawemakalio. Towards the shore is the [land of the] chief. Towards Kau is the land of Meheula; there is one cultivated garden, no house... Parcel two was obtained in 1842 from Meheula. No one objects.

Kahalehau sworn and says, I know this land, it is as Kapuaa has explained here.

Hewahewa LCA 8081

Foreign Testimony Volume 5:34

Kapuaa sworn, deposed, he knows the claims of Hewahewa. One is situated on the *ahupuaa* of Waiakea on the *ili aina* of Kalulu; it is bounded on all sides by the land of the Konohiki. It consists of 2 fields which are cultivated, it is not enclosed. The road leading in the district of Puna runs through it. The claim as set forth in his letter is incorrect.

The other claim is situated in the district of Puna, on the *ahupuaa* of Keaau, on the *ili* Halauloa and is bounded on the west by the Konohiki; on the north by

⁸ In the Māhele between Kauikeaouli and the *ali'i*, 'Ōla'a was relinquished by the chiefess Kaunuohua (a descendant of Keawemauhili) to the King. 'Ōla'a was also given a unique distinction in that it was identified as a "*Kalana no Hilo*," or a separate district, and though within the boundaries of the District of Puna, tied to the District of Hilo. (*Buke Mahele* 1848:92)

Keawemakalio's land; on the east by the Konohiki, and by Meheula's land on the south. It consists of one field, there is no house on it.

The lot on Waiakea he received from Kamahiai in the year 1847, and the lot in Puna from Meheula in the year 1842. His claim to these lots has not been disputed. Kahalehau sworn, deposed that the evidence of Kapuaa was true. [continued on page 82; below]

Hewahewa LCA 8081
Foreign Testimony Volume 5:82

[continued from Vol. 5:34]

Hilo Sept. 5th, 1852

Kanaina sworn says, I am the Konohiki of Keaau, an *ahupuaa* of land in Puna, Hawaii, under the chief Kanaina⁹ at Honolulu. I know the claim of Hewahewa in that land. It is a good claim. He received it from Kanuha in the year 1842 *paha* [perhaps] and Kanuha received it from Kekauluohi. It is not disputed. The survey of Mr. Pelham as near as I can judge is correct. I have seen the bounds as surveyed, and it is clear to me that they are right. I was not on the ground when it was surveyed, but the bounds were pointed out to me.

Barenaba sworn says, I know the claim of Hewahewa in Puna, it is in the same land with my claim. My knowledge is the same as that of Kanaina, and I confirm his testimony. I am a *kamaaina* on that land.

Barenaba LCA 2327
Foreign Testimony Volume 5:83

...Kanaina sworn says, I am the Konohiki of Keaau, Puna, Hawaii, and know the claim [in the *ili* of Kalaihina]. It is *oiaio* [true]. He received it from his aunt Kawaikini in 1830, and has held it without dispute ever since. It has always been with his ancestors. The survey I should say was correct. There is an orange tree on it belonging to Barenaba. The lord of Keaau is Kanaina, the chief at Honolulu.

While traditional accounts, historical records, and the presence of archaeological sites demonstrate that a number of people were living in portions of Kea'au, even at the time of the Māhele, it is not clear as to why only two other claims were made by native tenants of the land for residential or agricultural parcels. As recorded above, in the documentation of Hewahewa and Barenaba at least two other individuals (Keawemakalio and Mehe'ula) lived on, or cultivated land bounding these *kuleana*.

⁹ Kana'ina – notes in subsequent claims identify the first Kanaina as being different from the latter Kanaina; the latter presumably being Charles Kanaina, husband of chiefess Kekāuluohi, and father of William Charles Lunalilo.

III.b. Kea'au and Vicinity Described in the Proceedings of the Boundary Commission (1873-1914)

The emergence of fee-simple title for land in Hawai'i saw rapid growth of business interests as well. In 1857 J.F.B. Marshall addressed the Annual Meeting of the Royal Hawaiian Agricultural Society, and reported on the increasing development of business in the islands. Ventures included—cultivation of sugar and coffee; harvesting *pulu* for mattresses and pillows, and *kukui* for oil; ranching and export of hides, tallow and wool; and salt manufacture (Pacific Commercial Advertiser; November 5, 1857). It also heightened the need to establish boundaries of lands so that private property rights could be protected.

In 1862, a Commission of Boundaries (the Boundary Commission) was established in the Kingdom of Hawai'i to legally set the boundaries of all the *ahupua'a* that had been awarded as a part of the Māhele. Subsequently, in 1874, the Commissioners of Boundaries was authorized to certify the boundaries for lands brought before them (W.D. Alexander in Thrum 1891:117-118). Rufus A. Lyman served as the Commissioner of Boundaries for the Third Judicial Circuit. The primary informants for the boundary descriptions were old native residents of the areas being discussed; in this case some of the witnesses had been born in Kea'au, 'Ōla'a, Waiākea, Waikahekahe and neighboring lands in Puna, in the late 1700s and early 1800s.

The native witnesses usually spoke in Hawaiian, and their testimony was translated into English and transcribed as the proceedings occurred. Readers here will note that there are often inconsistencies in spelling of particular words such as place names and features. The author has also observed that often, when two of the same vowels were used by the original translator/transcriber, it indicated that he heard a lengthened pronunciation of a particular vowel. This emphasis of pronunciation is now indicated by a macron mark—for example, the place name “Kahoolua” would be written Kahōlua, and “*puuhala*” (a pandanus tree) would be written *pūhala*.

The narratives below are excerpts from the testimonies given by native residents of the area, or that were given by surveyors who recorded the boundaries based on the testimony of native guides. Not all of the documentation provided by each witness, is repeated here, though primary documentation regarding *ahupua'a* boundaries in the study area, and narratives regarding native customs and practices are cited. Underlining and square bracketing are used by this author to highlight particular points of historical interest in the narratives.

Boundary Commission Testimony – Volume A. No. 1

June 4, 1873

Uma^K. Sworn

I was born at Keauhou at Keaau Puna, at the time of the return of Kamehameha 1st from Kaunakakai, Molokai [ca. 1791], I have always lived there and know the boundaries between Keaau and Waikahekahe. My parents pointed them out to me when we went after birds and sandal wood. Waikahekahe Nui joins Keaau at sea shore at Keahuokaliloa, a rock that looks like a human body, which is between two points, the point on the Waikahekahe is called Kaluapaa [sic. i.e. Kualapa as written in other section of the testimonies] and the one on Keaau, Keahuokaliloa. Thence the boundary runs *mauka* to place called Koolauo. The *pahoehoe* on the north side is Keaau and

the good ground where coconut trees grow is on Waikahekahe. In past days there was a native village at this place. Thence *mauka* to Haalaaniani (*He kupua* [named for a supernatural being]) when the old road from Kalapana used to run to Keaau, thence the boundary runs to Wahikolau, two large caves, the boundary runs between them. Thence *mauka* to another cave called... [page 191] ...Oliolimanienie, where people used to hide in time of war. At this cave Waikahekahe Nui ends and Waikahekahe Iki joins Keaau. Thence the boundary runs along Waikahekahe Iki, *mauka* to Laeopuula, an old *kauhale*, *he ahua pahoehoe* [a house compound on a *pāhoehoe* rise]. Keaau on the Hilo side of the road running *mauka*, thence to Kikinui, an old *kauhale* for bird catchers, thence to Hoolapehu, another old village, thence to Alaalakeiki, which is the end of Waikahekahe Iki and Kahaualea joins Keaau. This place is at an old *kauhale manu* [bird catchers compound] (opposite a rise of ground, above the seventeen mile post, on the Volcano Road, about two miles above Kanekoa), thence *mauka* to Palauhulu, an *ahua* [rise] on the road to Kilauea, at the place where the road to Panau branches off. The boundary between Keaau and Kahaualea is on the South east side of Palauhulu about as far away from Hilo Court House to seashore. Thence the boundary runs *mauka* to Omaolaulau (*he oioina* [a resting place] on *pahoehoe*) near the woods at Reeds bullock pen, the boundary of Keaau is about as far from the Government road as from the Hilo Court House to the Government School house, thence *mauka* to Keekee, *Kauhale kahi olona* [house for stripping *olonā* bark for cordage] in Olaa. The boundary is a short distance from the Government road on the South East side. Thence to Kauwaanahunalii (*he oioina*) this place is on Keaau and the boundary runs to the South East side of it. This is at the high ground where you can look down in the woods where the bullock pen is, thence to Kawaiaeae a large water pond (South East side of the road). The boundary of Keaau and Kahaualea is close to the pond, on the south east side, thence *mauka* to Kalaninauli, the land on the south east side being only about six chains wide thence to Puuenaena (large *ohia* trees on the road *makai* of the *koa* woods) a short distance South East of the Government road. Thence the boundary runs *mauka* to a place called Pohakuloa, a small cave south east of the Government road, and a very short distance above the *koa* woods, on the Government road to Kilauea. Thence Keaau is cut off by Keauhou. Olaa bounds Keaau on the north west side. Keauhou cuts Keaau off to Government road to Kilauea, then runs *makai* along the old... [page 192] ...Government road, through the *koa* woods. Olaa being on the North side of the road and Keaau on the South east side. Thence down the road passing these points Palauhulu and to Kapueuhi, thence *makai* to Kahooku thence to Kanekoa, the houses on the South East side of the road are on Keaau, those on the other side are on Olaa, thence to Kamahiki (14 mile post). Thence to Kalehinapuoa (where there is a *mauka* road which goes to Hawelu's) thence to Kaahakanaka, on the outer road passed Hawelu's thence to Kaluakaiole (Kaakeakaiole) *mauka* of where Haanio road to Kukulu leaves the present traveled road, thence to Mahinaakaaka on the outer road, out side of Kahuku, thence down to where Kahopuaku's houses used to be (Makaulele) along the old road, this is as far as I know the boundaries between Olaa and Keaau. Kahopuaku's houses were on Olaa. Have heard that Mawae is the boundary between Waiakea and Keaau, on the Government road to Puna, and also to Olaa. Have heard that Kawiokawaa is the boundary at sea shore between

these two lands. I have not seen this place, the sea bounds Keaau on the makai side. Ancient fishing rights, including the uhu which was Konohiki fish extending out to sea. CXd.

Austins brother in law surveyed the boundary between Keaau and Waikahekahe, I and Keoki my *keiki*, who is a *kamaaina* of the land, his *kupuna* having told him boundaries, went with him, there were also two other men whose names I do not know. We surveyed up as far as Oliolimaniania, and then returned. This place is on the *pahoehoe*, opposite Waiuli, on Olaa a long distance out on the *pahoehoe* from Waiuli, heard that he surveyed *mauka* boundaries with Ohelo a *kamaaina* of Kahaualea, from Pohakuloa down to Palauhulu. (Volume A No. 1:191-193)

Puaa^K. Sworn

I live on Ponahawai, was born in Kau at time of Keouamua (one of Kamehameha I's battles). I came to Keaau and lived there two years when I was a boy. Have lived on Waiakea a great many years, in 1860 I returned to Keaau and had charge of the land for five years. While in charge [page 193], I heard what some of the boundaries were, and went and saw them. Uma, the last witness and Kalimakahili now at Keaau, and Kaoo, Kamaaina of Waikahekahe (who is now sort of *opulepule*), went with me. I never heard any dispute about boundaries between Keaau and Waikahekahe 1st. At the boundary between Keaau and Waikahekahe is the land of a place Keahuokaliloa, thence *mauka* along Waikahekahe to *pahoehoe*, on Hilo side of a place called Kukuikea where the natives cultivated food, and where breadfruit trees grow. Thence to Hilo side of Waiianohu a large place that fills with water in the rainy season. Thence to Koolauo, the *pahoehoe* on the Hilo side of it is Keaau, the soil is on Waikahekahe Nui. Thence *mauka* along the road to Halaaniani, Keaau on the Hilo side of road. Halaaniani is a *puu pahoehoe* [*pāhoehoe* hill] in a grove of *ohia* trees, called Keakuji, about as far as from Hilo Court House to Wailuku bridge, on Hilo side of Halaaniani, on Keaau, thence two holes or caves where people used to live. The boundary running between these caves, mauka to Oliolimanienie, he oioina [trail side resting place] on Puna side of a cave called Olioliana, where people used to hide in time of war. Thence Waikahekahe Nui ends and Waikahekahe Iki joins Keaau, and bounds it. I have been to a place on the boundary between Waikahekahe Iki and Keaau, but I do not remember the name of the place, do not know where Waikahekahe Iki ends. Keaau ends a little above the cave at Pohakuloa, and is cut off by Keauhou. Uma told me this. Nailima of Olaa told me Keaau ended at Halaaniani, he told me this when I was Konohiki of Keaau. Some of the Olaa people told me Keaau ended at Palauhulu. Kaoo^K told me that Kahaualea cut both Waikahekahe's off. I think at a point outside of Kanekoa, he did not tell me where. Have heard that Waikahekahe Iki runs clear to Kilauea. Kaoo is a *kamaaina* of Waikahekahe, have always been told that the road from Hilo is between Keaau and Olaa, until you get to Makaulele, below Kahopuaku's houses to a place called Kilohana where oranges are growing. Thence the boundary of Keaau and Olaa leaves the Volcano road and runs *mauka* above these orange trees, thence to an *ohia* grove called Puaaehu, thence to Waiaele... [page 194]...a place in the woods on the old road to Olaa. I have only been there once, Olaa is on the *mauka* side of this place and Keaau is on

the *makai* side, and Waiakea on the Hilo side at Mawae. Waiaele, a water spring with banana trees growing near it used to be an old *kauhale*. Mawae is on the Hilo side of Waiaele, about as far from here to Kalepolepo. It is a large crack that runs from the upper edge of the woods to shore and is the boundary between Keaau and Waiakea. Keaau is *makai* of the road from Waiaele to Mawae, and Olaa is *mauka*. Mawae is the boundary between Keaau and Waiakea from this point to the sea shore. Mawae is a large crack running across the Government road (*makai* road) to Puna, and thence to Kawiakawa, a sort of *awaawa* [gulch or depression] at shore, point of Kalipala at Papai, and point of Paukupahu. The *mawai* runs between these two. Kawiakawa is some distance on the Puna side of the coconut trees on Paukupahu, Alae and others whose names I do not remember, told me these things boundaries when we used to travel over the old road to Olaa. I went through there once, the road used to go from Pooholua to Olaa. The persons I went with are all dead. CXd. [Volume A No. 1:193-195]

Kanoi^K. Sworn

I was born at Kapapala in Kau, at the time of the building of Kiholo [ca. 1811] lived there until a few years since know the land of Keaau and the boundaries on the mountain adjoining Kahaualea. The upper end of Keaau is bounded on the South East-side by Kahaualea, and on the *mauka* side by Keauhou and on the Northwest side by Olaa; Kaheana, Kaihe Kaheana², and Makanui my Kupuna showed me some of the boundaries of these lands. Kaheana was from Panau Puna, and Kaihe was from Kau. These two men, with others from Kapapala showed me boundaries between Keauhou and Kahaualea where we went after the *oo* on Keauhou. Went after sandalwood on Kahaualea. Keauhou cuts Keaau off at Pohakuloa, the *huina alanui* [road intersection], where the marks or sign board is at the junctions of the Hilo and Puna [196] roads this side of the Kilauea House, the name of this place is Halemaumau. The boundary of Keaau runs *makai* along the Puna road to Kaluaiki, a small crater, at a place where the road runs between two craters. On to the *mauka* side of crater Kaluaiki, said crater is on Kahaualea and Keauhou is on the South side of the road. Keaau and Kahaualea lay side and side, from Kaluaiki to Nawailoloa, a place on the road from Palauhulu to Panau. Kaluaiki is about as far Pohakuloa as from Hilo Court House to Kaina's house at Alenaio. Nawailoloa and Kilohana, two ponds of water, on the road to Panau from Palauhulu, from Nawailoloa the boundary between these two lands runs *mauka* to a grove of *Ohia* trees called Namauokalahlili, thence *mauka* to Puukea a hill in the woods where we used to go after sandal wood, thence *mauka* to Namamokalei where we used to catch *uwao* ['*ua'u* – petrels]. This place is opposite to Kauanahunahu, *mauka* of Keekee about a mile. Thence to Kaluaiki. I have often been to these points from Waiuli to Pohakuloa. I have always heard that the old Government road to Kilauea is the boundary between Keaau and Olaa, I do not know the *makai* boundaries. CXd. [Volume A No. 1:195-196]

Nailima^K. Sworn (same witness as for Olaa)

I was born at Olaa, and know the boundaries between Olaa and Keaau. My *kupuna*, now dead, showed them to me. Keaau ends at Halemaomao at the junction of the Hilo and Puna road. Olaa on the Hilo side of the road and Keaau on the Puna side. Thence *makai* to Pohakuloa, thence *makai* to Puenaena

(big *ohia* trees) thence to Kalaninauli, so called by Nahienaena. Thence to Waiaiai, thence to Kauailehulehu, thence to Keanapapa at the 24 mile post thence to Kauwanahunalii, thence to Keekee, thence to Omaolaulau (at *ohia* woods, and the bullock pen) thence to Pohakuloa, thence to Palauhulu, thence to Kawaikahoochia. Thence to Kawaa, thence to Kaialuawai, thence to Kaluamanuahi, to Kaleinakeakua, which is at the 18 mile post, thence to Pahookui, thence to Pohakuloihi, to Punahaha, 17 mile post, thence to Kapuamau [page 196]. Thence to Kawaiaiai, thence to Kapae, 16 mile post, thence to Kanekoa, thence to Mokuhaaheo, thence to Mahiki, to Kahau, to Puualae, to Kaleiki, to Kanukea, thence to Umihali at the fifteen mile post, thence the boundary runs to Kalehuapua, *mauka* of the road to Hawelu's house (thence to Kaahakanaka, outer road to Hawelu's house). Thence follow the outer road to Popoiwi, where Haanio's road branched off to go to Kukulu. Thence follow the outer road to Mahinaakaaka, opposite Kahuku, thence to Kapuhu, and *ohia* grove, where the road turns towards Hilo on the *makai* side, thence to Ahuapuu, a *puuhala* tree by the road, thence to Makaulele, a little *makai* of this place. Keaau road joins at this point the boundary leaves the Hilo road, and turns *mauka* along Olaa, to Kilohana, an *ahua* or mound with orange trees. Thence the boundary runs up *mauka* along *awaawa* on Kau side of Kilohana, up a hill covered with *puu hala*, thence to pali Puuaehu, the boundary on the brow of pali, this side of Keaani, which is the name of an *ohia* grove on the side of the *pali*, some distance *mauka* of Haanio's road, thence to Kaanamanu a place inside the woods. I have never been there and only heard of this place. Thence to Kaaipuaa, an old village, where people used to live. Thence to Waiaeli [also written Waiaele in text], a pond of water with *aweoweo* growing in it. Said pond is on the old road from Olaa to Pooholua. Have heard Waiakea joins Olaa and Keaau at Waiaele, Mawae is near there and have always heard that it is the boundary between Keaau and Waiakea. From the Government road to Olaa, seashore Kawiakawaa is at sea shore. CXd. [Volume A No. 1:196-197]

Naipo^k. Sworn

Was born at Waiakea at time of the Peleleu [ca. 1795]. Have always lived on Waiakea and Keaau. Keliinohopuu, my father, Ku his brother, and Kapulii (all dead) showed me boundaries, They told me Kapohakuau, a large rock on the point at shore is the boundary between Waiakea and Keaau, thence *mauka* [page 197], along Waiakea to Kawiakawaa, a small cave where natives worshipped Idols. The boundary runs up *mauka* in *awaawa* Keaau on the Puna side and Waiakea on Hilo side to Mawae on the lower Government road to Puna, boundary at the bottom of the pali. Thence up along Mawae to *mauka* Government road to Olaa. I have not been along this Mawae but have always heard that it runs from lower to upper road. My parents told me Keaau ended at Waiaele. Naaue [Nauē] is between Mawae and Waiaele, it is a place where people used to flee and live in time of war. I have been told Waiakea joins Olaa at Waiaele. The sea bounds Keaau on the *makai* side and the land has ancient fishing rights extending out to the sea. Do not know the boundaries on the other side of the land. CXd. [Volume A No. 1:197-198]

On January 21, 1875, Rufus A. Lyman, Commissioner of Boundaries, and upon the application of C.R. Bishop, certified the boundaries of the *ahupua'a* of Kea'au. The boundaries are recorded:

No. 61 Certificate of the Boundaries of Keaau, District of Puna, Island of Hawaii 3rd J.C. [Volume 1 – B:112-115]

Commencing at the east angle of this land at a pile of stones on the seas shore at a place called Keahuokaliloa—This place is 10900 feet south east along the Government road [112] from the cocoanut grove at Keauhou, and running thence along the lands Waikahikahi nui, Waikahikahi ike and Kahaualea, as follows. Magnetic bearings:

South 10°30' West 10700 feet;

South 32°00' West 20196 feet to large *ohia* with **X**;

South 59°00' West 9170 feet;

South 47°30' West 16632 feet;

South 41°15' West 27324 feet;

South 60°00' West 22836 feet;

South 63°30' West 19700 feet to Kaluaike crater at the east side of the Puna and volcano road and at the head of this land;

North 6°40' West 3600 feet to Pohakuloa *koa* grove on the Hilo and Volcano road about 1730 feet below the junction of the Hilo and Puna Road;

North 46°38' East 10230 feet along the land of Olaa;

North 56°15' East 9400 feet to **O** cut in the *pahoehoe* at the little rise in the road about a mile and a quarter above the Omao woods;

North 69°18' East 6400 feet to **O** cut in the *pahoehoe* on the road in the Omao woods;

North 40°42' East 13070 feet to **K** cut in the road at Kuhalau;

North 29°12' East 12140 feet to A cut in the road a place called Kahooku where some *Neneleau* trees are [113] growing, and from where the houses at Kanekoa can first be seen;

North 24°00' East 23810 feet to a pile of stones by the side (East side) of the road, a little below Waiuli;

North 42°10' East 12350 feet to a pile of stones at the upper edge of a little strip of woods through which the road runs;

North 13°05' East 5600 feet to a large pile of stones on the lower side of the road at Makaulele;

North 16°10' East 985 feet to **O** cut in the road at the extreme East corner of Olaa. Thence still along Olaa;

South 85°00' West 4250 feet;

South 72°20' West 25800 feet to a point in the woods the lands of Olaa and Waiakea join. Thence along the land of Waiakea;

North 43°30' East 36800 feet to a well known place called Mawai [Māwae] in the woods on the Hilo and Volcano road, 9122 feet along road from the cocoanut tree at the side of the road at the North side of the woods;

North 41°15' East 29910 feet through the Panewa [Pana'ewa] woods to sea shore at an old *Heiau* [114] named Kawiakawa. Thence along sea shore to point of commencement.

Containing an area of 64275 acres.

Surveyed by J.M. Lydgate

Volume B-Page 399

The Ahupuaa of Waikahekaheiki, Puna, Hawaii

On this 28th day February A.D. 1876 the Commission of Land Boundaries for the island of Hawaii 3rd J.C. at the court house at Hilo, Hawaii on the application of J. O. Dominis agent for the Queen Dowager Emma Leleonalani, and H.A. Widemann agent for Mrs. Naaea by their attorney E.G. Hitchcock, for the settlement of the boundaries of the *ahupuaa* of Waikahekaheiki, situated in the district of Puna, Island of Hawaii 3rd J.C.

Notice of time and place of hearing personally served on applicant, and owners of adjacent lands as far as known.

Present J.H. Nawahi for applicants and L. Kaina for the Hawaiian Government. Owners of Waikahekaheiki Nui not represented. The Commissioner of Boundaries has written to the owners of this land several times, but they decline to do anything about it, until it is settled who the land is to belong to, as it formerly belonged to Kale Davis w., and she died leaving 5 heirs, and the estate has not been divided.

Testimony – Palau^{K.}

Palau^{K.} sworn says (The witness appears to be over 60 years) I was born at Waikahekaheiki Puna, Hawaii, at time of *Niaukani o Kamalii* (ca. 1811), and was grown up when missionaries first came to Hilo. I now live at Makuu the adjoining land. Have always lived on these two lands. I am a *kamaaina* of Waikahekaheiki. My mother Mau was a *kamaaina* of the land, and showed me the boundaries. The boundary at the shore between this land and land of Makuu, is at a *kualapa* [a ridgeline or point] called Kuwelo [Ku'uwelo], there is also a *mawae* [fissure] there: Thence the boundary runs *mauka* along *Kualapa* to the end of it, and on across the Govt. road to an *ahu Pahoehoe* [*pāhoehoe* rock cairn] near the road; Thence *mauka* to old road to an *ahu pohaku* [stone cairn] at place called Kaumumanu, thence *mauka* across old *pahoehoe* to the *pili* [*heteropogon* grass] on the Hilo side of a grove of breadfruit trees on Makuu, at place called Kulanapahu. Thence to *pili* on Hilo side of grove of breadfruit trees at place called Kahoolua. Thence *mauka* to *pili* on Hilo side of place called Puunanaio, a breadfruit tree and old *mahina ai* [cultivated field]. Thence boundary runs *mauka* across *pahoehoe* to place called Papamaihi an *oioina* [trail side resting place] on the old road from Kaimu. Thence *mauka* to the Puna side (or Kau side) of where houses used to be at old cultivating ground at place called Wahileolae. The point of woods called Makaohe are on Makuu, and part of *pahoehoe*. Thence the boundary runs *mauka* to old road from Kaunamano to Kalae, where I was told Waikahekaheiki ends. This land is bounded *makai* by the sea. The ancient fishing rights extended way out to sea. The boundary at shore between this land and Waikahekahe nui is at a point called Lahale [Laahale]. thence the boundary runs *mauka* to grove of cocoanut trees *makai* of Govt. Road. Only one cocoanut tree is on this land at that place

[page 400] the rest of the grove are on Waikahekahe Nui. Thence *mauka* to old road at place called Malumaluulu, where a breadfruit tree formerly stood on the boundary. Thence *mauka* to a breadfruit tree at place Papamahina. Thence *mauka* to a cocoanut tree at Pilinui towards Puna of place called Koolauo: Thence *mauka* facing on the Hilo side of breadfruit tree to Haamea. Thence *mauka* across *pahoehoe* to place called Holoholokolea at the old road from Makahanaloa in Puna to place called Naakiolaola. Thence *mauka* to the edge of the *pahoehoe* on the Puna side of the old cultivating ground at place called Naepuhi. Thence *mauka* to edge of *pahoehoe* on the Puna side of the old *kauhale* [house site] at place called Wailoa. This place is on Hilo side of place called Wahikolae. Thence the boundary runs *mauka* to place called Oliolimanienie the *mauka* end of this land and Waikahekahe Nui and junction of Keaau and Makuu. I have always been told this is the end of these lands. C.X.d.

I do not know points given by Uma in his evidence on boundaries of Keaau above old road from Kaunamano.

Testimony closed as Mr. Nawahi and Mr. Kaina state that there are no more *kamaaina* living that know anything about the boundaries of this land. Uma having died recently. [Volume B:399-400]

Decision

The boundaries of Waikahekaheiki, are decided to be as given by Palau. Notes of survey to be filed previous to issuing certificate of boundaries.

If owner of land is unable to get anyone to survey land soon, then Palau is to go with some person and put up markers on boundary.

Com. of Island Boundaries 3rd J.C.

The Certificate of Boundaries for Waikahekahe Iki was issued on July 25th, 1914, and in the coastal region reported:

Beginning at a point on the sea shore marked with X cut on the *pahoehoe* at a place called Kuuwelu, the coordinates of which point of beginning are 11,422.5 South and 6734.40 East of Government Survey reference point Kaloli. The boundaries running inland were set as:

1. S. 55 14' W. true 1337.5 to a point marked with a galvanized spike driven in the *pahoehoe* under a mound of stones at a place called Kaumumano.
2. S. 40 53' 25° W, true 22,971 feet to a spike driven in the *pahoehoe* under a pile of stones on the *mauka* side of the Puna Road at a place called Ohiakuapuu... [Volume C No. 4:168]

The boundaries from the Puna Road (Kea'au-Pāhoa Road) were set as:

10. N. 42 56' 37° E. true 12,629 feet to a galvanized spike driven in the *pahoehoe* on the *mauka* side of Puna Road.
11. N. 40 30' 33° 23,752.5 feet to a point marked with a ___ out in the *pahoehoe* by A.B. Loebenstein near the edge of the sea *pali* at sea shore at a place called Laahale at sea shore.

12. Thence down the sea *pali* along the high water mark to initial point...
[Volume C No. 4:169]

The following excerpts from the Judgement of Boundaries of Waikahekahe Nui, recorded October 12, 1898, and decided on May 3rd, 1900, are of interest in the description of Keahuakaliloa, and features which were reported *makai* of the old Puna Government Road. Witnesses in these proceedings were the same as those for Kea'au.

Volume C, No. 4 – No. 180 ...Beginning at the North angle of this land, at a point known as “Kamokuna,” and at the East angle of Keaau Cert. No. 61, the mark being a mound of stones in the center of which, surrounded by four square stones is set a stone 1 foot square and 15 inches height, inscribed with a Δ , distant 150 feet seaward of the Puna Govt. Road, and 30 feet from the edge of the sea bluff, above a rock in the sea called Keahukaliloa, and another rock called Kalaupae; the H.G.S. Δ Station “Kaloli” bearing N. 12°22'30” W. true... Survey filed by A.B. Loebenstein. [Volume C No.4: 124-127]

No. 180 Certificate of Boundaries of the Land of Waikahekahenui of Puna, Island of Hawaii Lahilahi, Royal Patent No. 2336 (by name) L.C. Award No. 8522-B. May 3rd, 1900.

Judgement

An application to decide and certify the Boundaries of the Land of Waikahekahenui, District of Puna, Island of Hawaii, having been filed with me on the 12th day of October A.D. 1898, by A.B. Loebenstein, in accordance with the provisions of an Act to facilitate the settlement of Boundaries; now therefore, having duly received and heard all the testimony offered in reference to the said boundaries...and it appearing to my satisfaction that the true, lawful and equitable boundaries are as follows, viz:

...Beginning at the North angle of this land, at a point known as “Kamokuna,” and at the East angle of Keaau Cert. No. 61, the mark being a mound of stones in the center of which, surrounded by four square stones is set a stone 1 foot square and 15 inches height, inscribed with a Δ , distant 150 feet seaward of the Puna Govt. Road, and 30 feet from the edge of the sea bluff, above a rock in the sea called Keahukaliloa, and another rock called Kalaupae; the H.G.S. Δ Station “Kaloli” bearing N. 12°22'30” W. true... Survey filed by A.B. Loebenstein. [Volume C No.4: 124-127]

Olaa Sugar Company

By the end of the nineteenth century, significant developments in land use were evolving in Hawai'i. Among the most far reaching of these developments were sugar plantations, which graded vast tracts of native forest and former Hawaiian dryland agricultural field systems in order to cultivate sugarcane. With the establishment of fee-simple land title, confirmed boundaries, and the removal of governmental obstacles to furthering business interests, plantations grew up on all of the major islands. At Kea'au, in 1899, W.H. Shipman leased nearly four thousand acres of Kea'au to the Olaa Sugar Company which was incorporated in May 1899. Bureau of Conveyances records describe the transaction, and also record

stipulations placed on development by W.H. Shipman, in order to protect certain features of the land. Importantly, we learn of the exclusion of the Kea'au Beach parcel and ponds, and walled enclosures along the coast which were part of the residence and ranching operations

May 9th, 1899

Lease of W.H. Shipman to Olaa Sugar Co. Ltd.

(L.A. Thurston, President; J.B. Castle, Treasurer):

Lease Agreement — W.H. Shipman leased 3812 acres of land in Kea'au to the Olaa Sugar Company Ltd., for a term of forty years (to 1939), with the right to acquire additional lands for development as necessary. Among the conditions of the lease were the following —

...that such selection of a mill site shall not include any portion of the premises reserved by the Lessor as below set forth, nor be within two miles of the Keaau landing; and also the right to use and divert for the purposes of the plantation to be established by said Lessee, all water now on said land of "Keaau" and all which may be developed on said land, provided however, that no defilement of the ponds or springs located on the sea beach of Keaau shall be done or permitted by the lessee... (Bureau of Conveyances, Liber 197:238]

The lease also withheld the following parcels:

1. Approximately 150 acres along the Puna Road, about three miles from the junction of the Puna and Volcano roads, known as Waipahoehoe, a portion of which is now under cultivation;
2. Approximately two and one-half acres of land at the junction of the Volcano and Puna roads, occupied by a Japanese as a restaurant and stable;
3. Approximately thirty acres of land, enclosed and planted in coffee, lying on the *makai* side of the volcano road, just South of Kukulu;
4. A twenty acre parcel of land, adjoining the last mentioned piece of land, leased to Capt. Elderts;
5. The premises containing thirty (30) acres, more or less, now enclosed by a stone wall at the landing of Keaau, occupied by the party of the first part as a ranch building and premises, including the Keaau pond and the land for a distance of two hundred (200) feet on the Puna side thereof; subject however, to the right as aforesaid of the party of the second part to use the water therefrom;
6. All the enclosures at the beach used by the party of the first part as cattle pens;
7. And also the right of way wide enough for use of cart, from the volcano road at Kukulu to the ranch buildings of the party of the first part at the beach; And also from the Volcano road at Kukulu *mauka* along the edge of the woods to the upper boundary of the land;
8. Five acres on the *makai* side of the junction of the Puna and Volcano roads;
9. Five acres on the *mauka* side of the junction of the Puna and Volcano roads;

10. And also the cattle pen and approaches thereto on the *mauka* side of the Volcano road at Kukulu...

...And also that said Lessee may clear the said demised premises from all trees except breadfruit, orange, mango, and lime trees which shall not be cut while in healthy condition... (Bureau of Conveyances, Liber 197:238-242)

The primary figures in Oloo Sugar company also had interests in other island-wide plantations and supporting businesses. Oloo Sugar Company soon joined into the transportation system of the Hilo Railroad Company, which operated from 1899 to 1916, and was the forerunner of the Hawaii Consolidated Railway, Ltd. The Hilo Railroad company serviced plantation and transportation needs between the fields and communities of Waiākea and 'Ōla'a, out towards Kapoho, where in 1905, the Oloo Sugar Company took assumed interests in the Puna Sugar Company of the Kapoho vicinity as well

Lorin A. Thurston, Vice President and General Manager of the Hilo Railroad Company (also a co-founder of Oloo Sugar Company) recorded that by April 1901, the railroad extended 25.1 miles from Hilo to Kapoho, and by 1904, had added almost another 25 miles of railroad from Hilo to Glenwood (Thurston IN Thrum 1914:143). Also by 1904 it was reported that the company began experiencing financial difficulties. This was in part due to the "ravages of a leaf hopper on all cane" (ibid.). The Puna Plantation operations were nearly abandoned, and Oloo Sugar Company's production was cut in half. Several years of problems at the sugar plantations serviced by the rail system, also slowed down the development of Hilo, and thus diminished the need for rail services, producing a shortfall in revenues needed to pay for the rail system expansions (cf. Thurston IN Thrum 1914:144). By 1907 business was up again, but the expansions in the area of service and operation costs led to the reorganization of the Hilo Railroad Company in 1916.

Following reorganization, the Hawaii Consolidated Railway, Ltd., came into operation, and while recovering from several natural disasters and ongoing financial difficulties, the 1946 *tsunami* succeeded in closing down rail operations for good. The oral history interview with Roy Shipman Blackshear and John Ka'iewe (as well as Land Court and Bureau of Conveyances records in the following section) provide readers with additional information on plantation operations, the changing of the name from Oloo Sugar Co. to Puna Sugar Co., and railroad line activities in Puna. Puna Sugar remained in operation until the early 1980s—further details on the history of Kea'au, the sugar plantation and more recent land management is discussed in "The Shipmans of East Hawai'i" (Cahill 1996).

IV. GOVERNMENT RECORDS— A CHRONOLOGICAL HISTORY OF KEA‘AU AND THE PUNA ROADS

This section of the study provides readers with detailed records of governmental communications pertaining to Kea‘au and the historic Puna Trail-Old-Government Road. These communications include letters to and from the Hawaiian Government, district officials, and area residents that document the development of coastal schools and churches, roadways, public-works and public-facilities, and changes in the community during the nineteenth and early twentieth centuries (from ca. 1846 to 1933). The primary repositories of the original documentation cited below included the Hawai‘i State Archives, Survey Division, Land Management Division, and Bureau of Conveyances; unless otherwise noted, communications cited below were viewed in the collection of the State Archives.

Because this document is meant to provide land and resource managers and other interested parties with detailed documentation of the history of travel on the Puna Trail-Old Government Road, most of the pertinent documentation is cited verbatim. The information is generally presented in chronological order, and communications translated by the author (Maly) are noted. (*Italics emphasis is this author’s – noting particular sections of text.*)

August 13, 1847

***Governor of Hawaii, George L. Kapeau; to
Premier and Minister of Interior, Keoni Ana***

Regarding taxation and public work days. Of particular interest are the paragraphs below which describe the development of the Government Road encircling the island of Hawai‘i from Kona to Ka‘ū, Puna, and Hilo. It will be noted that by the 1840s there was already discussion in the government about the importance of the road system as a means of travel to be used by visitors.

Aloha oe e ka mea Hanohano –

I have a few questions which I wish to ask you. Will the police officers be required to pay, when they do not attend the Tuesday (*Poalua*) labor days? How about parents who have several children? What about school teachers and school agents? Are they not required to work like all other people when there is Government work on the roads and highways?

I believe that school agents, school teachers and parents who have several children, should only go and work on the weeks of the public, and not on the *konohiki* days....

...The roads from Kailua and down the pali of Kealakekua, and from Kailua to Honokohau, Kaloko, Ooma, at the places that were told our King, and from thence to Kaelehuluhulu, are now being surveyed. When I find a suitable day, I will go to Napoopoo immediately, to confer with the old timers of that place, in order to decide upon the proper place to build the highway from Napoopoo to Honaunau, and Kauhako, and thence continue on to meet the road from Kau. The road is close to the shore of Kapalilua. *The highway makai of Kukalaula [the plain below Kīlauea], makai of Keauhou [Ka‘ū], and along the beach of Puna to Hilo, will probably begin at Keaiwa.*

The width of the highways around Hawaii, is only one fathom, but, where it is suitable to widen where there is plenty of dirt, two fathoms and over would be all right.

For the town of Hilo, I have appointed some road overseers, being B. Pitman, Frank W. Wood, maybe Koana, Halai, Luhilea, Kaiana. Three natives and three foreigners. They get no pay for the work that has been placed upon them, they give their services free to this work because of their desire to improve the land.

If the roads are put into proper condition, there are a lot of places for the strangers to visit when they come here. The Kilauea volcano, and the mountains of Maunaloa, Maunakea, Hualalai.

There is only one trouble to prevent the building of a highway all around, the steep gulches at Waipio and Pololu, but his place can be left to the very last. The cliffs at Hilopaliku [now the North Hilo District] are also very bad, but another and better place has been found, it is a little *mauka* of that, that is what the old timers living at Kulaimano say.

A foreign carpenter has proposed to me that he build the bridge over Wailuku completely, all the material to be his and also the labor, and to pay him two thousand dollars. I did not pay much attention to this, because, I do not believe that it can be built for that money, it will take three thousand to finish it, and maybe go into four thousand... (Subject File – Roads Hawaii)

March 29, 1848

Governor Kapeau; to Minister of the Interior, Keoni Ana:

Acknowledging receipt of communication and answering questions regarding construction methods used in building the roads.

...I do not know just what amount of work has been done, but, I can only let you know what has come under my notice.

The highway has been laid from Kailua to Kaloko, and running to the North West, about four miles long, but it is not completely finished with dirt. The place laid with dirt and in good condition is only 310 fathoms.

The highway from Kealakekua to Honaunau has been laid, but is not all finished, and are only small sections, as follows: From Kealakekua, and *mauka* of Keei; and from Honaunau to Keomo, the place where had a severe battle with Kiwalao, and which battle was called Mokuohai. Dirt has been laid from Kealakekua to Keei.

The highways at Kau have been repaired, but no one is in place, but in sections.

The highways in the town of Hilo have been fixed and finished, but not properly completed... (Subject File – Roads Hawaii)

1848 School Report (Puna Section)

Public Instruction Files:

By 1848, surveys of schools, including names of teachers, numbers of students and various limited comments regarding the quality of instruction began being forwarded to the Hawaiian Government. The information below, identifies school locations and gives us the names of teachers who were living at Kea'au and vicinity.

Teacher	Daily Salary	Number of Students	Location of School
Maiiau	12 ½ cents	18	Makuu
Kaholo	12 ½ cents	36	Keaau 1
Ihauae	12 ½ cents	45	Keaau 2
Kau & Ihauae	25 cents	34	Olaa 1
Kaanaana	18 ¾ cents	24	Olaa 2

Studies included subjects such as — reading, arithmetic, geography, penmanship, philosophy, science, and religion. (Series 262 – Hawaii Island; Folder of 1848)

August 30, 1853

School Lot at Keaau 1. Puna Hawaii:

This lot begins at the shoreward corner, at a cut off coconut tree stump, proceeding South 15 ½° West 3.00 chains, then South 79° East 6.00 chains, then North 15 ½° East 3.00 chains, then North 79 ° West 6.00 chains, back to the place of commencement. (Figure 7)

1.80 Acres

Approved Aug. 30th 1853.

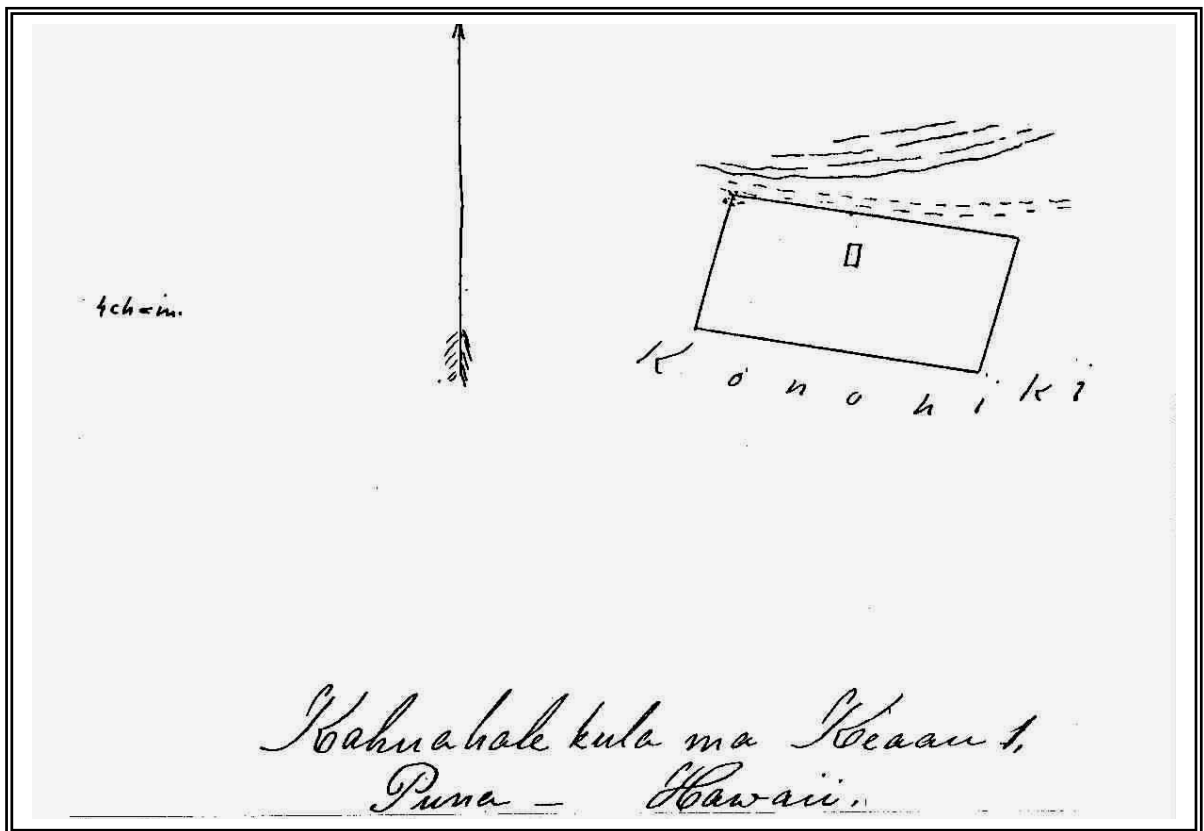


Figure 7. Survey and Plan – Kahuahale Kula ma Keaau 1. Puna Hawaii (Hawaii State Archives; Public Instruction Survey Book:15)

August 30, 1850

School and Church Lot at Keaau 2. Puna Hawaii:

This lot begins at a large stone on the shore, the northern corner of the lot, and proceeds South $56\frac{3}{4}^{\circ}$ West, 3.86 chains to a coconut tree stump, then proceeding along the Government Road (*Alanui Aupuni*) South $22\frac{3}{4}^{\circ}$ East 10.2 chains, then North $75\frac{1}{2}^{\circ}$ East 4.00 chains to the shore, then proceeding along the shore to the place of commencement. (*Figure 8*)

4.20 Acres

Approved Aug. 30th 1853.

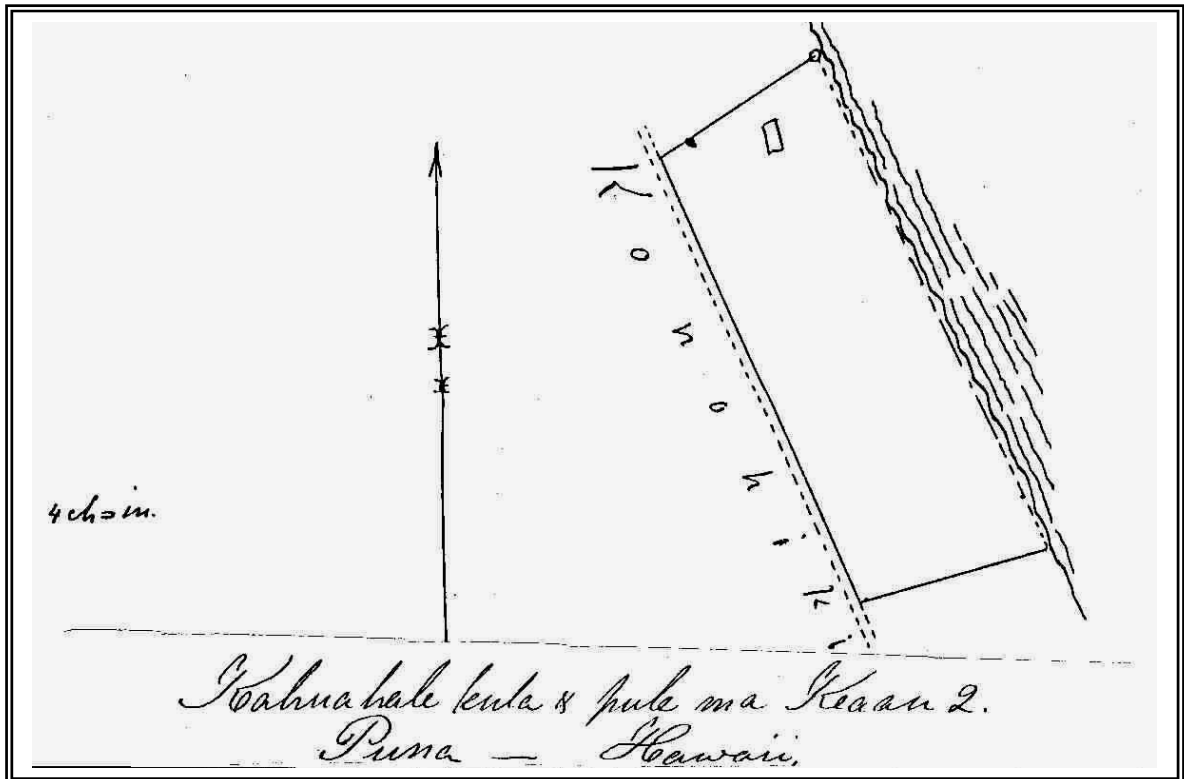


Figure 8. Survey and Plan – Kahuahale kula a me pule ma Keaau 2. Puna Hawaii
(Hawaii State Archives; Public Instruction Survey Book:24)

Land Grants of 1852-1855

Shortly after the Māhele of 1848 (Kea’au and major land division discussed above in Section III.a) the Hawaiian Government instituted a Land Grant program. Native tenants interested in acquiring land upon which they lived, or felt they could cultivate, were granted in fee simple to the applicants. Though no grants were recorded for Kea’au, at nearby Maku’u-Pōpōkī, along the Puna Trail-Old Government Road, three claimants were awarded land (*Figure 9*). These awardees are the elders of John Ka’iewe, an interviewee in this study.

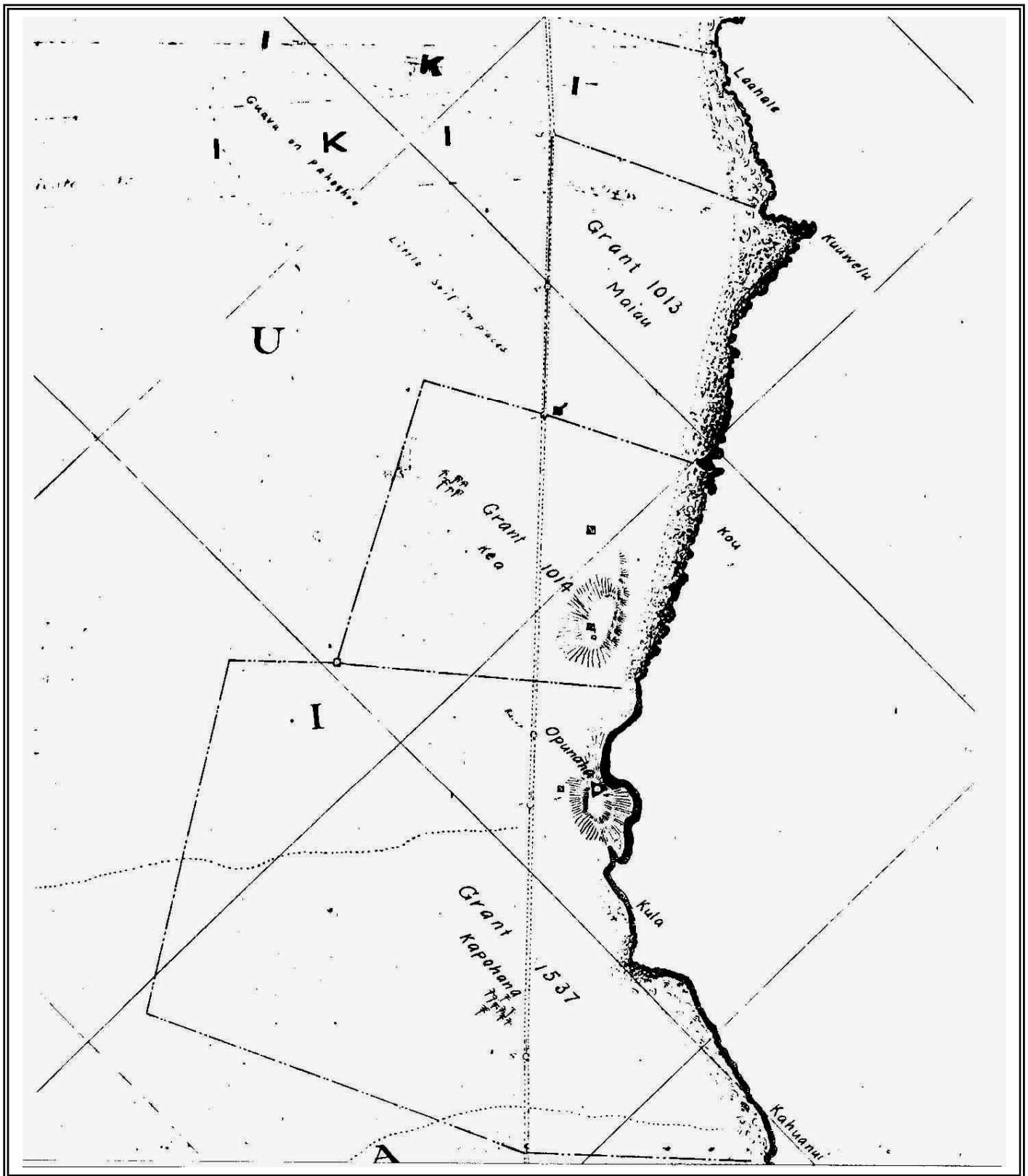


Figure 9. Portion of Register Map No. 2258 (Moragne 1903). Showing Grants of Maiau, Kea, and Kapohana; Lands of Maku'u-Hālonā-Pōpōkī (State Survey Division)

Grant No. 1013 to D.W. Maiau at Makuu (1852 – Figure 10)

It will be noted that the Surveyor mistakenly used the name Keonepoko instead of Waikahekahe for the northern boundary of Maiau's land. In 1848, Maiau was identified as the teacher at Maku'u; and later records show that Maiau's Grant was later transferred to Keanaha Pu'ukoholā. Keanaha Pu'ukoholā was one of the informants referenced by Thos. Cook, when he surveyed Kea'au, and members of the Pu'ukoholā family inscribed their names on the pāhoehoe flats at Pākī (see Section VI for further documentation).

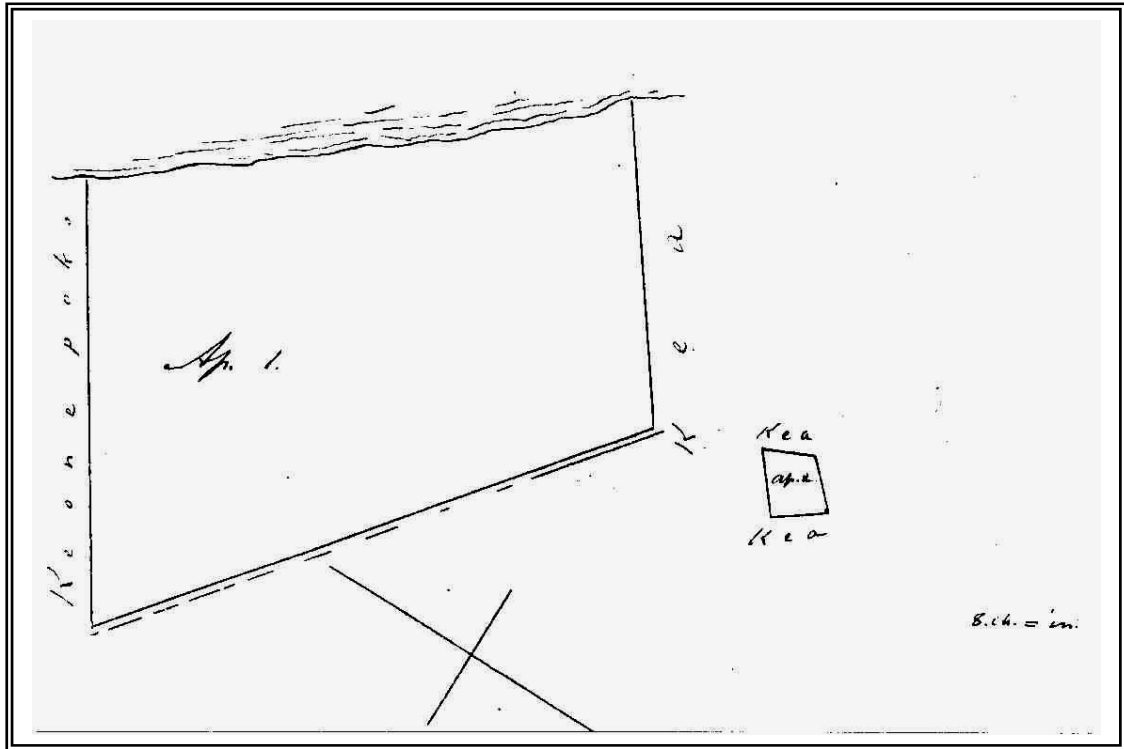


Figure 10. Grant Map No. 1013

Lot 1.

This lot begins at the shore, at the boundary wall of Keonepoko [Waikahekahe lki], and proceeds South 56 ½ West 19.17 chains to the government road; then along the road South 52 ½ East 25.10 chains to the land of Kea; then proceeding along the boundary of Kea North 53 ½ East 14.00 chains to the shore; than along the shore to the place of commencement. There are 38 17/20 acres in this parcel.

Lot 2.

This lot begins at a kukui tree and proceeds along the land of Kea... Bounded on all sides by Kea, containing 6/10th of an acre. (translated by Maly)

Grant No. 1014 to Kea at Makuu (1852 – Figure 11)

Starting at a stone cairn on the shore, proceeding South 39 ½ West 24.36 chains to a coconut tree; then North 38 1/2/ West 26.05 chains to a pandanus

tree; then North $51 \frac{1}{4}$ East 11.00 chains to the Southern corner of the land of Maiau; then proceeding along his boundary North $53 \frac{1}{2}$ East 14.00 chains to the shore; then proceeding along the shore to the place of commencement... There are $56 \frac{4}{10}^{\text{th}}$ acres in the lot of Kea. (translated by Maly)

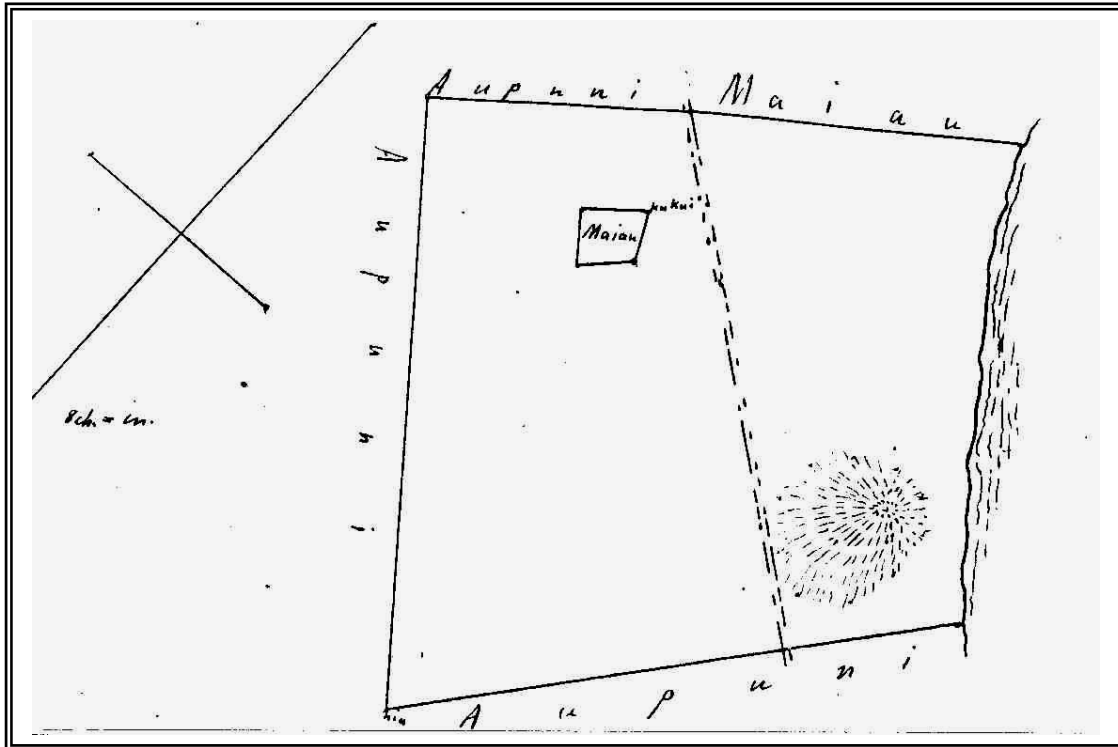


Figure 11. Grant Map No. 1014

Grant No. 1537 to Kapohana at Halona and Popoki (1855 – Figure 12)

This parcel begins at the shore on the Northern corner of this lot, adjoining the land of Kea, and proceeding along this land South $39 \frac{1}{2}$ West 24.48 chains to a coconut tree, then proceeding South 37 West 9.30 chains to a breadfruit tree; then proceeding South $41 \frac{1}{4}$ East 32.24 chains to a stone cairn; then North $56 \frac{1}{2}$ East 35.29 chains to the government road; then North $37 \frac{1}{2}$ East 20.00 chains to the shore; then proceeding along the shore to the place of commencement. There are 171 acres within this lot. (translated by Maly)

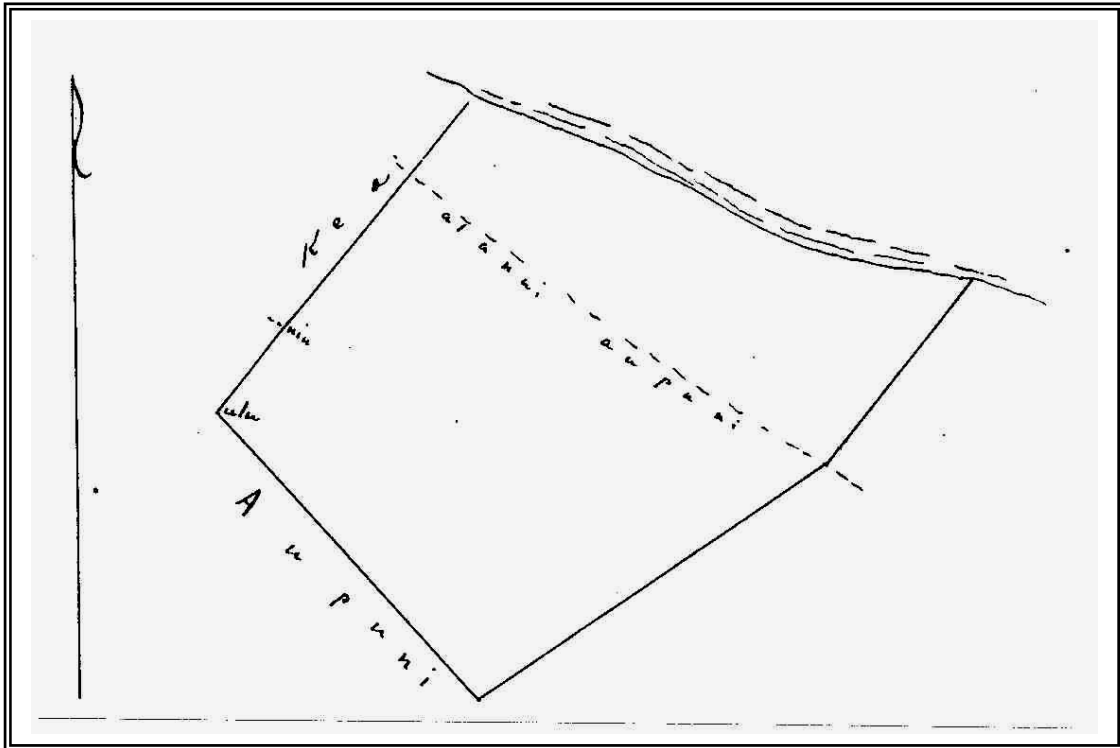


Figure 12. Grant Map No. 1537

**Overview of Road Laws and Development
in the Kingdom of Hawai'i (1840 to 1857):**

Roads are the most accurate tests of the degree of civilization in every country. Their construction is one of the first indications of the emergence of a people from a savage state, and their improvement keeps pace with the advance of a nation in wealth and science. They are the veins and arteries through which flow the agricultural productions and commercial supplies, which are essential to the prosperity of the state. Agriculture is in a great measure dependent upon good roads for its success and rewards.

The history of road making in this kingdom does not date far back. The first law that we find recorded was enacted in 1840, which as well as the laws of 1846 and 1850 gave to the Governors a general control of the roads, with power to make new roads and employ prisoners in their construction. But no system of road making has ever been introduced, and the whole subject has been left to be executed as chance dictated. In 1852 road supervisors were made elective by the people, at the annual election in January. This change worked no improvement in the roads, as the road supervisors, in order to remain popular, required the least possible amount of labor, and in many districts an hour or two of work in the morning was considered as a compliance with the road law. Under this law the road supervisors were pretty much to themselves, and though accountable to the Minister of the Interior, they considered favor of their constituents of more importance. This law was found productive of more evil than good, and during the last session of the legislature a new road law was passed, which goes in to force on the 1st of January 1857. This new law gives to the Minister of the Interior the appointment of road supervisors throughout the Kingdom, who are subject to such general instructions (we suppose in

regard to the construction of roads) as he may issue... (The Pacific Commercial Advertiser, September 25, 1856)

April 6, 1858

L. Kaina, Road Supervisor for the District of Puna to Lot Kamehameha, Minister of Interior.

...You asked me for the remaining money of the Puna Road Tax to be forwarded to you. There is no money remaining. I was asked for the remainder of the money for the years 1858 and 1859. In my thoughts there is no money that was received for these years; because no people paid the money. They worked instead. I was also asked how much money would be needed to make the roads good again in these years. *Here along the pahoehoe flats of Hopoe, \$300.00.* There are no people there. The work can be done on the *pahoehoe* of Panau and Kealakomo for \$300.00. Totaling more than five miles. These are the things needed to improve the road, hammers, crowbars and chisels. (Subject File – Roads Hawaii; translated by Maly)

**Chas. Gulick, School Inspector; to Department of Public Instruction
“1865 – Report on Hawaii; Inspector Gulick’s Report”**

...I left Hilo on the 16th of August and proceeded into the district of Puna and on my way visited the following schools.

Keaau. *A thatched stone hovel, a la East Maui, standing on private grounds, while the school lot lies unoccupied close by, below the road, except by an equally distant building, called by courtesy a church. 16 scholars attended the examination; their reading and writing was very good, arithmetic and geography passable.* Thence to Makuu, another stone hovel standing on the original lot. This school I did not examine, it being out when I arrived... (Series 262 – Folder Hawaii - 1865:23-24)

August 30, 1865

James W. Austin and Charles Kanaina, Guardians of the Person and Property of William C. Lunailo mortgaged the *ahupua’a* of Kea’au, Puna, Island of Hawaii to Charles R. Bishop for \$9,500.00. (Bureau of Conveyances Liber 20:124)

1868

Petition by residents of Puna to F. W. Hutchinson, Minister of Interior:

We the people who signed our names below on this petition set before you and explain our thoughts to you:

L. Kaina is our road supervisor who has been removed, we humbly ask you to reinstate him as our road supervisor for the district of Puna because we have seen that he has improved much of the Government Road of this district... We do not doubt his work and you do not need to doubt it. You have set one road supervisor each for the districts of Kona, Kohala and Hamakua in accordance with the law. Here is something about the earlier petition that was set before you, There were several children below the age of 15 who signed their names to it.... [lists names of some of the youth] Please agree to our request and send your

response to us care of S.B. Puamana, Judge for the district of Puna...
(Subject File – Roads Hawaii; translated by Maly)

August 26, 1868

**L. Kaina (at Kilauea Lua o Pele), Road Supervisor, Puna; to
F.W. Hutchinson, Minister of the Interior:**

...I am your humble servant, L. Kaina, Road Supervisor of Puna. I have heard that some of the people of Puna have petitioned you to terminate my position as road supervisor... While I am not living in the Puna District, I can easily travel around the district and inspect the roads (*alanui*), and at the time that road work is being done, I travel to inspect the work.

The reason for their claim against me, is that they desire the work themselves, because they lack work and funds, and they desire the government work...

Here is one trouble with the road at Kalapana and Kaimu, I have met with the people there and request that a road be opened in another location. The tidal wave (*kai hoee*) was the source of this trouble. *I know that an appropriation of \$1,000.00 was given to the District of Puna. You have received my vouchers, and there are \$200.00 left in my hand. Perhaps some of that money can be used on this problem, to clean up the road at Kalapana and Kaimu, and some to be given to repair of a bad place on the shore of Panaewa. The problems in upland Panaewa have been taken care of...* (Subject File – Roads Hawaii; translated by Maly)

Aug. 29th, 1868

**R.A. Lyman, Lieut. Governor of Hawai'i; to
F.W. Hutchinson, Minister of the Interior:**

Describes travel along the coastal Puna Road to Hilo, and use of the road for transportation of goods from Puna to markets at Hilo; also comments on the need for construction of the Wailoa (Waiakea) Bridge.

...I would say that Hilo receives a little over \$2000.00 a year in cash for the road tax, and the District has 13 good sized bridges out of town to keep in order, and a number of small ones. Two of these have been rebuilt this year, and two more have got to be rebuilt within three months. *The district has not got money enough to build this bridge. Hilo can get along with it, but Puna, the poorest district on the island can not well do without it. As it is on the main road to Puna, and you can not ford the stream. And you can [not] go around it without traveling through a swamp and through the bushes for two miles. The produce of Puna comes across this stream, and they feel the want of the bridge very much, on coming in with loaded animals having to walk around for over three miles instead of coming on to good roads on the beach. A bridge 90 feet long is needed and a road way from the beach to the bridge of about 20 feet in length...* (Subject File – Roads Hawaii)

October 22, 1868

**J.W. Kumahoa (at Keahialaka, Puna), Road Supervisor;
to Honorable HW Wilimana (at Interior Department):**

...I herewith tell you of the work which was given to me by the Minister of the

Interior, that is the job of Road Supervisor of Puna. I began people working on the days assigned to road work in the District of Puna, in the month of December 1868 [sic – 1867].

The number of people I have put to work is 132. I have inquired how many people were put to work by L. Kaina, but have not been told. I heard that there is a petition by him (Kaina) regarding me. His alternate (Heleluhe) took the petition to the people for signatures... I keep the instructions you have given me, and that is the reason that some of the people mistreat me, because I honor the laws of the road work in my district... (Subject File – Roads Hawaii; translated by Maly)

July 16, 1869

**S.B. Puamana (Kaimu, Puna); to
the Minister of the Interior (F.W. Hutchinson):**

Describes work done on the first five miles (Kea'au-Waikahekahe) of the Puna Road (see also next communication of same date).

At the instruction of L. Kaina, "Go and survey the mileage of the road work which remains to be done by J.W. Kumahoa, Road Supervisor of Puna." Therefore *I conducted the survey it all as instructed, there are five miles. I inspected and understand the extent of the work at mile markers (kia mile) 1 and mile 5, those are the miles of the greatest and most difficult work. I think, based on my understanding, that it is right to pay for those miles, \$200.00, and for the three miles between, to pay \$400.00.* This is what I think... (Subject File – Roads Hawaii; translated by Maly)

July 16, 1869

**L. Kaina, Puna Road Supervisor; to
Minister of the Interior (F.W. Hutchinson):**

...S.B. Puamana went and surveyed and inspected the Government Road at place thought to need work and funding. He began the survey and inspection from the place called Waikahekahe and continued to Haena at Keaau, five miles. The nature of these miles is not the same. Inspection shows that in the first mile, the work will be difficult, and payment of two hundred dollars is right. The second mile at \$140.00, the third mile at \$130.00, the fourth mile at \$130.00, and the fifth mile at \$200.00. The combined total is \$800.00.

Here are the provisions needed by those who work on the road – 12 crowbars, 12 pickaxes, 12 shovels, 12 hammers, 12 (*koi kimo*) broad adzes, 12 (*kila pao*) steel chisels, and 12 (*koi lipi*) long adzes...

I have often seen this place, and it is justifiable to do road work there. The road will be changed at certain places, that is near the shore of Hopoe, and Aalama[nu], because the waves cover the road.... When the work is to begin, I will go directly there to supervise the work.... (Subject File – Roads Hawaii; translated by Maly)

January 7th, 1870

R.A. Lyman to Minister of the Interior (F.W. Hutchinson):

...I have received from S.B. Puamana the sum of one hundred and ninety five 50/100, dollars. Four 50/100 (\$4.50) dollars were paid for the freight of the

money & told from Honolulu.

Puamana says that he can [not] do the job for Eight hundred (\$800.00) dollars without losing money, as he can not hire men to work on the road for less than Fifteen 00/100 dollars a month.

Puamana thinks he could do it for \$1000.00 if it is only 6 feet wide. Folks who are well acquainted there, think he can not do it for that price.

Mr. Jones is going to Honolulu tomorrow, & perhaps he will be willing to take the job. He has a good gang of men on hand... (Subject File – Roads Hawaii)

January 8, 1870

S.B. Puamana; to Minister of the Interior (F.W. Hutchinson):

I have received in my hand, the two hundred (\$200.00), from the hand of R.A. Lyman, sent of the person who makes the road of Puna...I met with L. Kaina to give him the wages for the workers, and we agreed to pay \$10.00 each for the month. I searched for people to work, and only found 4 men who wanted to work for that pay, they cannot do the work (alone). We met again with L. Kaina to correct the wages for the workers, and offered the high wage of \$15.00 for the month, but found no men who wanted the work. Therefore, I suggested to L. Kaina that the road work should be set aside because there were not enough men to work.

Yesterday, January 7, 1870, I returned 195.50 to the hand of R.A. Lyman... (Subject File – Roads Hawaii; translated by Maly)

February 2, 1870

L. Kaina (at Kilauea), Puna Road Supervisor; to F.W. Hutchinson, Minister of the Interior:

...Because Mr. Jones has spoken to me about the Road of Puna, which you want me to make, there for I am writing to you.

The first mile, that is the place where the Road Supervisor worked up to, from there the work will begin, and it is the most difficult mile. If I take twenty men to work there, the work may not be completed in one month, with the work to be done as I think right. Based on my inspection, to undertake that mile, it would cost –

20 men 8 dollars for the month	\$160.00
Their poi	40.00
Their fish	20.00
Their shelter and such	10.00
	\$230.00

Therefore I need to ask for three hundred dollars for that difficult mile. And for the two miles in between, it is appropriate for me to ask for two hundred dollars because it is not too difficult, and for the two miles remaining, it is right for me to be paid three hundred dollars, because the work is similar to that of the first mile.

If I begin the work, I will do so and make the road good... (Subject File – Roads Hawaii; translated by Maly)

February 11, 1870

**S.B. Puamana, Judge, District of Puna; to
F.W. Hutchinson, Minister of the Interior:**

I wrote to you earlier that I would travel to Honolulu in the month of February so that we could settle the work on the road in Puna. But because I have heard that the work has been given into the hand of another, I am uncertain is I should go to see you in Honolulu. Therefore, I inquire of you, was the work given into the hand of another? If the work was not given to another, I would like to travel to Honolulu to meet with you. Please write to me... (Subject File – Roads Hawaii; translated by Maly)

March 5th, 1870

**Chas. L. Gulick, Interior Dept. Clerk;
to L. Kaina, Esqr., (at Kilauea, Hawaii), Puna Road Supervisor:**

...I am directed by the Minister of the Interior to inform you that your communication of the 2nd of February last, has been received. *The Minister consents to your request for three hundred dollars for the first mile, and two hundred dollars for the two miles in between; he desires that you commence the construction of said mile immediately, but as to the remaining two miles, same to be left until further instructions from the Minister, if he should decide to commence operations thereon.*

There is not sufficient appropriation for the Roads in the District of Puna, but, the Minister intends to ask this Session of the Legislature for an appropriation sufficient for the roads of that District. That is the reason for deferring operations at this time, on the two remaining miles... (Interior Department Letters – Volume 10:134)

March 5th, 1870

**Chas. L. Gulick, Interior Dept. Clerk;
S.B. Puamana, District Judge; Puna, Hawaii:**

...By direction of the Minister of the Interior, I beg to make the following statement.

Your communication of the 11th of February last, has been received. What you have heard is true, it has been given to another.

You state in one of your letters some time ago, that you cannot do that work. As you have delayed it too long, the Minister therefore has offered this work to L. Kaina... (Interior Department Letters – Volume 10:135)

March 12, 1870

**L. Kaina, Puna Road Supervisor; to
Chas. L. Gulick, Clerk of the Minister of the Interior:**

...I have received your letter at Hilo and see the Minister of the Interior has agreed to my constructing three miles of the road – and that I am to take the money from the hand of R.A. Lyman. I am taking the money and going to Kilauea to get our men, and will take the workers, I will work diligently with all of my people on the three miles, and will await further response then do additional work.

Please tell His Excellency, the Minister of the Interior that the *lua pele* (volcano) is very full, it rose perhaps on the 19th of February, past and overflowed the top. It is very fine to look at the eruption at this time... (Subject File – Roads Hawaii; translated by Maly)

[Letter of March 7th, 1870 to R.A. Lyman, Lieut. Governor of Hawai'i, on above matter; requesting him to give money and tools to Kaina.]

June 20th, 1870

**Chas. L. Gulick, Interior Dept. Clerk;
to W.H. Reed, Esqr., Hilo, Hawaii:**

...I am directed by His Excellency the Minister of the Interior to ask you to examine the work of L. Kaina on the road in Puna, which he has just finished, and report to him concerning the same... (Interior Department Letters – Volume 10:192)

June 20th, 1870

**Chas. L. Gulick, Interior Dept. Clerk;
to L. Kaina, Esqr., Kilauea, Hawaii:**

I am directed by the Minister of the Interior to acknowledge receipt of your favor of the 13th of June, in relation to the road constructed by you in Puna. The Minister has appointed W.H. Reed of Hilo, to examine the road and report to him.

The Minister now wishes you to commence work on the remaining section of said road, in accordance with the terms of your former agreement... (Interior Department Letters – Volume 10:192)

February 17th, 1871

**J.W. Kumahoa (at Keahialaka), Puna Road Board; to
F.W. Hutchinson, Minister of the Interior:**

I request that you provide me with ten shovels, ten crowbars, and ten hammers.

I explain to you that I have been hired to construct two miles at four hundred dollars, that is why I ask your for these items.

Work is beginning at Panaewa [i.e. coastal section of the road] with ten men... (Subject File – Roads Hawaii; translated by Maly)

February 22nd, 1871

**R.A. Lyman, Lieut. Governor of Hawai'i; to
F.W. Hutchinson, Minister of the Interior:**

...J.W. Kumahoa Road Supervisor of Puna has made a contract with 10 men to make 2 miles of the road in the woods between here and Keau [Kea'au] in Puna. The two miles they propose to make are very nearly impassable now, as the road is so full of sharp stones.

He wishes to take 10 crowbars, 10 shovels, and 10 stone hammers from the tools that Mr. Kaina had when he was at work on the Puna road. I have directed him to take these tools as soon as they are ready to use them... (Subject File – Roads, Island of Hawaii)

May 17th, 1871

**R.A. Lyman, Lieut. Governor of Hawai'i; to
F.W. Hutchinson, Minister of the Interior:**

...I have this day made a contract with the natives to make another mile of the Puna Road, and have drawn on you in favor of F.S. Lyman for one hundred 00/100 (\$100.) dollars amt. to be paid in advance to the men. The other \$100.00 is to be paid to them when the mile is accepted. They are to have \$200. for the mile... (Subject File – Roads Hawaii)

June 1st, 1871

**J.W. Kumahoa (at Panaewa) Puna Road Board;
to F.W. Hutchinson, Minister of the Interior:**

...I explain to you that I was hired to make two miles (of road) at four hundred dollars – \$400.00, two hundred dollars for each mile. Those are the miles in Panaewa, near Hilo. There remains to be made three and a half miles from Keaau and reaching the road of L. Kaina at Hopoe. There is a great amount of work to be done to open this road, it is a very treacherous place. The laborers think that these miles will cost one thousand two hundred dollars - \$1,200. Four hundred for the first mile, four hundred for the second mile, two hundred for the third mile, and two hundred for the half mile... (Subject File – Roads Hawaii; translated by Maly)

June 2nd, 1871

F.S. Lyman to F.W. Hutchinson, Minister of the Interior:

...At the request of a man by the name of Uha, I write to you in his behalf, in reference to the Road in Puna, of this Island. Uha wishes to make the remaining two miles, next adjoining the three miles made by L. Kaina, during last year; and he is ready to contract to make the same for the sum of six hundred dollars, and is anxious to do the job... (Subject File – Roads Hawaii)

August 16th, 1871

**R.A. Lyman, Lieut. Governor of Hawai'i; to
F.W. Hutchinson, Minister of the Interior:**

...I have this day drawn on you in favor of J.O. Dominis for One hundred 00/100 (\$100.) dollars, to purchase animals to work on the Puna road.

The men are getting along very fast with the Puna road. I think they will finish it in about three weeks from now... (Subject File – Roads Hawaii)

December 28th, 1871

**D.H. Hitchcock, Sheriff of Hawaii; to
F.W. Hutchinson, Minister of the Interior —**

**Evidence from the record of the Hilo Police Justice in the case of Rex vs. J.H.,
Kumahoa:**

...Charged with fraudulently commuting with persons on their days of labor on the Road in the District of Puna, Hawaii during the past year...

The following testimonies of S.B. Puamana and selected defendants—recorded in the above cited communication—describe nature of work undertaken on the Waikahekahe-Maku'u portion of the Puna Road:

...Puamana Esqr. S.

Lives in Puna, Hawaii – Am Tax Collector for this year. The Road Supervisor gave me a list of names of men who had worked their Road Tax — this is the list he gave me etc. I find on it Kauna, Papa and Mokuohai as having worked out their 6 days Road tax. These three men live in Kapoho Puna Hawaii, they were all assessed for Road tax and it was worked out as per list given me by Kumahoa and I did not collect their tax.

Kaluna S.

Lives at Kapoho Puna — knows Kumahoa, was taxed Road tax worked it out at Makuu Puna. I worked two days there. I worked on the Road at fixing it. I repaired 90 fathoms. On Tuesday we left our place to work & commenced on that day, afternoon about 4 I left off work. On Wednesday morn continued & afternoon we went back to Kapoho. There was between 30 to 40 on the road working the 90 fathoms. Kumahoa did not talk to us about votes or voting...

Kalawe S.

Lives at Kapoho Puna Hawaii. Kumahoa the Road Supervisor worked me two days for this years tax. I commenced labor in the morning and worked till even. The same in the next day. We were given a tax to the repair & fill the road...This was at Waikahekahe Puna... (Subject File – Roads Hawaii)

December 29th, 1871

R.A. Lyman, Lieut. Governor of Hawai'i; to

F.W. Hutchinson, Minister of the Interior:

...J.W. Kumahoa Road Supervisor of Puna, has been fined \$40. by the Police Justice of Hilo for not working 8 men the number of days and hours required by law. He has appealed to the Mag. term of the Circuit Court. I understand that the Sheriff has about 30 more cases to bring against him. The Sheriff has discharged him from the office of Dept. Sheriff of Puna.

Shall I pay over the Puna Road tax to him or not? I am afraid that he has been trying to obtain votes in his manner of working the road, as he is one of the principal candidates for election as Representative for Puna... (Subject File – Roads Hawaii)

December 30th, 1871

J.W. Kumahoa to F.W. Hutchinson, Minister of the Interior:

...I have been prosecuted by malicious intent, for releasing people from their road tax, and sentenced by D.H. Hitchcock the Police Justice of Hilo, but I have appealed to the next session of the jury term of the Circuit Court that is to take place in May 1872... I will be down there in person when the Legislature sits and will give you full particulars of my case now pending before the courts, devised by my enemies for being a red skin and a Hawaiian; and having

received by your generosity a government position... I feel that I have done right in the face of the law... (Subject File – Roads Hawaii)

January 6th, 1872

R.A. Lyman, Lieut. Governor of Hawai'i; to

F.W. Hutchinson, Minister of the Interior:

...What the Judge said to Kumahoa was that it was a notorious fact that most of the Road Supervisors from Hawaii to Niihau make use of the office to get elected as members of the Legislature... (Subject File – Roads Hawaii)

May 22nd, 1872

R.A. Lyman, Lieut. Governor of Hawai'i; to

F.W. Hutchinson, Minister of the Interior:

...The Jury acquitted J.W. Kumahoa, Road Supervisor of Puna of the charge of fraudulently freeing natives from working out their road tax. It seems to have been an error of judgement on his part, more that any intention of not working the men properly. I speak of the case that was brought to trial... Mr. Kumahoa wishes to know whether you desire him to continue in the office or not?... (Subject File – Roads, Island of Hawaii)

June 1872

Petition of signed by 50 Native Residents of Puna to F.W. Hutchinson, Minister of the Interior, in support of J.W. Kumahoa:

Petitioners listed six reasons why the case was brought up and why they supported Kumahoa. Among those reasons was:

...5. *This Road Supervisor is a good steward of the Government funds. We have seen with our own eyes, that we have gotten a good road through Panaewa. We have not before seen such a good road as this in this place, done by any supervisors before...* (Subject File – Roads Hawaii; translated by Maly)

September 28th, 1872

Charles Kanaina and Charles R. Bishop, Guardians of William C. Lunalilo leased the *ahupua'a* of Kea'au, Puna, Island of Hawai'i; to Obed B. Spencer. The lease was granted For a period of ten years, beginning September 1, 1873, at a yearly rental of \$500.00. (Bureau of Conveyances Liber 36:354)

September 1, 1873

O.B. Spencer to J.O. Dominis & R.A. Lyman

Assignment of Lease & Bill of Sale (Keaau, Puna)

O.B. Spencer assigns lease and sells personal property to J.O. Dominis and R.A. Lyman, including the following properties:

The lease of the land known as Keaau in the District of Puna, Island of Hawaii and all other leases of land held by me in the District of Puna aforesaid together with all buildings and improvements to me belonging upon the said lands, and also all my flock of cattle running on the land of Keaau aforesaid

and on the adjoining lands branded “OS” or “ ” or “ ” together with my brand “OS” and also all of my flock of goats and sheep running on the land of Keaau aforesaid and the adjoining lands and also my fowls and hogs on the lands aforesaid. And also the following horses [names 10 horses; also lists two foals, four mules, seven donkeys] ...Also a lot of lumber and shingles, a table and potatoes growing... (Bureau of Conveyances; Lib. 37:488-489)

September 10, 1873

J.O. Dominis & R.A. Lyman to O.B. Spencer

Chattel Mortgage (Land of Keaau).

Including — Three hundred (300) head of cattle branded “OS”; and four thousand (4000) goats now in the possession of the parties of the first part on the land of Keaau and the adjoining lands in the District of Puna and Hilo Hawaii... (Bureau of Conveyances; Lib. 37:489-490)

May 31, 1873

Petition of signed by 49 residents of Puna; to

E.O. Hall, Minister of the Interior:

Asking that J.W. Kumahoa be removed from the position of Puna Road Supervisor (noting that the petition was sent to F.W. Hutchinson in 1872, but went unanswered). (Subject File – Roads, Island of Hawaii; translated by Maly) (see below for details of petition and responses to claims.)

1873

**Petition signed by approximately 60 native residents of Puna; to
to E.O. Hall, Minister of the Interior:**

In support of J.W. Kumahoa. Petitioners provide the following chronology of work accomplished in Puna, under J.W. Kumahoa —

- I. In the year 1870 Kumahoa opened the road at Kauaea. Following trouble from the seas and because there were no people the road was not rightly repaired. In this year, 1873, the road was reopened. We have seen this road, it is good and a blessing to us.
- II. *He made the road at Makuu. It was a very treacherous place before, but through his work is good to this time.*
- III. *In the year 1870, he was hired to make the road from Kumu to Haena, three miles [for] \$400.00, it is a good road and the Government was gotten through because of his work.*
- IV. *In the year 1871, he took the men out and worked on five miles in a very bad place in the road made by L. Kaina at Waikahekahe. That is the road made for \$700.00, three miles. At this treacherous place, he was accused. We disagree, the Government is not at a loss because of him.*
- V. *In the year 1872, he again took men out on the five miles to work on the treacherous places of the Road made by S. Kipi at Haena, a distance of one and three-quarters miles for \$900.00.*

Therefore we humbly ask you not to terminate the Good Road Supervisor of this District... (Subject File – Roads, Island of Hawaii; translated by Maly)

**October 1873 to January 1874
Public Instruction Files, Puna School Report:**

Teacher	Daily Salary	Number of Students	Location of School and Condition of Building
N. Kanihoa	50 cents	18	Makuu – Good
S.N. Pa & Kamakahiki	50 cents	8	Keaau 1 – not very good
F.H. Nihoa	50 cents	13	Ola (Olaa) – very poor

J.E. Elderts, School Supervisor, for the district of Puna also recorded that in the same period, there were: two deaths at Maku'u, with no births; one birth at Kea'au (no deaths); and two births at 'Ola'a (no deaths). (Series 262 – Hawaii Island; Box 4, Folder of 1873)

**January 1, 1874
J. Kapaakaula, Road Supervisor, Puna; to
E.O. Hall, Minister of the Interior:**

...I, your servant am pleased to inform your about things in the things that you have placed me in charge of, in the District of Puna, Hawaii.

The Government Roads of this District; are laid out straight (*pololei*) and graded (*iliwai*), with gradual rises. I have faith that most of the repairs can be made by the people of this District. The Road Supervisors remain diligent... The only small problems are in the places that are set far off, places where the natives are very attached to; these are the places where there is a need for money to help in this District.

There are areas of *pahoehoe*, some that are rocky (*makaili*), others with light soil, the blessing of the roads in this District is that it is somewhat barren. The places with a lot of soil are the places which become very boggy in this District... So by this you are informed of the bad places and the good places in this District... (Subject File – Roads Hawaii; translated by Maly)

**August 18, 1874
Queen Dowager Emma Kaleleokalani; to
J.O. Dominis and R.A. Lyman
Indenture of Lease (Waikahekaheike, Puna):**

...The Ahupuaa of Waikahekaheike, according to its ancient boundaries with all the rights, easements, and appurtenances...for the term of Ten years to commence from the first day of July 1874... (Bureau of Conveyances Liber 40:230-232)

On September 21st, 1874; R.A. Lyman and J.O. Dominis consolidated their leases and cattle branded "OS" under an Assignment of Lease to R.A. Lyman, J.O. Dominis, and C.R. Bishop (Liber 40:265-267).

September 14, 1874

Charles Kanaina (heir of King Wm. Lunalilo) to R. A. Lyman

Indenture of Lease (land of Keaau, Puna):

...All the land of the *ahupuaa* in the District of Puna, Island of Hawaii, called "Keaau", according to its ancient boundaries, including its *konohiki* rights to the fishery...for the period of twenty-five years, beginning the first day of October 1874... The party of the second part agrees to repair the walls (*pa aina*) as required by the Law, that have been built on this land... Furthermore, here are several things agreed to by the two parties - the pandanus trees (*kumu puhala*), guava (*kuawa*), and *amaumau* (ferns) growing in this *ahupuaa* may be cut; but the other trees may not be cut for sale. The trees of different varieties may not be cut and sold to others, or taken out of this land. Furthermore, such trees shall not be cut or otherwise damaged, the coconut trees (*niu*), breadfruit trees (*ulu*), and trees of any variety that have been planted, also retained outside of this lease are the property rights of the tenants approved by the Land Commissioners... (Bureau of Conveyances Liber 40:240-242; translated by Maly)

See also Bureau of Conveyances Liber 40:267 recording transfer of lease and partnership of R. A. Lyman, John O. Dominis, and Charles R. Bishop, constituting the firm of R.A. Lyman & Co., on September 21st, 1874.

September 22, 1874

W.L. Green, Minister of the Interior to R.A. Lyman

Indenture of Lease (various lands in Puna):

...All those tracts or parcels of land situated in the district of Puna Island of Hawaii known as Makuu, Halona, Keonepokoiki, Kaohe and Popoki for the term of Ten (10) years from the first day of January A.D. 1874...Said party of the second part hereby further agrees that he will not...cut, nor allow to be cut, any timber or fire wood from any portion of these lands for sale; and that here not gather nor allow to be gathered, *Pulu* from these lands or any part thereof... (Bureau of Conveyances Liber 40:250-251)

October 31st, 1874

J. Paakaula, Road Supervisor, Puna; to

E.O. Hall, Minister of the Interior:

In explanation of the Road Work in Puna From January 1 to October 31, 1874, Paakaula reports that:

... no money was received from the Minister of Interior, nor from Road Taxes for road work in Puna during the year of 1874;

two hundred three (203) people worked their Road Tax requirements; and total 1218 man-days were worked on the roads;

I worked a total of 79 days with the people...

About half of the roads are in fairly good conditions; and I have faith that the remainder of the work can be accomplished by the new Road Supervisor, L. Kaina... (Subject File – Roads, Island of Hawaii; translated by Maly)

January 21, 1875

Hawaiian Government Survey Files

John. M. Lydgate to W.D. Alexander:

Proposing to conduct work for the Government, including the survey of the District of Puna and the Puna Government Road. His application to undertake the work as approved, and Register Map 583 (*Figure 13*) was prepared as a result of the survey work:

...I have a conditional proposition to make you as superintendent of the Gov't. Survey.

I rather expect to leave the Islands for the States in a short time – probably inside of a month, and the condition and proposition is that if I should have time to do the amount of work necessary, I should like to furnish the Gov't. Survey for the Sum of \$100.00; 1st the coast line of that part of the Island lying between the town of Hilo and the land of Keaiwa in Kau. Some 65 or 70 miles I should say. Of course I can't afford to give it with the accuracy that I know is required in the final Gov't. Survey work. It will be the nice miniature that are wanting, not the outline however.

2nd I will give the two Gov't. Roads; the one from Hilo direct to the Volcano and the other round by the shore. These will be given from actual survey. Also the roads from the Volcano to Kapapala and Keauhou indicated pretty correctly.

3rd The main topographical features – hills, craters, &c.,; and the general nature of the country—whether wooded or not, recent lava flows &c; of the regions above named, extending from Hilo to Keaiwa...

I think you will see at one that these results represent a large amount of work, as indeed they do, and were it not that I have already data from which a considerable part of it can be derived I could not think of doing it for that sum...

I will also indicate as far as I am able what I consider the best plan of triangulation for that part of the Island, and will mile the Puna Road if the Minister of the Interior will pay the expense of putting up marks – not over \$4 or \$5 I should say... (DAGS 6 - Hawaiian Government Survey Files)

February 8th, 1875

Charles T. Gulick, Interior Department Clerk; to

Jno. M. Lydgate Esqr., (Surveyor)

...Sir, Professor Alexander passed over to me your application to survey the Coast line of Puna, roads, &c., &c., and I am desired by his Exlcy to say that your propositions is hereby accepted, and you are authorized to proceed with the survey, sending full notes with map... (Int. Dept. Vol. 12:640)

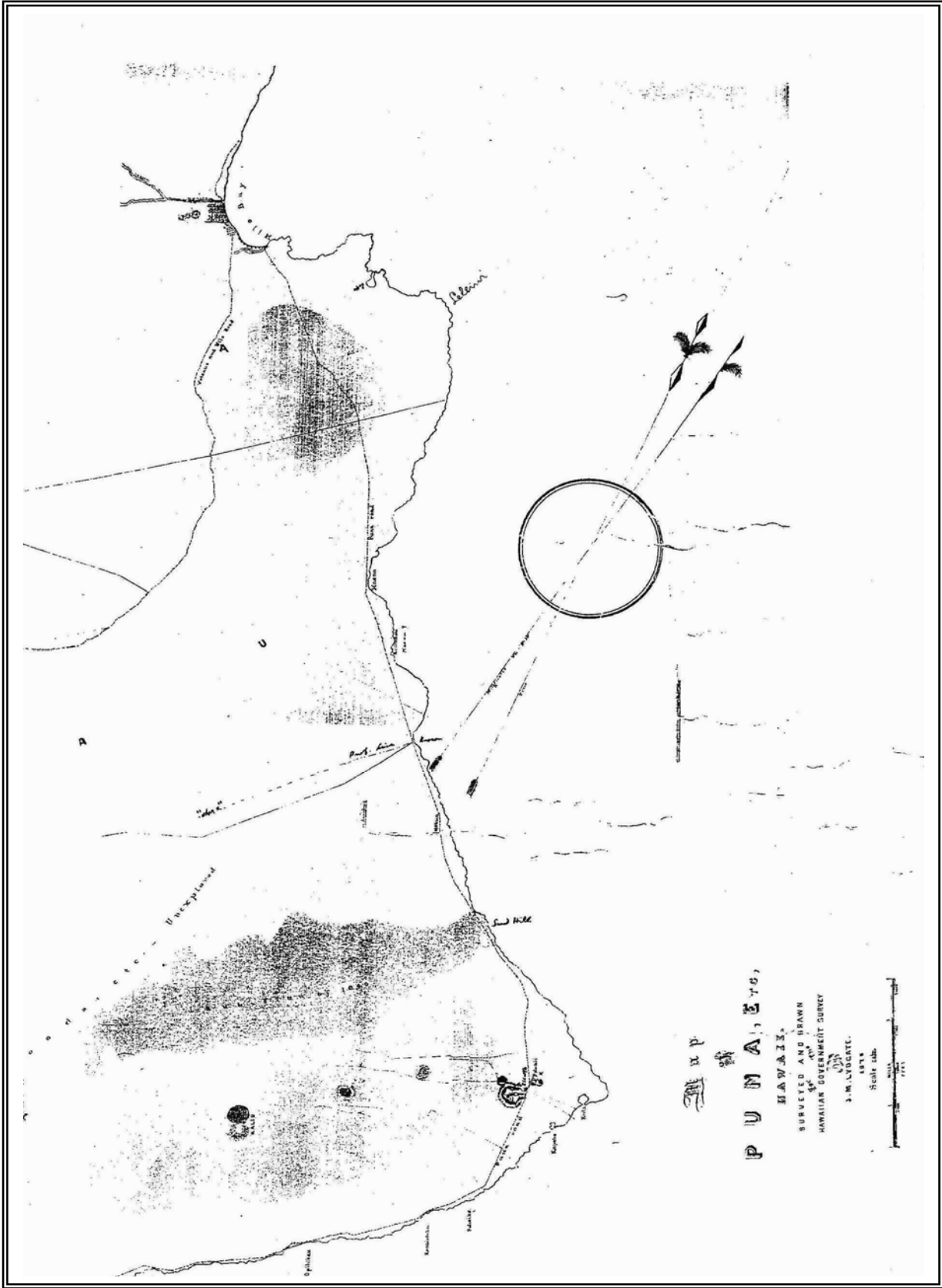


Figure 13. Portion of Register Map No. 583; 1875 – J.M. Lydgates Survey of the Puna Road (State Survey Division – not to scale)

May 4th, 1875

**J. Paakaula, Road Supervisor, Puna; to
E.O. Hall, Minister of the Interior:**

...I have presided as the Road Supervisor for the District of Puna, below you from A.D. 1873 to 1874. I took this position with faith in the goodness of the people. I terminated my position in October of 1874, not as a result of my not fulfilling my work, but by receipt of the termination letter of the Minister... I do not desire to return to the work.

I worked with 203 people of the district of Puna, a total of 79 days, and no work was done by the one who took my job through the last day of December 1874... Perhaps you did not get my letter (Oct. 31, 1874), so I retransmit my report to you at this time. Please answer... (Subject File – Roads Hawaii; translated by Maly)

October 21st, 1876

R.A. Lyman, in consideration of \$8,333.000 sold his interest in the lease and business interests in the *ahupuaa* of Kea'au, Puna, Island of Hawaii, to Charles R. Bishop. (Bureau of Conveyances Liber 48:115)

December 29th, 1876

Charles R. Bishop, in consideration of \$120,000.00, assigned lease and business interests in the *ahupua'a* of Kea'au and vicinity to the Hawaiian Agricultural Company. (Bureau of Conveyances Liber 48:146)

April 28th, 1877

**H.R. Hitchcock, Inspector General of Schools; to
C.R. Bishop, President of the Board of Education:**

Hitchcock reports on his findings of an inspection of the schools in the districts of Puna and Ka'ū—recording the diminishing enrollment of the schools at Keauhou, in Kea'au and Maku'u, and also described the difficulty the students had in keeping animals out of their cultivated fields; the produce being used to support the school operations. Importantly, Hitchcock provides readers with insight into the nature of walled lots for which no gate-way exists:

...The schools in Puna, have, some of them, deteriorated slightly from their former good standing, owing to the resignation of some of the best teachers. Raw recruits have taken their place, and have not yet become accustomed to teaching... *The schools at Keauhou and Makuu are both very small, and as they are within three miles of each other, I have told the school agent to unite the two under one teacher, who shall teach two or more hours at each place, daily.* The wages to be advanced to 62 ½ cents per diem for a good man. This will make a saving of 37 ½ cents per diem, which I regard as good as wasted now...

Puna is a district overrun by cattle, goats and hogs, which regard not stone walls, and patiently wait until the crops begin to be valuable, then appropriate them largely to their own use. This has a depressing effect upon the little workers, who add cubits to the height of the walls, until it becomes a matter of

peril to the inspector to climb over them in order to enter the school house...
(State Archives – Board of Education Series 262, Hawaii Reports – 1877: 1 & 2)

1877 - Report of the Royal Commissioners on Development of Resources District of Puna:

...This district is largely composed of *a-a* and lava, and no large agricultural enterprises, except stock raising are being prosecuted at present. The natives of the district, however, look cleanly and contented, and raise some coffee, cocoanuts, &c. The cocoonut grows spontaneously, and its cultivation might be indefinitely extended till the export of copra would be quite important. There is a little boat landing at Mawae, Kula, near Eldart's ranch, to which the present entrance is dangerous in consequence of having to double round a reef of rocks, a part of which might be blasted out, opening a direct channel to a good boat harbor... The roads leading to the harbor would need to be improvement. The roads generally in the district are good... [Pacific Commercial Advertiser – May 5, 1877]

August 13, 1877

J. W. Kumahoa, Road Supervisor District of Puna; to

J. M. Smith, Minister of the Interior:

...I now have the time to respond to you...there is trouble along my section of the Government Road in the District of Puna, Hawaii, the animals are destroying the road and laying it to waste.

The reason for this trouble is the weakness of the Road Supervisor of Puna and cannot undertake the work, because of this difficulty, therefore, I have seen a man who can undertake this work, and his name is T. M. Naahumakua. He is the one I feel is right... (Subject File – Roads Hawaii; translated by Maly)

September 1st, 1877

Hawaiian Agricultural Company, in consideration of \$33,000.00, assigned lease and business interests in the *ahupua'a* of Kea'au to J.E. Eldarts and William H. Shipman. (Bureau of Conveyances Liber 51:222)

October 15, 1877

R. Rycroft (Pohoiki and vicinity rancher and farmer); to

J.M. Smith, Minister of the Interior:

There are running at large in this district quite a number of Jacks belonging to the Government and are never used, they were brought to work on the roads but the object failed.

I write to ask if you will dispose of them, I should be willing to buy them by the lot or I will collect them and pay so much a head. There are from 15 to 20 of them according to what the natives say... (Subject File – Roads Hawaii)

1877

Statistical Table of the Hawaiian Churches for 1877 — Along this section of the Puna Coast line, identifies only the Church at Pū'ula, J.N. Kamoku, pastor; a total of 141 members in good standing (Hawaii State Archives, Lyons' Collection; M-96).

August 1880

J.F. Jordan appointed to position of Road Supervisor for the Districts of Hilo and Puna. (Subject File – Roads Hawaii)

October 1, 1880

**J.F. Jordan, Hilo and Puna Road Supervisor; to
H.A.P. Carter, Minister of the Interior:**

Communication describes Hilo Road work and reports that “We are not doing anything in the Puna District...” (Subject File – Roads Hawaii)

October 11, 1880

**J.F. Jordan, Hilo and Puna Road Supervisor; to
Judge F.S. Lyman, Hilo:**

J.F. Jordan was appointed to position of Road Supervisor in 1874. By the time of this writing, he had also been given the position of Road Supervisor in Puna District. Herein, Jordan reported that in 1874, he spent two months working on the new bridge at Waiakea; and in regards to employment of prison labor on road projects:

...I could see that our road money was in danger and that the prospects of our accomplishing much with the prisoners under that state of affairs would be very poor so I made those facts known to the Minister of the Interior who had once authorized me to ship a gang of men for the Hilo Road and let the prisoners go which gives us today, Peace, Pleasure, and economy of labor...

...I have been trying to avoid doing any work on the Puna or Volcano Road other than what is actually necessary as that which is mostly required on the Puna and Volcano Road is quite hard to get, and that is fine dirt or gravel, the country being mostly stony, now there is an appropriation of \$10,000 for the Volcano Road and \$3000 for Puna, if I remember right, which if spent for hand labor will not accomplish but a very little, owing to the fact that gravel has got to be made out of stone, whereas if \$8000 is laid out for a steam stone crusher which is also a road roller everlasting roads can be built to the Volcano and also in Puna, and about five times the amount of work can be accomplished with the money and still leave a valuable tool which will do good work for many years to come; with only about five men required – 1 to attend the crusher, 1 the engine and 3 to bring stone by cart or otherwise. With such machine the people of Hilo might well expect to have good streets otherwise their money will go to the hands of Chinese for not only a less quantity but a much poorer quality of work... (Subject File – Roads Hawaii)

October 26, 1880

**Petition of 101 native residents of the District of Puna;
to H.A.P. Carter, Minister of the Interior:**

...We the commoners of the District of Puna, Island of Hawaii, with great trust in your leadership...petition you, asking that you respond to us and help us because for several years past, we have had no help from the Government from the troubles and difficulties in our District...

- ...2. *For several years past there has been no new repair work done on the roads in our district, with this problem we have been patient;*
3. We have a good harbor in our District but no buoys, chains and anchors to tie up the ships that visit there;
 4. There is great trouble and we have had much patience with postal delivery because of the many miles from Hilo, Puna and Waiohinu, Kau, Hawaii;
 5. This trouble is that there are almost 15 miles that some people have to travel in our District to get their mail or newspapers at the Post Office in Hilo.

Therefore with this explanation and the appropriations granted by the Legislature of 1880 we are hopeful that your excellency will help us in this District...

1. – Courthouse and Jail	\$800.00
2. – For the Roads and Pathways of Puna	\$3000.00
3. – Buoys, anchors and chains for the Harbor of Pohoiki	\$500.00
4. – Transport of mail from Hilo, Puna and Kau	\$14.00 per week
5. – Transport of mail from Hilo and Kilauea	\$3.00 per week...

(Subject File – Roads Hawaii; translated by Maly)

December 13, 1880

Petition of foreign and part-Hawaiian residents of Puna District; to H.A.P. Carter, Minister of the Interior:

...In the matter of J.F. Jordan – Whereas we, your petitioners are aware of a certain petition in circulation, and soon to be presented to your Excellency, requesting the removal from office of our present Road Supervisor, and whereas, we are satisfied that the said petition is an unjust one, and that the present Road Supervisor has faithfully and conscientiously performed the duties of his office during his incumbency.

We your petitioners do humbly pray that said officer be sustained and continued in his present position... (Subject File – Roads Hawaii)

February 10, 1881

Abraham Kapepa, on behalf of the native residents of Puna; to H.A.P. Carter, Minister of the Interior:

...I have been instructed by the native residents of the District of Puna to inform you that it is not right for there to be only one Road Supervisor for Puna and Hilo. Here are the reasons:

- I. The Road Supervisor remains only in Hilo all the time leaving Puna with *no work done for four years;*
- II. *We have not seen him to this time, for the Road Supervisor is always working in Hilo and does not think of the District of Puna;*
- III. It is not right for Hilo and Puna to have only one Road Supervisor. It was not that way from before, it was always that there was a Road Supervisor for Hilo and a Road Supervisor for Puna;

IV. *If it continues for long that there is no work done on the Roads of Puna, the damage done by the Cattle will greatly increase. There is much rock on the roads. What of the \$3,000 set aside for this District for the Legislature?*

V. *If there is only one Road Supervisor from Hilo and Puna he will not come to Puna because there is so much work for him to do on the roads of Hilo. So I saw several weeks ago in Hilo Paliku...*

Here is who we think would be a good Road Supervisor and we trust in his ability to make it right, it is Rev. J.N. Kamoku. Here is the work and tasks that he has at this time. He is a Minister and a member of the School Board for this district and Assistant Superintendent of the School. He is a verifier of Labor Contracts, a member of the Puna Tax Board for 1880, and he is well off... (Subject File – Roads Hawaii; translated by Maly)

February 12th, 1881

J.F. Jordan, Road Supervisor Hilo and Puna Districts; to H.A.P. Carter, Minister of the Interior:

...We now have 35 men at work in the Hilo District, the work is progressing rapidly and very satisfactory to me...we have three gangs, D. Kamai has 18 men, P.H. Apana has 10, our gang which is doing bridge work consists of 1 mason and 6 laborers. We are all working between Onomea and Hilo. P.H. Apana agrees to take his gang on to the Volcano road. I have engaged a few day men to go with me on the Volcano and Puna roads, for the purpose of making a thorough examination of the roads; where and how far apart the places are, where material can be got and the best means of getting it to the road &c. On my return I shall report to you... (Subject File – Roads Hawaii)

March 1st, 1881

J.F. Jordan, Road Supervisor Hilo and Puna Districts; to H.A.P. Carter, Minister of the Interior:

Herein, Jordan presents perhaps the earliest formal communication suggesting that a portion of the *makai* Puna Road be dropped (the section from Kea'au through lower Waiākea); and that a new road from Kea'au to the Kūkulu vicinity of the Hilo-Volcano Road be developed.

...Your favor of Feb. 16th, came duly to hand, wherein you spoke of a communication from Puna District. It is true that I have done but little work on the Puna road, owing to the fact that the road is now in as good condition as it has been for the past six years. I have talked from time to time with Shipman & Eldarts and nearly all the best natives in the District asking their opinion as to what would be the best to do, they do not seem to know anything further than to take the stones out of the road and cut the bushes, which has been done, with the exception of a little on the Hilo end, which has been left on account of changing the road. Your Excellency are aware of the fact that the Puna road like the Volcano road, was built of course stone with a small sprinkle of gravel which had to be carried a long ways, put in the middle which made a trail. This was done when labor was cheap, so that now to repeat this work and accomplish something which would be of benefit to the Public as well as a

credit to the operators, requires entirely different manner of doing the work. With our tramway which is now about ready, we can carry gravel from $\frac{1}{2}$ to $\frac{3}{4}$ of a mile quite cheap, but there is only a few places on either road where gravel can be got. Since I first went over those roads, my idea has been the we require a small stone crusher and road roller. It is my candid opinion that we can accomplish fully three times as much work with the money left, after buying a small stone crusher and steam Road Roller when used in connection with our tramway. Owing to the fact that I have been but a short time in Govt. Employ and am feeling my way in to this road work, also knowing that many extensive mistakes are often corrected by the kind advice of good people.

I have talked with Judge Lyman, S.L. Austin, Shipman, Eldart, Richardson, Kennedy and many others who authorize me to use their names in recommending a stone crusher for the volcano and Puna roads, with which to build a six or eight foot road. We would not require a very heavy crusher as we can find an abundance of small stones. There is no hard rock in the District. Blake of New Haven Conn. builds such a crusher as we require... (Subject File –Roads Hawaii)

March 2nd, 1881

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
H.A.P. Carter, Minister of the Interior:**

...I did not have time to write by yesterdays steamer as I should have done, owing to the fact that I did not arrive in town until a few minutes before the steamer left. *I should have stated that I had been over the first 16 miles of the Volcano Road, also the Puna Road to a point 17 miles from Hilo. After a careful inspection of both roads I find that there is not gravel or fine material enough on that portion of either road to justify any calculations on doing the work promised by the amount of money appropriated.* So that materials must be made by hand or machine. Our bridge casting and car wheels arrived in good order. We are building our tramway out of 2 x 4 we shall only lay it as fast as we make road bed therefore it will have a solid foundation and will not be likely to break... ..I shall try and go to the south end of Puna District as soon as I can and have a talk with Rev. J.N. Kamoku and see what is required... (Subject File – Roads Hawaii)

March 26th, 1881

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
H.A.P. Carter, Minister of the Interior:**

...Your favor of March 22nd is at hand. I shall do as you direct me in regards to the Volcano Road. I feel confident that I can do work on that road which will please you.

I have now a gang at work six miles from Hilo on that road, our tramway is laid down on the Hilo end ready for a start as soon as I can spare the prisoners from the Hilo Road... Mr. Shipman will act for me in Puna. I have about $\frac{1}{4}$ of a mile of tramway for Hilo District with which we can bring gravel on our roads in all kinds of weather. I shall send for four more pairs of car wheels... (Subject File – Roads Hawaii)

April 21st, 1881

J.F. Jordan, Road Supervisor Hilo and Puna Districts; to

H.A.P. Carter, Minister of the Interior:

Advise Minister that Draft No. 43 was drawn for work in Puna District, not on the Volcano Road.

...The gang of white men which worked for us at Laupahoehoe some time ago came to Hilo last week wanting work. I set them to work on the Volcano Road last Monday. We are using our tramway in three different places and doing good work... (Subject File – Roads Hawaii)

May 10th, 1881

J.F. Jordan, Road Supervisor Hilo and Puna Districts; to

H.A.P. Carter, Minister of the Interior:

...The work on the Volcano and Puna Roads is progressing nicely. I am following the plan recommended by your Excellency in regards to those roads. I have made some alterations in our road roller, so that now we can do pretty smooth work. We are using 4 head of animals to haul it. We regulate heft by putting on rock, by this we save a great deal of labor owing to find gravel being so scarce. Our gang in Puna are at work on the new road which connects the road of Puna with that of the Volcano... (Subject File – Roads Hawaii)

May 26th, 1881

J.F. Jordan, Road Supervisor Hilo and Puna Districts; to

H.A.P. Carter, Minister of the Interior:

...Yours of May 17th came to hand last week. In regards to the sledge hammers bought of E.O. Hall & Sons, I was very much in need of them. Thinking that yourself and all others in the Interior Office would be very busy if not over worked owing to the small pox in Honolulu, I took the liberty of ordering them as a great deal of our work on the Volcano and Puna Roads has to be done with sledge hammers. *Nearly all the material required to repair the Volcano Road through Panaewa woods, which is also the Puna Road, will have to be made by breaking up stone which is now lying on each side of the road.* Nearly all of the work on the first four miles of the Volcano Road is let by contract to P.N. Apana and Evan Cameron at 10 cents per foot, with the exception of about $\frac{3}{4}$ of a mile near town where I am working the prisoners. This road to Panaewa woods, four miles is being made 16 feet wide many hills cut down so as to make it a very good wagon road. Considerable of it is already done this brings us to the outer edge of all the cane land on that side of Hilo Town. So that I do not think that there is any necessity for trying to make anything more than a passable trail from there to the Volcano...

I have sent one of our shipped Chinamen out into Puna to remain there and do the repairs on the Road in the different places where it may be required. It seeming strange to say that in all of Puna there is not one man who can be hired to do road work. I have offered them piece work where they could make four or five dollars per day, but they will not work. It is true there is but very few people in the district...I have 19 men at work on the new road which connects the Volcano and Puna Roads this will be about 3 miles they have agreed to build it for 5 cents per foot where any building is required. Some of it will not require any work... (Subject File – Roads Hawaii)

June 16th, 1881

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
H.A.P. Carter, Minister of the Interior:**

...Yours of June 6th came duly to hand... Evan Cameron with the gang of white men finished his contract to grade 6,000 feet of the Volcano Road at 10 cents per foot, so I let them go. P.N. Apana has nearly finished his contract to grade 3 ½ miles of the Volcano Road. I shall try and do the balance of the work required on the Volcano Road with shipped men and our prisoners... *I think that our plan of sending a man to Puna under contract to keep that road in repair will also give satisfaction, as one man can do all the work required in that District from year to year...* (Subject File – Roads Hawaii)

June 30th, 1881

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
H.A.P. Carter, Minister of the Interior:**

...The work on the Puna and Volcano Roads is progressing nicely. It now looks as if we were soon to have a good road making material in as close to the town of Hilo the lava has taken a fresh start, it runs in to a ravine on Sunday morning last and has come down about two miles. Since 7 A.M. that morning heading for Waiakea Plantation. It is certainly one of the grandest sights that man ever looked at. The stream of liquid lava is about 10 or 12 feet wide running at a rate of about four miles per [? hour – writing illegible] with high banks of aa on each side. The lower end has been at a stand still for the past thirty six hours owing to the fact of its been spreading out. It is now with in two miles of town but not likely to do any damage soon, the flow is now aa. This would be a grand thing for our Hilo Streets if it would come close enough to town to enable us to haul it on to the streets as it would make a good road... (Subject File – Roads Hawaii)

July 7th, 1881

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
H.A.P. Carter, Minister of the Interior:**

...Work on the Puna and Volcano Roads is progressing as usual. I was forced to do a little work on the Hilo Road this week owing to the heavy rains and the great amount of people now travelling to see the lava flow. They are coming from all parts of the island. The lava is about the same distance from town as it was on June 30th. Some what owing to its filling up the Kukuau gulch where it has been running. It is now spreading out on the Puna side and not near so active as it was last week. The work done by contract on the Volcano Road is getting a little uneven as it settles down, so that I am now going over it with the prisoners so as to take out the coarse stone and make a smooth surface... (Subject File – Roads Hawaii)

July 21st, 1881

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
H.A.P. Carter, Minister of the Interior:**

...Owing to a sudden change taken by the lava flow since Monday last, I concluded that it would not be advisable to do any more work on the Volcano Road close to the town of Hilo. Therefore I have let the prisoners go, as they

can get employment on the plantations close to town. *We are still at work on the Volcano Road four mile from town, also on the Puna Road 8 miles from town.* The lava is again very active and about 1 ½ miles from town. We are all making our plans for a move, it has come so far now that it is likely to change the waters course so that if we are not burned out we are likely to be flooded out on the Waiakea side of town... (Subject File – Roads Hawaii)

December 1881

J.F. Jordan notifies Minister of Interior of his intentions to resign. D.H. Hitchcock applies for position. (Subject File – Roads Hawaii)

January 1882

Petition from 83 native and foreign residents of Puna District; to Simona K. Kaai, Minister of the Interior:

Submitting a complaint regarding development of the Kea'au-Kūkulu Road, and apparent abandonment of the old *makai* section of the Puna Waiākea Road.

...We are native residents of the District of Puna, Island of Hawaii. We humbly ask you to appoint M.K. Kealawaa as Road Supervisor for the District of Puna in the place of T. Keoki the previous foreign Supervisor.

First) It was not right for the previous Road Supervisor to use the *Government money from the shore of Keaau to Kukululu at Panaewa as there are no people who travel upon the road to this day, and the Government is at a loss.*

Second) *There has been no work done on the road along the shore of Puna only a small area has been worked on with a large portion of the district remaining with no work done and there is great disrepair.*

Third) In our thought it is right for M.K. Kealawaa to be the Road Supervisor of Puna. He was the assistant Road Supervisor with L. Kaina for four years and is familiar with the work.

Fourth) He was also the Assistant Road Supervisor for J.W. Kumahoa for three years. Therefore it is right for him to have the job.

In testimony of the truth of this we sign our names below... (Subject File – Roads Hawaii; translated by Maly)

January 9th, 1882

Estate of W.C. Lunalilo to

S.M. Damon, J.E. Eldarts and William H. Shipman

Deed (Land of Keaau):

Trustees under the will of William Charles Lunalilo sell the *ahupuaa* of Keaau, District of Puna Island of Hawaii to S.M. Damon, J.E. Eldarts and William H. Shipman. (see description of boundaries as confirmed by the Boundary Commission in 1875) ... Reserving and excepting however such *kuleana* titles as may be included within the said boundaries... (Bureau of Conveyances Liber 70:461-462)

January 9th, 1882

**S.M. Damon, J.E. Elderts and William H. Shipman
Agreement (Lands of Keaau and Waikahekahenui):**

Partners in purchase of the *ahupuaa* of Keaau agree not to sell or lease any share of said lands of Keaau and Waikahekahenui without having first in writing offered to sell or lease the same share to others of said party jointly... (Bureau of Conveyances Liber 70:462-463)

Note: Isaac Adams sold the *ahupua'a* of Waikahekahenui to S.M. Damon, W.H. Shipman, and J.E. Elderts through a deed dated October 18th, 1881 (see Liber 71:358-359).

January 9th, 1882

**J.E. Elderts and his wife Ka'ai Elderts; to William Hillebrand
Mortgage Deed (Lands of Keaau and Waikahekahenui):**

In consideration of a loan for \$6,000.00, Elderts mortgaged his one-third undivided interest in the lands of Kea'au and Waikahekahenui to Wm. Hillebrand... (Bureau of Conveyances Liber 70:463-465)

January 9th, 1882

**Wm. H., and Mary E. Shipman to William Hillebrand
Mortgage Deed (Lands of Keaau and Waikahekahenui):**

In consideration of a loan for \$6,000.00, Shipman mortgaged his one-third undivided interest in the lands of Kea'au and Waikahekahenui to Wm. Hillebrand... (Bureau of Conveyances Liber 70:465-467)

(Note: Samuel M. Damon also executed a similar document on the same date.)

January 25th and 26th, 1882

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
H.N. Armstrong, Minister of the Interior:**

Jordan describes the completed realignment of the Kea'au-Kūkulu road connecting to the new Hilo-Volcano Road; thus by-passing the *makai* Kea'au-Waiākea Road.

[Jan. 26, 1882] ...On the 19th and 20th of this month we had a frightful rainstorm through Hilo District, washing away 3 bridges; one 70 and two 80 foot in length, also 3 stone culverts. Many of the steep grades were torn away so as to make them impassable. The dirt was all washed away leaving nothing but a mass of rocks. I have taken all the men from the Puna and Volcano Roads to Hilo so we are making good progress towards making the road quite passable once more...

...It will be seen by the reports that \$204.88 of the Puna Road money was used on the Volcano Road. A new road has been made from Volcano Road at a point 6 miles from Hilo to Keau [Kea'au] a point 10 miles from Hilo, so as to bring Puna travel in on Volcano Road and save the repairs on 7 miles of Puna Road.

It will also be seen that \$249½ days [worth] of labor was borrowed from Puna and worked on Hilo Road, after I received orders not to draw against Hilo District. Bad weather set in and I was forced to go back from time to time and do such work as would keep the road open...

[note dated Jan. 25th, 1882 attached to above communication] ...*I have been trying for the past year to hire some men to do the road work in Puna, being completely tired out with the style of work done by Chinamen who offer themselves from time to time when they want a weeks work, or rather a weeks pay. They never earn half the money which the law of this country would seem to force people to give them. In talking with the planters from time to time they strongly encourage hiring white labor for road work, as they would be far more intelligent workers. Mr. Hitchcock told me that he would let me have six of his men by paying him the amount of their dept so I have taken 3 for Puna District. The natives in that District will not work. Those 3 men are under contract for one year and have all got family...* (Subject File – Roads Hawaii)

ca. March 1882

Petition signed by 120 native and foreign residents of Puna; to W.N. Armstrong, Minister of the Interior:

Complaint against Jordan and the Kea'au-Kūkulu Road realignment, and his failure to maintain the traditional Puna Road alignment.

...We are the people named below, from the District of Puna, Island of Hawaii. We petition you and humbly request that you appoint W.L. Haau of this District to the position of Road Supervisor of Puna, not J.F. Jordan, who is the Road Supervisor of Hilo and Puna. Here are the reasons:

- (1) *The road of Puna has not been maintained and is left in disrepair.*
- (2) *The new road that has been opened by Road Supervisor Jordan, from a place near Haena, running to Kukululu, is of no value to the residents, they do not use it; it is not in compliance with the Law, and is a waste of three thousand (\$3000) appropriated by the Legislature for the roads of Puna in 1880. There has been no work on the places that are a blessing to the people. At this time the old road (alanui) is still traveled upon.*
- (3) *It is only there in Hilo that the Road Supervisor undertakes most of his work, not in Puna. Therefore the disrepair of the road persists, and it is as if it the road is nothing to the Road Supervisor of Hilo and Puna. Because of this, it is right to have a different Road Supervisor for Puna, who will do the necessary work with the money appropriated by the Legislature.*
- (4) *The road in Puna has in no way been maintained. One Road Supervisor for both Hilo and Puna means that Puna is just set aside.*

So the name which we wrote to you above is the man who we think is good to be the Road Supervisor of Puna. We feel that he is a good man, both in his living and his work... (Subject File – Roads Hawaii; translated by Maly)

March 30, 1882

**J.F. Jordan, Road Supervisor Hilo and Puna Districts; to
W.N. Armstrong, Minister of the Interior:**

Resigns from position as Road Supervisor of the Hilo and Puna Districts (Subject File – Roads Hawaii).

April 25, 1882

**Petition signed by 29 native and foreign residents and businessmen of Puna; to
W.N. Armstrong, Minister of the Interior:**

...We received your reply [dated March 28, 1882] to our petition that W.L. Haau be appointed Road Supervisor of Puna. Your reply told us that you were not of the mind to make the change at this time, and that we should meet with Jordan, &c. Your reply to us was good, but here is the difficulty as we understand it:

First: We have heard that Jordan is resigning from his position as Road Supervisor and going to work for Wilder (Waila) at Mahukona, Kohala. So no one is of a mind to go and meet with him.

Second: This seems to be just another delay in doing the repair work on the road in the District of Puna. Therefore we desire to see the undertaking of the needed work on the road in this District by the one thought of by the people of Puna. We ask this of the Legislature which is in session...

We are with humility, your obedient servants... (Subject File – Roads Hawaii; translated by Maly)

September 22, 1882

**C.N. Arnold, Road Supervisor-in-Chief, Hawaii; to
John E. Bush, Minister of the Interior:**

Having been appointed to position as Road Supervisor in Chief, Hawaii; Arnold reports on the condition of roads in the districts of Kohala Hamakua and Hilo. Communication includes detailed recommendations for Hilo Bridges. Inspection report continued on November 7th, 1882, with descriptions of the Volcano Road and roads in the District of Kau.

December 5th, 1882

**C.N. Arnold, Road Supervisor in Chief, Hawaii; to
John E. Bush, Minister of the Interior:**

Arnold describes the lower road from Waiakea to Puna.

...I have the honor to submit you the following report on the condition of the lower or "Makai" Road in Puna District. The road from Waiakea River to Elderts Ranch is in need of some little repair, chiefly throwing the loose stones out of the road which have been knocked off the side walls by cattle. This road for almost its entire length is over pahoehoe and aa and it is always dry, very little can be done to improve it; as there is as yet no Supervisor for this District. I would suggest the name of J.M. Kauwila as the most energetic man I have met there for the position... (Subject File – Roads Hawaii)

December 7, 1882

**Michael Hahale (at Pepeekeo);
to J.E. Bush, Minister of the Interior
(applying for position as Road Supervisor, District of Puna):**

...If I should receive the authorization of my Lord, your humble servant asks that I be appointed Road Supervisor for the District of Puna, Island of Hawaii. The roads of this district are not good for the most part it is the road in the distant uplands that is in disrepair. It has been fully 20 years or more that no work has been done on this road, that is the road from the boundary of Hilo to Volcano. The previous Road Supervisor did not put any money into this road, he only spent money on the lower section of the road over the last 20 years or more. The \$4,000 in funds is not enough but we will make do with it for the work.

Here is how the funds can be divided, the coastal Road \$5,500; the upland Road \$1,500.

I have mistaken, there is not \$7,000 for the District of Puna as I thought, but only \$4,000. If I get your permission to become the Road Supervisor of Puna the roads will be made good.

My great desire is to make the upland road good; that is the road that ascends all the way to the wondrous Volcano and Kau so that visitors from other lands can come.

Puna is the land of my birth and I have resided there as a native therefore I am a newcomer to Hilo... (Subject File – Roads Hawaii; translated by Maly)

January 18, 1883 Minister of the Interior informs M. Hahale that he was not selected for the position (Subject File – Roads Hawaii).

**March 21st, 1885
C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to
Charles Gulick, Minister of Interior:**

...In accordance with your instructions I beg to hand you the following list of names as being those I would select for Supervisors in the different Road Districts under my charge:

J.K. Kaunamanu, Hamakua District
James Kaai, North Kohala District
S.P. Wahinenui, South Kohala District
Judge J.K. Hoapili, North Kona District
Hon. D.H. Nahinu, South Kona District
Hon. J. Kauhane, Kau District
W.L. Haau, Puna District

Hoping these parties may meet with your approval... (Subject File – Roads Hawaii)

July 30th, 1885

**C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to
Charles Gulick, Minister of Interior:**

...I regret to inform you that we had just experienced one of the worst storms ever known. It began about 1:30 o'clock p.m. on Saturday 25th and lasted until Tuesday morning 28th. From Saturday evening until Monday morning 15 inches of rain fell, while at times the wind was terrific. Considerable damage has been caused by this storm... I have just received a letter from Mr. Rycroft at Pohoiki Puna and also two from natives in which they say that the road has been badly damaged in their vicinity, and that it is almost impassible by means of rocks thrown in by the sea, as they say there was a succession of Tidal waves and ask that something be done as soon as possible... (Subject File – Roads Hawaii)

September 29th, 1886

**C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to
W.M. Gibson, Minister of Interior:**

...I beg to inform your that the recent rains have rendered the road between Hilo and the Ramie Plantation [near Kū'olo, Kea'au] almost impassible for horsemen and entirely so for teams. Mr. Lycau the manager of the Ramie Co. has requested me to place the same in repair, as they are very shortly expecting their machinery which must be hauled over this road. 4 miles of the above road is in the Hilo district and 5 ¾ miles in the Puna district. I estimate that for \$1000. I can put this road in good repair, although that sum will not make a first class road. Hilo's portion of this expense would be about \$400. Puna's \$600... (Subject File – Roads Hawaii)

November 23rd, 1886

**C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to
L. Aholo, Minister of the Interior:**

Reports on heavy rains—no less than 31 60/100 inches between Nov. 1st to 20th—with roads and bridges washed out in various districts.

...There is also some work in the Puna District which should have immediate attention Viz. The cutting out of the both Upper and lower roads through the Puna woods and repairs to the road from Keau [Kea'au] to Eldarts, a distance of 13 miles. I can contract to have this road repaired for \$520 or \$40 per mile. The work of cutting out the Roads through the woods will cost \$400 more... (Subject File – Roads Hawaii)

April 25th, 1887

**C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to
L. Aholo, Minister of the Interior:**

...I beg also to call your attention to the following works on Government Roads which I consider of immediate importance Viz work repairing lower Puna Road 8 miles, at \$400.00... (Subject File – Road Hawaii)

July 14th, 1887

C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to

L.A. Thurston, Minister of the Interior:

...In obedience to your request I beg to hand you the following list of the District Supervisors under my jurisdiction –

North Hilo – D. Kamai; Native

East Hilo – John Moore; half caste

Hamakua – W. Lumaheihei; half caste

North Kohala – Kailimai; Native

South Kohala – Kanehaku; Native

North Kona – Hon. J.K. Nahale; Native

South Kona – Hon. D.H. Nahinu; Native

Kau – John Kapahu; Native

Puna – no appointment

Recommendations:

Puna – perhaps Kauwila... (Subject File – Roads Hawaii)

July 14th, 1887

C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to

L.A. Thurston, Minister of the Interior:

Describes work on the lower Puna Road, a “bridle path,” extending from Kea’au to Kapoho.

...Puna. The roads of this district through the Paniewa [Pana’ewa] Woods on both the upper and lower roads have very recently been put in good repair. Some slight repairs are required on the lower road from Keau [Kea’au] to Kapohu [Kapoho] a distance of 13 miles as this is only a Bridle trail these repairs will be light. Cutting the brush out of the way and throwing out loose stones and repairing any soft spots that exists. I estimate the cost of this at \$50 per mile or \$650... (Subject File – Roads Hawaii)

November 15th, 1887

J.A. Hassinger, Chief Clerk; to

C.N. Arnold, Esq., Road Supervisor in Chief, Hilo Hawaii:

...I am directed by his Excellency the Minister of the Interior to say that he is informed from several sources that you have given out Contracts for cutting out the bushes from the Puna and Volcano Roads at \$50. per mile which is very much more than this work can be done for; also that one of the Contractors is drawing a Salary as a Road Supervisor – and the party holding the other Contract is his brother; and further that the Contract has been sublet for about \$5. per mile.

I am further directed to say that these statements come to him so direct, that his Excellency cannot pass them over without inquiry.

You are therefore requested to report to him at your earliest convenience concerning the matter and meanwhile stop the prosecution of any Contracts made for cleaning brush from the roads, until explanation is made... (Subject File – Roads Hawaii)

December 3rd, 1887

**C.N. Arnold, Road Superintendent-in-Chief, Hawaii; to
L.A. Thurston, Minister of the Interior:**

Describes work on Lower Puna Road, and difficulty in getting men to do the work.

...Your favor in reference to work on the Puna Roads is at hand and in reply I beg to say that the work has been well and cheaply performed. Mr. C. Moore has had a contract for the most of it that portion through the Paniewa [Pana'ewa] woods at the rate of \$50 per mile and there is also about 1 ½ miles between there and Kapoho which was paid at the same rate. 12 miles of road was let to him at the rate of \$25 per mile. Juan Souza had a contract in the Paniewa woods at the same rate Viz \$50 per mile and finished 1 1/3 miles \$116.65. Hawelo's [Hawelu] work was done on the upper, or Volcano Road above the half way house and was about 1 mile in length. The total length of road repaired was as near as I could say without an actual survey 25 ¾ miles or about 2 ½ miles beyond Kapoho. I enclose you herewith a sworn statement from Moore who had the most of the work in charge. As I had no road Supervisor in that district [Puna] the only way in which I could get the work done was to contract for it on the best terms I could make. I have not had a Supervisor there for 5 years and have done the work of the district myself without pay... (Subject File – Roads Hawaii)

January 16, 1888

L.A. Thurston, Minister of the Interior appointed W.H. Shipman to be a member of the Road Board for the Taxation District of Puna, Island of Hawaii. (Subject File – Roads Hawaii)

November 16th, 1888

J.M. Lydgate to L.A. Thurston, Minister of Interior:

Describes survey and examination of Volcano Road from Kūkulu to 'Ōla'a. Detailed description of terrain given. (Subject File – Roads Hawaii)

January 8th, 1889

W.H. Shipman; to L.A. Thurston, Esq.:

...Your favor at hand in regards to the Agreement you sent for me to sign, I have not signed yet, I will agree to sign same providing we can come to some terms on another matter connected with it. If the Volcano Road should run through my paddock at Kukulua Keaau, it would damage the P. [paddock]

I propose that the Government put up a five wire fence on both sides of the road by the time the road is completed through paddock. In meantime while constructing road have a gate put up. Posts &c. needed in fencing can be cut from the land free of charge... (Subject File – Roads Hawaii)

See further documentation on acceptance of agreement in communication dated January 19th, 1889.

January 14th, 1889

L.A. Thurston, Minister of the Interior; to

J.E. Elderts, Chairman Road Board, Puna Hawaii:

Notifying him that in addition to the annual road tax to be collected, he has \$2,146.00 to

spend on road work in the District of Puna in the period of January 1st, 1889 to March 31st, 1890... (Interior Department Letters, Volume 37:409)

January 14th, 1889

**L.A. Thurston, Minister of the Interior; to
W.H. Shipman, Esq.:**

...I note that you propose that the Government should put a five wire fence on each side of the road through your paddock. I think your proposition is not a fair one.

In the first place, the old Government Road runs directly through the paddock, so that there already exists a right of way there, which is proposed to now return to, varying from it only slightly to attain good grades.

The variation from the old line will not interfere with your paddock anymore than the use of the old right of way would, as both will go through the fence. As, therefore, the Government already has a right of way through the paddock, it does not seem to me the fair thing to ask it to fence both sides of the road simply because it proposes to vary the exact line by turning out for grade.

In the second place, the appropriation made is barely sufficient, if it is going to build the road through to the Volcano. If therefore we have to go to such outside expenses as this the road will have to stop somewhere out in the wilderness. There is nobody on the whole line who will begin to be benefited so much as the owners of Keaau, as it will open to easy wagon traffic that section of it which is suitable for cultivation which is now of very little practical value on account of its inaccessibility.

On a reconsideration of the matter will you not encourage the enterprise to the extent asked. If you will, you will do a public spirited act, forward an enterprise which will eventually I hope greatly enhance the value of your property... (Interior Department Letters, Volume 37:410)

January 19th, 1889

W.H. Shipman to L.A. Thurston, Minister of the Interior:

...Your favor of the 14th is at hand, since writing I have seen J.M. Lydgate, & he says the road will run through one end of the paddock & not through the middle as I first understood. I will therefore sign the agreement you sent up. I wish though that you would have two gates put up, one at each end of the road where it runs in paddock & also give me the right to have them there... Agreement attached.

A note written on the side of the letter prompts Interior Department answer — “Minister does not have legal right to grant building of gate across a Public road under the circumstances of the present case. If he chooses to maintain gates this Government will not object.” (Subject File – Roads Hawaii)

April 24th, 1889

**J.E. Elderts, Chairman Puna Road Board; to
L.A. Thurston, Minister of Interior:**

...Enclosed herewith I beg leave to hand you quarterly report of Puna Road Board for the quarter ending March 31, 1889. Also vouchers for the same.

Work has been done on the Road from Kuai [Koaē] to Wawa [Waawaa]; and

from Makuu to Kaohe. I called a meeting of the Road Board according to law, but there was no one present but myself... (Subject File – Roads Hawaii)

May 20th, 1889

L.A. Thurston, Minister of Interior; to

E.G. Hitchcock, Sheriff of Hawaii:

Inquires about feasibility of using prison labor on upper Volcano Road. (Subject File – Roads Hawaii) See further communications for additional documentation of employment of prisoners on Volcano and Puna Roads.

September 4th, 1889

J.E. Elderts, Chairman Puna Road Board; to

L.A. Thurston, Minister of Interior:

Puna Road Board proposes that a new Puna Road—from the Volcano Road in the vicinity of Kūkulu to Maku'u be opened, thus passing Shipman's private land in coastal Kea'au.

...The Puna Road Board held a meeting in the courthouse at Pohoiki, Puna on the 27th. And I was authorized to address you for information as to when we can commence to draw for the second sum of one thousand dollars, that we were to have for the Puna Roads.

It is proposed by the Board to open a new road in the Puna District, starting from the Volcano Road about 8 miles from Hilo, and coming out at Maku [Maku'u], which will then give us a very good road all the way to Puna. The route has been over by the full Board and laid out ready to commence work on. Trusting that we may be authorized to draw soon for the one thousand dollars... (Subject File – Roads Hawaii)

January 20th, 1890

E.G. Hitchcock, Sheriff of Hawaii; to

L.A. Thurston, Minister of Interior:

...I have at present but 42 prisoners at work on the Volcano Road, & several of these will have worked their sentences out by the end of this month. There is accommodations in the Vol Road Jail for 55 prisoners, & I think it might be well, if they can be spared from Honolulu, to send up say 10 long time prisoners to be put at work on the Vol Road!... (Subject File – Roads Hawaii)

ca. April 1890

Petition from 50 Hilo Town Residents;

to L.A. Thurston, Minister of the Interior:

Requesting that improvements be made to the lower Puna-Waiakea Road.

...The undersigned residents of the town of Hilo and vicinity, would hereby request that a Government Road, of not less than 50 feet in width be opened from the lower Puna Road in Waiakea along about the present trail to Cocomanut Island. We believe it to be a necessary road, and one which will soon be necessary, if wharves are put up on the Waiakea side of the bay... (Subject File – Roads Hawaii)

April 26th, 1890

**F.S. Lyman, Circuit Judge Third Judicial District; to
E.G. Hitchcock, Esq., Sheriff of Hawaii:**

...The Minister of the Interior having on the 22nd day of April A.D. 1890, in writing informed me that it has been made to appear to him by the petition of Fifty of the Tax-payers of the District of Hilo, that a *Government Road of not less than 50 feet in width be opened from the lower Puna Road in Waiakea along about the present trail, to Cocoanut Island*, and duly requested me to select a list of twenty four names from among the legal voters of the District of Hilo...and direct the Sheriff to draw therefrom a jury of six persons to decide on the propriety of the measure proposed... (Subject File – Roads Hawaii)

(See also Interior Department Book 45:12)

December 22nd, 1890

**J.E. Elderts, Chairman Puna Road Board; to
C.N. Spencer, Minister of Interior:**

...As the Puna District has over 80 miles of what is called Road and the Road tax for the District only amounts to little over \$300, hardly enough to pay for 1 good man for the Cantonier, and it needs at least 5 men, 2 on what is finished of the Volcano road, and 3 on the lower roads, and as I do not know where their pay is to come from, I am waiting for further instructions from you... (Subject File – Roads Hawaii)

January 26, 1891

W.H. Shipman submitted his resignation from the Puna Road Board to J.A. Hassinger, Esq., for delivery to Minister of the Interior. (Subject File – Roads Hawaii)

February 24th, 1891

**J.E. Elderts, Chairman Road Board of Puna; to
C.N. Spencer, Minister of Interior:**

...Your Honred of the 10th of Feb. came duly to hand. And I should respectfully recommend D. Kaulupali on Koae or J.M. Kauwila, In place of W.H. Shipman... (subject File – Roads Hawaii)

Interior Department file note on the letter reports that J.M. Kauwila was appointed to position on March 2, 1891.

January 1st to April 1st, 1891

Report of the Government Schools of the District of Puna:

- Abraham Kekino was the teacher at Makuu, there is no longer a school house, though nine students took lessons.
- No School reported at Kea'au (the old coastal school lot).
- S. Kaulupali was the teacher at Ola, the school was a good building. (Public Instruction files, Series 262: Box 4, 1891-Hawaii)

Surveys of the new Puna Road and Puna Homestead Lots

The following series of communications between A.B. Loebenstein, Government Surveyor and Land Agent; the Minister of the Interior; and W.D. Alexander, Surveyor General; provide readers with detailed documentation on — native residency and land use practices as remembered by natives at the time of his surveys; and the development of the inland Puna Government Road, between 1891-1895. This new road, is generally the alignment of Highway 130, which replaced the old Puna Government Road along the coast.

May 19, 1891

A.B. Loebenstein, Government Surveyor; to

C.N. Spencer, Minister of Interior:

Begins a series of communications and reports on the initial surveys of the new *mauka* Puna Road.

...re Puna Road. I began work on this following my return from Honolulu. With 5 men and an assistant, I have got as far as the land of Waiakaiula, belonging to the Catholic Mission. The road as now laid out by me after several attempts elsewhere, begins at the old Volcano Road, about one mile beyond the Ramie ranch. The nature of the ground the first 6 miles or so, is *pahoehoe*, of the smooth and level kind, with numerous “Kipukas” of good ground at places. From Waiakahiula on, the good land begins. I have further secured from several of the large property owners, quit claim deed for 50 foot rights of way, which shall be forwarded to you after due execution... (Subject File – Roads Hawaii)

May 31, 1891

A.B. Loebenstein, Government Surveyor; to

C.N. Spencer, Minister of Interior:

...Re Puna Road. I have returned from a week’s work on this job. The work has now extended as far as Kapoho, the whole distance covered from the initial point at the Ramie Ranch by Kuolo, to the present terminus being 70000 feet, nearly 13 miles.

From the further boundary of the Cath. Mission land. I have thus far occupied only Gov’t land, in one instance I have traversed for over 2 ½ miles on one unbroken stretch of fertile arable land, and indications point to more beyond.

I also take the liberty to state that the whole public sentiment in Puna and Hilo is favorable to the road... (Subject File – Roads Hawaii)

July 12th, 1891

A.B. Loebenstein, Government Surveyor; to

C.N. Spencer, Minister of Interior:

...Re Puna Road. I herewith submit to you for approval, quit claim agreements for right of way through the lands of Keaau & Waikahekahe; I have further secured the signature of R. Rycroft for right of way through the lands controlled by him, & await merely the acknowledgement to the same before sending them, – abstracts of agreements have also gone forward to A.J. Cartwright & the Trustees of the B. Pauahi Bishop Estate.

All of the above will have secured a right of way for the road to Opihikao a distance of about 30 miles from Hilo.

I am now within 2 miles of Kaimu & have discontinued cutting the trail beyond this for the present, pending your instructions... My official report to you will embody all that has been done, with full data & information as to cost of construction of road, & adaptability of land for agricultural purposes. Of the latter there are vast tracts, & the impenetrability of the forest on rotten aa beds is one reason why the progress of the work has not been more rapid... (Subject File Roads Hawaii)

July 20th, 1891

A.B. Loebenstein, Government Surveyor; to

W.D. Alexander, Surveyor General, Hawaiian Government Surveys:

...You will have observed from the various documents sent down from time to time to the Minister of Interior that I have been engaged for some time on the location & preliminary survey of a road through Puna. It was at the minister's request this job was undertaken.

My instructions were to pick out if possible a suitable location of an eventual carriage road through the interior, & by means of this road to open up tracts suitable for agriculture or homestead purposes. The actual field work was begun about the middle of May & up to date has progressed as far as Kamaili, a short distance from Kaimu. *The initial pt. of the survey starts from the junction of the Volcano and Puna road Ramie ranch about 1 mile outside of the Panaewa woods (a short cut to the seacoast at Makuu, begun but not completed by the Thurston administration)* & follows a general contour line. A bench mark established by McBruner at the time of his survey of the Volcano Road, served as the basis of elevations carried forward. The features of the country of one which the road traverses for the first 10 miles are of little account for purposes of agriculture, consisting mainly of broad & flat belts of *Pahoehoe*. It is of a very friable nature however & there are few irregularities, rendering the construction of a road over the same a simple and comparatively cheap affair... (Hawaii State Archives; HGS DAGS 6, Box 3 – July 20, 1891)

August 1, 1891

A.B. Loebenstein, Government Surveyor; to

W.D. Alexander, Surveyor General, Hawaiian Government Surveys:

...I note your instructions in the matter of Honuaula hill station & will get a couple of men to clear the top of the hill which like all the other Puna hills is covered to the crest with *ohia* timber...it is going to be a difficult matter to get men for the Puna work. In itself it is a "*mehameha*" [lonely or solitary] place with few inhabitants... (HGS DAGS 6, Box 3)

August 2, 1891

A.B. Loebenstein, Government Surveyor; to

C.N. Spencer, Minister of Interior:

...The Puna Road line has now been laid out & profile located as far as Kaimu. I have not proceeded beyond this but am now employed locating the roads in position & hope to finish in a week or 10 days. Unless you instruct me to the

contrary or have other views regarding what I shall do next, I shall proceed to take up the subdividing of the lands of Nanawale & Kaniahiku in accordance with directions previously given me by yourself & the Surveyor Gen'l. I take the liberty of stating in comments herewith, that the new road crosses these lands in the best available location.

A petition is now being circulated through Puna addressed to you & soliciting you to place the matter of constructing the road before the Legislature... (Subject File – Roads Hawaii)

August 24, 1891

A.B. Loebenstein, Government Surveyor; to

C.N. Spencer, Minister of Interior:

...re Puna Road survey. I have extended the same to the land of Kalapana & discontinued for the present the survey beyond this. As Kalapana & Kupahua are Gov't lands & you have instructed me to cut up the same into homesteads, the further extension of the road might be postponed until such time as I can get at the homestead work... (Subject File – Roads Hawaii)

There are numerous other communications in the files for 1891 and later, from Loebenstein, Baldwin, Alexander and others that document further survey of homestead lots and the larger Puna District.

January 6th, 1892

A.B. Loebenstein, Government Surveyor; to

Geo. N. Wilcox (Legislator):

By this communication with attachments, Loebenstein provides G.N. Wilcox (a member of the Legislature) and W.D. Alexander (Surveyor General), with detailed descriptions of work conducted in Puna—findings and recommendations regarding past and present land use and development of the new Puna Road.

...In view of the passage of the \$30,000.00 appropriation for the road through Puna, I take the liberty of enclosing to you a duplicate copy of the report on “the new road to Puna”, & of which I executed a preliminary survey in 1891. I believe that I have already informed you of the disappearance of the original copy & the several circumstances connected with it.

The supplemental report mentioned at the close is a statistical index of the lands in Puna, compiled so as to indicate ownership, location, area, conditions & etc. of this I have a press copy at your disposal.

I bring the matter to your notice at this juncture in view of your probable tour to Hawaii, – officially – on the adjournment of the Legislature. I would therefore suggest that you make the trip through Puna over the ground covered by my survey & thus assure yourself of whatever conditions, for or against the construction of this road, may strike you at the time.

As I am so familiar with the District, it would be well for me to accompany you, if you think likewise, I await your orders... (Subject File – Roads Hawaii)

[Attachment 1]

The New Puna Road.

Prof. W.D. Alexander, Surveyor General Hawaiian Government Survey.

Among the interesting comments in this communication is that Loebenstein reports that new Maku'u-Kea'au Road (proposed and begun under the Puna Road Board in 1889) was unfinished.

Sir:

Having been commissioned to undertake a survey for a Road line through the Interior District of Puna Hawaii, the object being to ascertain –

- 1st. If any lands existed there that were capable of development, but which are now locked up by reason of their inaccessibility, and
- 2nd. To lay out a road, which would bring such lands into cultivation and a market. I now beg leave to submit the following report;

The survey for the road was begun in the middle of May and finished in August A.D. 1891, the distance traversed over being 25 miles. The initial point is on the present Volcano Road, within a few hundred feet of the 9th mile from Hilo town. The distance, at this point, from the sea coast being about 6 miles, and the elevation above mean tide 312 feet. For over 1,000 feet or so the line follows a short bit of newly constructed road, which was originally intended to continue to the sea coast at Makuu, and leaves the same on its junction with the old Volcano Road. The arable land of Keaau flanks the road on either side and the Pahoehoe is reached at a distance of 7,000 feet from the starting point. The line here debauches from the old Volcano Road, running over smooth lava until Waipahoehoe is reached. This is a broad flat of a mile in width of open land surrounded with Pahoehoe and covered with considerable soil, evidently accumulated from the denudation of several cones, which still exists on the upper end.

For the next 7 miles the line of the road is carried over *Pahoehoe*, the general elevation being 475 feet, distance from the sea coast being 6 miles. This stretch of 7 miles, lying over large tracts of smooth solid lava, of the kind marked with rope like lines and concentric folds, and covered with thin Ohia woods, is remarkably easy to travel over, and for the progress of a bullock cart would afford no difficulty even now. The extensive forests of Makuu and Halona, Gov't. lands, distant one and one-half miles above the road line, filled with an exuberant mass of shrubbery, in which the presence of bananas, *Ki* [ti plants], Yam, and *Awa* [*Piper methysticum*] can be easily distinguished, and the growths of young Sandal wood, which seem to thrive and find support in the fissures which intersect the surface are features which would make the nearer approach desirable.

The attempt to do so was made but the undulating nature of the lava the many rounded hillocks, and the constant concession of slight ascents and descents, and the numerous fissures intercepting the plain, all characteristics, which singularly exists both above and below the surveyed road line through this section, as if Nature had intended no other line, would have rendered any other location unsuitable from a point of cost. While on the other hand there is nothing to enjoin, from constructing feeders to the main road, at available

points, making use, where possible of the numerous trails built and used in ancient time, by the natives, for access to these localities, their old planting grounds.

An interesting feature of this locality is the large number of lava caverns and long subterranean passages abounding upon it, especially between the 9th and 11th miles, in fact this whole tract is so thoroughly penetrated by caverns that hollow sounds are often heard beneath ones footsteps when traversing the region.

These subterranean passages are generally entered through some opening made by the falling in of the roof and prove to be regular arched ways, ranging as much as 25 feet in width and 15 feet high and extending for long distances. The floors have that corrugated ropy appearance such as are seen on any viscid mass if drawn out as it hardens. The roofs and sides are covered with stalactites, the whole producing a wonderful effect when lit up.

These caverns evidently served as burial places in ancient and comparatively modern times in view of the fact that the benches here and there were covered in human remains...

By the sea coast, from Hilo to Kaimu, it is 37 ½ miles and by the upper road as now laid out it is not quite 34, and there is no doubt but that this distance can be further reduced by improvements in location at different points.

The total receipts in road taxes from the whole District for 1891 was no more than \$408 and of this whole amount only 104 dollars was collected with in the first 23 miles ending at Kapoho, while from there to Kaimu a further distance of 14 ½ miles the receipts amounted to \$118.

Of this total of \$222 nearly one half was from tax payers either residing in the interior, or else having their *Kalo*, *Awa* or Coffee patches there, and who migrate back and forward between the sea coast and the interior. *The first settlement met with after leaving Hilo by the sea coast road, is at Keaau, a distant 10 miles where there are less than a dozen inhabitants; the next is at Makuu, distant 14 miles where there are a few more, after which there is occasionally a stray hut or two, until Halepuaa and Koaie are reached, 21 miles from Hilo, at which place there is quite a village; thence to Kaimu there are only a few scattered settlements here and there. A good many of those living along the lower road have their cultivating patches in the interior, along or within easy accessibility to the new road.*

With rare exceptions this whole stretch of country passed over by the lower road is only an alternation between rugged fields of cool lava and the most desolate areas of scoriae and clinkers. It is true that over the barest fields there is found a stunted growth of trees and a sprinkling of verdure, struggling for recognition and growing in the many crevices and cavities in the lava, while it is true that effort at cultivation are made here and there these seem to succeed only in the holes made among the stones or diminutive patches of earth scattered here and there. Though even then the best spots afford but scanty returns.

Nearly all the food consumed by the residents of this District is raised in the interior belt to which access is had by the ancient paths or trails leading from the sea coast... The finest sweet potatoes are raised in places that look more like banks of cobble stones or piles of macadam freshly dumped varying from

the size of a walnut to those as large as ones fist. In these holes there is not a particle of soil to be seen...

The old sea coast road cannot be kept in repair with the means now at its disposal and its condition each year is becoming more unsafe and ruinous, there is but little travel over it; it has been shewn that there is little land capable of cultivation or development either side of it and whatever travel there is now over it would soon be entirely diverted to the upper road...

[Attachment 2]

Supplementary Report On the amount of Arable Land along the Proposed Road:

The statement appended hereto endeavors to give an idea approximately of the acreage fit for cultivation along the proposed road. A large portion of the lands in Puna remain as yet unsurveyed and the uncertainty in area is shown by the mark “(?)” in the column headed “total area”.

It was originally intended to incorporate with the list, those lands which beginning at the sea coast extend but a short distance inland, but are more or less out of reach except by ancient trails which can be followed from the new road. Only a few of these lands however, are other than small and worthless, and what little decent land there is, is taken up by grants scattered here and there. In view of the fact therefore that the whole amount of arable land contained in these latter and all of the rest of the District put together along the sea coast road between Hilo and Kaimu, a distance of 37 ½ miles would hardly exceed 2,000 acres by the most liberal estimate, it is to be hoped that that the statement as compiled will convey all the needed information...

Lands of Puna – Hawaii

Approximate acres suitable for cultivation along the upper road.

Name of Land	Owner	Total acres	Dist. from Hilo as Surveyed	Approx. Arable acres	Nature of Land	Approx. Elev. of Arable land	Remarks
Keaau	W.H. Shipman	64275 a.	7-13 mi.	7000 a.	soil & aa	250 to 1000 ft.	This land will grow cane, coffee, cocoa & etc., lies both sides of the road.
Olaa	Crown	54260	11 mi.	12000	ditto		ditto. Lots are now being applied for. Considerable Kalo & coffee now being produced.
Waikahekahe 1	W.H. Shipman	Unsurveyed	13 mi.	Very little	<i>Pahoehoe</i>		Thin forests growing on <i>pahoehoe</i> , only fit for grazing.
Waikahekahe 2	Est. Queen Emma	Unsurveyed	13 ½ mi.	Very little	<i>Pahoehoe</i>		Similar to preceding, though there are small patches of good land scattered here & there.

Popoki Makuu Halona Keonepokonui Keonepokoiki	Haw'n Gov't.	Un- surveyed	14 ½ to 20 mi.	3,000 a.	Soil & aa.	400-1500	These lands are all unsurveyed with the exception of Keonepokonui. Large islands of forest are scattered throughout this section, some adjoining, others from 1-1 ½ miles above the road, the old cultivating patches were in these forests and coffee, cocoa & etc will thrive in them. Large numbers of young sandal wood trees are found growing on the <i>pahoehoe</i> surrounding these forests.
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(Subject File – Roads Hawaii and Interior Department – Land Files 1891)

June 26th, 1893

A.B. Loebenstein, Government Land Agent; to

S.B. Dole (President):

...Survey for a road through Puna, with its accompanying report gave the first official estimation of the nature of a section of Hawaii which up to that time had remained more or less of a terra incognita. The survey of Puna since executed by me, further demonstrates the presence of large & extremely fertile areas through out the district, the large proportion of which fortunately belongs to the Government... The only mode of communication to speak of, now reaching into the Interior is over my line of survey which is now a well beaten path to Waiakahiula & the Nanawale homesteads, a distance of about 10 miles from the initial point of the survey...

A good passable wagon or bullock cart trail over the lava, the cracks filled in & the mounds or rough projections leveled off, would be sufficient for the demands of sometime to come... I will not transgress upon your time much further, & merely communicate the fact that this Puna Road is absolutely necessary to the further development to that District, as much as the Volcano Road is to Olaa, & that a petition to that fact would receive the willing signature of every resident... (Subject File – Roads Hawaii)

July 27th, 1893

J.W. Mason, Chairman Puna Road Board; to

J.A. King, Minister of the Interior:

...Yours acknowledging receipt of my quarterly statement to hand and noted. Our funds are being used up more rapidly than we could wish, but not more so than we could consistently expect, considering the condition of the roads. The fund placed at our disposal will be entirely depleted with in the next 30 days & the Volcano Road will not be fixed and but little work done in lower Puna. It is very essential that the Volcano road be fixed at once, if it is not it will cost the

Government quite a sum later, as wagons loaded with freight go right through now, in places where the most of the covering has been washed off... In lower Puna they want to do some needed repairing... (Subject File – Roads Hawaii)

March 28th, 1894

**Frank S. Dodge, Assistant, Hawaiian Government Survey; to
James A. King, Minister of Interior:**

...In accordance with the letter of instructions of March 8th from the Attorney General, I have made an examination of a large portion of the surveyed lines of the proposed road through central Puna, and herewith submit my report on the same.

March 14th to 18th inclusive, were spent in the district of Puna, three days of that time being devoted to matters in connection with the new road, going over the line as surveyed by Mr. A.B. Loebenstein in 1891, and examining the adjacent lands to be opened. The larger part of the time was spent upon that section of the line between Keaau where it leaves the Volcano Road near the "Nine Mile" post, and land of Malama about three miles from Pohoiki... From the initial point on the Volcano Road, nine miles from Hilo, to the Nanawale Homesteads, the survey follows an almost direct line for nearly eleven miles, and I found no good and sufficient reasons for making any radical changes as proposed by Mr. Loebenstein... The first section of this road is already traversed by loaded wagons from Hilo, with lumber and supplies for the settlers.

An expenditure of a few thousand dollars would make a great improvement over the present condition of things and offer a great incentive to further settlement of that region...

The demand for the road is universal, and the whole district would benefit by its immediate construction. In building the new road I think ten thousand dollars (\$10000.00) would do a great deal on the first section of 11 miles to the Nanawale Homesteads, and make a good cart road that would answer all requirements for the present...a road of twenty feet in width is all that is needed across the Keaau plain...(Subject File – Roads Hawaii)

December 31st, 1894

**J.W. Mason, Chairman Puna Road Board; to
J.A. King, Minister of the Interior:**

...Enclosed please find my report of the quarter ending December 31st 94 with vouchers enclosed. Of the total sum fifty one dollars and ninety cents, expended, fifteen and 30/100 was expended on the Volcano Road repairing washouts and the remainder \$36.60 in lower Puna on the trails. Owing to the fact that the prisoners are being used to repair the V.R. at present it seemed best to take off our day laborers, but it will soon be necessary for us to continue the work regularly. Do you not think it a good idea to put on Cantoniers and will you appropriate a sum sufficient to keep say four of them at work continuously? The lower road desiring all the taxes... (Subject File – Roads Hawaii)

ca. April 1895

Petition sent by approximately 100 native and foreign residents and tax payers

of Hilo and Puna, protesting the possible removing of prisoners from the Puna Road project; to

J.A. King, Minister of the Interior:

...The undersigned residents and tax payers of Hilo and Puna districts of the island of Hawaii, having reason to believe that an effort is being made to have such prisoners as are now employed in building a public road from the nine mile post on the present Volcano Road across the District of Puna through the coffee lands of the southern portion of Puna removed, thereby stopping all work of constructing said highway, wish to make a most emphatic protest against such action... By delaying the work on this road the commercial & other interests of Hilo are seriously crippled, and the undersigned residents of Hilo & Puna do not think that injustice & right there should be any further delay in the said road's completion... (Subject File – Roads Hawaii)

May 1st, 1905

**Exchange Deed 110 and Deed 1338 between:
the Department of Public Instruction and W.H. Shipman**

On May 1, 1905, the Department of Public Instruction granted to W.H. Shipman, both Keaau School lots, described in School Grant 3, *Apana* 8; and School Grant 4, *Apana* 8 [note this should be *Apana* 18 as recorded in the 1853 survey and recordation files], School and Church Lot at Keaau 2. This done in exchange for a lot near the nine mile marker on the Puna Road, in Keaau. (Bureau of Conveyances Liber 270:149-152)

The survey coordinates for the old coastal school and church lots are presented above in the section covering events for the year, 1853.

By this transaction, the Government relinquished its interests in both coastal lots, granting them to W.H. Shipman; in return for the new school lot.

Kea'au Surveys 1901, 1911, and 1912

In the period between 1901 to 1912, A.B. Loebenstein and Thos. Cook conducted surveys of Kea'au. The surveyor's field books, in the collection of the State Survey Division contain several important drawings and notations of features along the Puna Trail-Old Government Road, and along the coast of the present study area. Additionally, because the surveyors were working with native residents of the Waiākea-Maku'u vicinity (e.g., Hawelu, Keanaha Pu'ukohola, and Kawailohi), they recorded a number of place names and features in the coastal region. *Appendix B* at the end of this study provides readers with copies of selected pages from the original field note books (courtesy of Randy Hashimoto – State Survey Division).

March 31, 1923

W.H. and Mary Shipman convey 14.6 acre parcel of land bounded by the road leading to Hilo in coastal Kea'au to Herbert C. Shipman (Bureau of Conveyances, Liber 673:143); and W.H. and Mary Shipman conveyed to Clara Shipman-Fisher (and husband), a 20 acre parcel in coastal Kea'au, bounded on the *makai* side, by a stone wall along the ancient Puna Road (Liber 673:144)

Kea'au and Waikahekahe: Land Court Application 1053

By 1930, W.H. Shipman initiated Land Court proceedings to record the boundaries of the *ahupua'a* of Kea'au. On December 17, 1930, Charles L. Murray, Assistant Government Surveyor, notified R.D. King, Surveyor, Territory of Hawaii, that he was transmitting under a separate cover, working sheets of surveys for Kea'au and vicinity. The work was conducted as a part of Land Court Application 1053, included surveys of the "old volcano trail, the Pahoia Road and a tracing of the closure, coordinates, and area of Keaau." (Murray to King, Dec. 17, 1930; in the files of the State Survey Division). Of general interest to this study, and the condition of trails in the vicinity of the boundaries between Kea'au and the Olaa Homesteads at the time of the surveys, Murray wrote:

The trails on these maps are shown where they are clearly defined. There are no signs to show that this trail is still in use. In many places a heavy moss has grown on the grooved trail in the pahoehoe and in other places the trail is covered with "uluhi" fern. Still in other places new trails have been opened away from the old trail. All this goes to show that the old trail is very seldom used if ever... (Murray, Dec. 17, 1930:2; in the collection of the State Survey Division – Land Court Application Folder 1)

Survey records for the lands near the coastal section of Kea'au, including the section crossed by the old Puna Government Road. Murray also references Māwae (Mawae)—famed in the history of Kamehameha I as the place where he was struck over the head with a paddle, thus forming the *Kānāwai Māmalaha-hoe (Māmalahoa)*, or Law of the splintered Paddle—and he cited the location of the *heiau* (ceremonial site) "Kawikawa." The following documentation is excerpted from Murray's field notes:

10. *Waiakea-Keaau Bdy: — The bearing of the line mauka of the angle "Mawae" was calculated from the new set of coordinates given to the "angle in the woods" (Keaau corner) derived from the new Volcano traverse, and the coordinates of "Mawae." The bearing and distance between "Mawae" and the sea was calculated from a point at highwater mark as the end of a concreted stonewall. This line is slightly different in azimuth from the Terr. Survey office records and considerably different in distance due to the fact that "Kawikawa" heiau is a short ways above high water mark, and the Survey office records bring the boundary only to the heiau and not to highwater mark. "Mawae" is at the point where the old Puna-Hilo Boundary sign originally stood and altho Mr. W.H. Shipman claims that "Mawae" should have been a few hundred feet toward the Hilo he has conceded to the present location of "Mawae" which has been considered the correct bdy point by the Government for over 30 years... (ibid.:3)*

12. *Government Beach Rd.: (exception No. 1) The Government beach road is in fact a well built trail which is 10 feet wide from curbing to curbing. It does not wind in and out to follow the contour of the land but goes in straight lines as described [Figure 14]. It has been substantially marked especially where the Keaau boundaries cross it... (ibid.:4)*

Figure 15 at the end of this study is a reduction of the approved 1933 map, “*Trails of Kea’au, Waikeahekahe Nui and Waikahekahe Iki*” prepared by the County of Hawaii. The communications below, between representatives of the Territory, County of Hawai’i, Senator William K. Kama’u, and other parties, provide readers with an overview of the concerns for public access at the time of undertaking the Land Court Application, and how they were resolved.

***Excerpts from Documentation Recorded in:
Land Court Application 1053 – W.H. Shipman Limited,
to Register and Confirm Title to Land Situate
at Island of Hawaii, Territory of Hawaii.***

I. THE AHUPUAA OF KEAAU: R. P. 7223, L.C.A. 8559-B, Apana 16 to W.C. Lunalilo.

...After W.H. Shipman acquired title in the early ‘80s [1882] he made no transfer of any portion of the Ahupuaa for more than ten years. Then came the coffee boom between 1894 and 1900 he sold nearly 4000 acres, chiefly in the vicinity of what is now called “9 miles Olaa”. Twelve deeds were executed...

In 1899 Shipman leased nearly 4000 acres of Keaau to Olaa Sugar Company, Limited, for a term of 40 years...

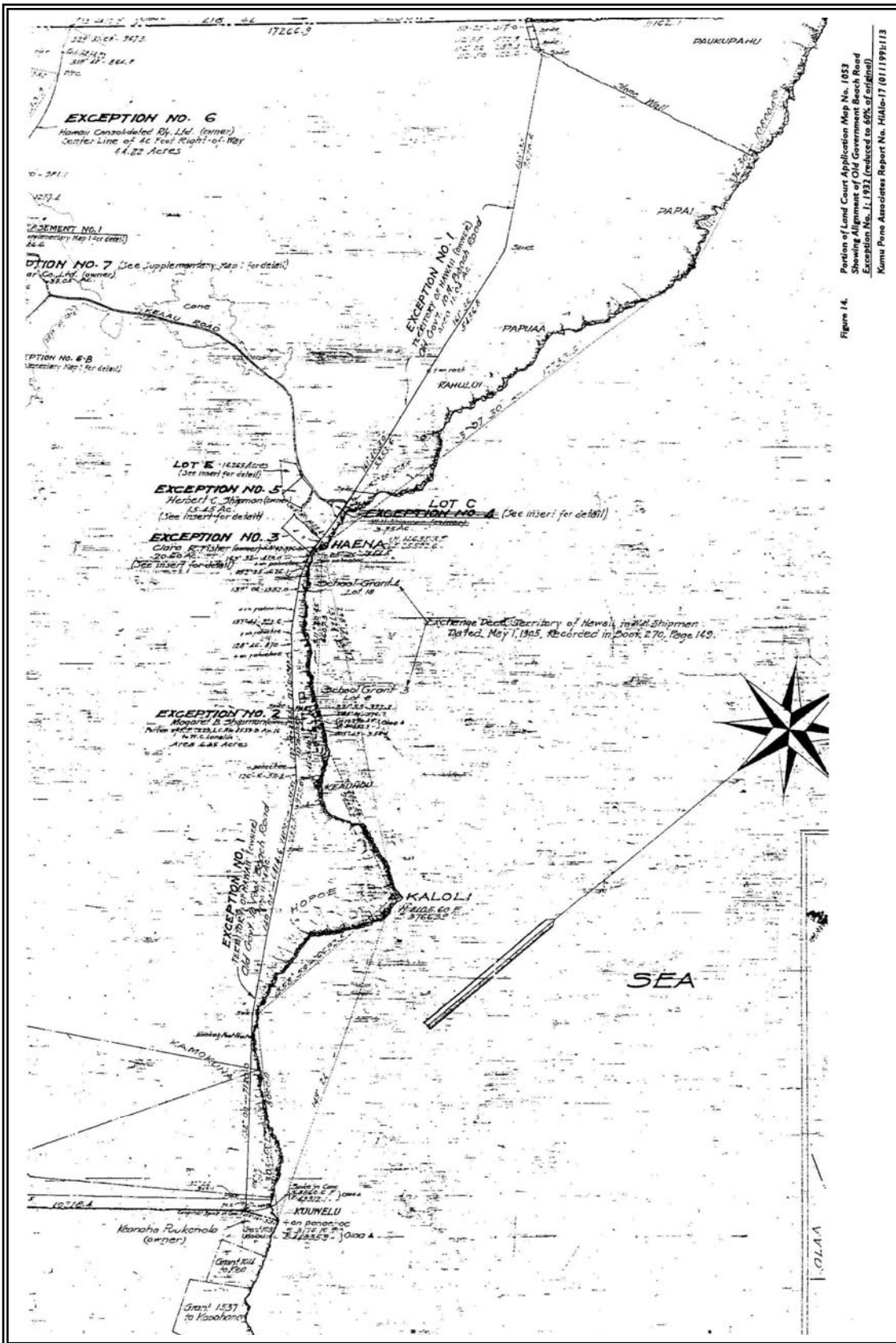
HILO RAILROAD COMPANY: Various grants of rights-of-way to this company appear in the Abstract (Pp. 145, 157, 305). The petition and map filed herein show that these rights are now claimed by the Hawaii Consolidated Railway, Limited, by virtue of a deed from John L. Flemming and others to Hawaii Consolidated Railway, Limited, Dated March 15th, 1916, and recorded in Book 450 at Page 113...

OLAA SCHOOL LOT. By various exchanges with the Territory of Hawaii, W.H. Shipman divested himself of title to 5.97 acres of Keaau situate on the Puna Road near its junction with the Volcano Road...

II. AHUPUAA OF WAIKAHEKAHE-NUI. L.C.A. 8525; R.P. 2236, Apana 3 to Kale.

This is a narrow sliver of land with a short frontage on the sea adjoining Keaau on its easterly side and running several miles *mauka*.

The awardee, Kale, seems to have been Sally Davis, daughter of Isaac Davis, a colleague of John Young, a follower of Kamehameha First, and one of the first white men to settle in Hawaii. W.H. Shipman claimed through a complete paper title from Sally Davis’ heirs. The land is chiefly ancient lava flows covered in part with forest, and the boundaries were uncertain and the surveys defective owing to the difficulty of the terrain...



**Figure 14. Portion of Land Court Application Map No. 1053
(Showing alignment of Exception No. 1 – Government Beach Road)**

IV. L.C.A. 8081. R.P. 4360 to HEWAHEWA:

This is a *kuleana* within the boundaries of Keaau and petitioner has good title by unbroken chain of conveyances from the original awardee – a rather unusual condition, seldom met with in discussions of Hawaiian *kuleanas*.

V. ROYAL PATENT GRANTS 3 AND 4, LOTS 8 and 18 to the BOARD OF EDUCATION:

These were small lots on the beach of Keaau set aside in early days for school purposes. The native population in this vicinity was scant at best and with the advent of Olaa plantation the schools on the beach were closed for lack of pupils, and a large school lot was acquired near the junction of the Pahoa and Volcano Roads in Olaa village. This was obtained by exchanges hereinabove discussed with W.H. Shipman, and the two grants above were given to Shipman. The title to these grants is good. (Land Court Application 1053, File Pages 61-69)

Sept. 1, 1932

Land Court Application 1053

**Wm. K. Kamau, Senator, 1st. Representative District ; to
Honorable Robert D. King, Surveyor, Territory of Hawaii:**

...It has come to my attention that the advance sheet for filing L.C. Petition No. 1053, Keaau, has been circulated for correction. I am also informed that all the old trails are not reserved on said sheet for the public, except one that gives no access to the beach.

There are at present numerous complaints against the granting of Land Court Application No. 1053 without the reserving of the old trails leading to and giving access to the beach , and , as a representative of the people of this county, I have been requested to take this matter up with you.

Therefore, you are urgently requested to kindly look into the matter thoroughly, and see that all the old trails are reserved for the public.

Please consider this a confidential communication... (State Survey Division File – Land Court Application 1053)

Sept. 2, 1932

Land Court Application 1053

E.L. Wung, County Engineer; to

Honorable Robert D. King, Surveyor, Territory of Hawaii:

...I have received the advance sheet of Land Court Application No. 1053, for which I wish to thank you.

I notice that on the map that only the main trail, "Exception No. 1", was reserved for the Government. It is also noted that the other old trails leading to Papai, Papuaa, Kahului, etc. and also the trails along the beach and another trail from the present Olaa-Pahoa road to the beach are not being reserved.

My attention has been called time and time again about the public being barred from fishing and gathering opihis along the Keaau coast, as well as all

fishermen after landing on the beach from canoes and sampans. Also in some instances men walking along the beach from Waiakea were driven out.

I regret to bring these charges up at this time, however, as county engineer and a public servant, I feel that it is my duty to inform you of the conditions here that you may investigate the matter thoroughly and act for the interest of the general public.

You will note that in the Geological Survey maps that some of the trails are shown, but there is no doubt that you have older maps which show several other trails.

About eleven years ago, a poor Hawaiian was charged and brought before court and indicted for trespassing the Keaau land to gather opihis,, finally public sentiment became so great that it was squashed.

Now, land court petition No. 1053 plainly shows that the public will be forever barred from the beach if said land court passes. I feel it is your duty as well as mine to see that the public is not deprived of such rights.

Kindly have the high waterline defined more correctly on the ground and have all the trails relocated and reserved for the public before it is too late.

Kindly keep this letter to yourself as the owners of Keaau are very powerful both politically and financially... (State Survey Division File – Land Court Application 1053)

September 15, 1932

Land Court Application 1053

Robert D. King, Surveyor, Territory of Hawaii; to

Mr. E.L. Wung, County Engineer of Hawaii:

...This is in acknowledgment of your letter of the 2nd instant, in the above entitled matter, and I beg to advise you that all matters regarding the government and the public interests, as they may be affected by this application, will be taken up as soon as the advertisement is published for the hearing of this case.

We have had a case of a similar nature on the island of Kauai and both the County Attorney and County Engineer cooperated in doing much of the initial work and studies regarding the preservation of the public interests. So in this instance the Attorney General's Department, as well as this office will have to depend to a great extent on the information, data and testimony that officials on the ground can much more conveniently gather. I would therefore ask you to cooperated with us to this extent.

There is one feature of Land Court titles that may not be generally understood and that is: a Land Court title does not take away nor does it extinguish any rights of easement and others of like nature in existence prior to the adjudication of such a title. It is well however, to have such rights, if any, defined at the time of the hearing, so it would be advisable for you and the legal department of the County to make all preliminary surveys and investigations as will preserve any existing rights.

If a map of this application will be of any assistance, I shall be glad to have one made and forwarded to you... (State Survey Division File – Land Court Application 1053)

On September 16, 1932 R.D. King sent a similar communication to Senator William K. Kama'u. Then on October 11, 1932, King wrote the following letter to W.H. Beers, County Attorney.

October 11, 1932

Land Court Application 1053

Robert D. King, Surveyor, Territory of Hawaii;

to Mr. William H. Beers, County Attorney of Hawaii:

...I have been advised that there may be possible claims of public easements or rights-of-way from the *makai* government road to the sea in the matter of the application of W.H. Shipman Ltd. for registration of title to the land of Keaau and certain lands adjacent thereto, in Puna district, island of Hawaii.

Notification of hearing under Application No. 1053 is now being advertised and set for November 5, 1932, and if the county is at all interested it may be well for you to gather such evidence as will enable you to properly present your case in court.

I have written to the County Engineer, who first discussed this matter with me, to the same effect and have also furnished him with a map of the property sought to be registered... (State Survey Division File – Land Court Application 1053)

October 11, 1932

Land Court Appln. 1053

Robert D. King, Surveyor, Territory of Hawaii; to

Senator William K. Kamau:

Hilo, Hawaii.

...With reference to your letter of September 1, 1932, this is to advise you that the above entitled matter now being advertised for hearing the date set being November 5, 1932... (State Survey Division File – Land Court Application 1053)

October 19, 1932

Land Court Application 1053

E.L. Wung, County Engineer; to

Honorable Robert D. King, Surveyor, Territory of Hawaii:

...Herewith, I am submitting to you two (2) blueprints showing most of the public trails thru the land of Keaau which I hope will be reserved for the public, unless other agreements granting trespassing thru the land of Keaau are made.

The trails marked on the blueprint are only approximate and are pointed out by a few of the old Hawaiians. There are many more who know the trails but dare not testify now. The following names are submitted now for references:-

Mrs. Sam Naia

Mr. Sam Naia

Mr. Joe Naia

Mr. Pookapu Punini

Mr. Lewai
Mr. Lonokapu
Mr. Malo

I have no money to do the actual survey to locate the trails, but I hope you can help me out and also keep in contact with the Land Court until all the trails are reserved or proper adjustments made.

Adjustments can be easily made whereby the public's right to the beach is reserved and some of the old trails may be abandoned... (State Survey Division File – Land Court Application 1053)

October 24, 1932

Land Court Application 1053

Robert D. King, Surveyor, Territory of Hawaii; to

Harry R. Hewitt, Attorney General:

Honolulu, Hawaii.

...I beg to report as follows:

That when the field and office check of the survey and map presented with Land Court Application 1053, was made and reported to the Land Court by this department, it was considered that the government road along near the beach, which is described in the application as "Exception No. 1", was sufficient to protect the public thoroughfare in vicinity of the coast and that there were no public roads or trails other than that provided for in the various exceptions described in the application. Other trails were noticed by the field surveyor but these were assumed to be cattle trails as Keaau is a cattle ranch.

Whilst I was in Hilo September last, the County Engineer called on me and reported that there were a number of trails which he considered public easements running from the public highways to the sea, so I asked for a conference with officials of the County of Hawaii at which were present the County Engineer, the Deputy County Attorney (Correa) and myself, and drew their attention to the fact that this application would shortly come before the Land Court, and that if it was the wish of the county to make any claims of any nature whatsoever that evidence should be gathered to substantiate such claims and present it through you to the Land Court.

I had previously received letters from Senator William K. Kamau and County Engineer Wung, regarding certain trails which they felt should be preserved in the land of Keaau...

Mr. Wung, the County Engineer of Hawaii, stated that there were no funds available for surveying the trails over which easements should be claimed in the nature of public rights-of-way and he requested that this department make such surveys, but if such public easements exist, descriptions by metes and bounds are not as satisfactory as a map showing the general location of the trails; for in the case of old trails there is often a difference of opinion as to the exact line followed, and the court as in previous cases been willing to reserve such claims by general clause and reference to the applicant's map on which the trails are delineated.

But if you advise that a further survey ought to be made in connection with the claims now being presented by the County Engineer of Hawaii, and that such

additional surveys should be made by this department, then it is felt that such additional surveys would only be considered when the county officials of Hawaii have satisfied that there are in fact public interests involved...

I have now received from the County Engineer and enclose you herewith a blue print copy of a plan prepared in the office of the County Engineer of Hawaii on which are shown the trails over which the public easements are claimed. There are also enclosed copies of correspondence between the Territorial Surveyor and County Engineer Wung regarding these claims... (State Survey Division File – Land Court Application 1053)

November 16, 1932

(handwritten letter)

**John N. Smith (private surveyor); to
R.D. King, Surveyor, Territory of Hawaii:**

...A complaint is now being filed by the County of Hawaii in regard to certain trails within the Land of Keaau, which they (the County) feel are public trails by means of long usage.

W.H. Shipman Ltd. contends that the trails in question are not public trails but their own private trails, made by them.

The County believes that these trails should be left open so that the public will have access to the beach.

The above is merely for your information. What I am driving at is the following:

At the meeting of the Board of Supervisors yesterday, the sum of approximately \$1000.00 was appropriated for the work of locating trails that the County felt should be left open to the public.

Mr. Wung promised me the work of locating these trails, if your office did not do the work, as he is short of men in his office.

He is writing you to find out whether it would be possible for you to do the work, thereby saving the County the necessary expenditure.

It is none of my business as to who will perform the work, but things being slow in my business, I thought this would be a chance for me to be doing something.

I personally believe that the County and not the Territory should do the work.

In lieu of the fact that money has already been set aside for the work, I not see why they do not now go ahead with the work... (State Survey Division File – Land Court Application 1053)

November 16, 1932

**E.L. Wung, County Engineer; to
Robert D. King, Surveyor, Territory of Hawaii:**

...The Board of Supervisors discussed with Mr. Herbert Shipman for about two days relative to the Keaau Land Court Petition No. 1053, with many interested people attending.

The County was willing to abandon all the trails above the Waiakea-Kapoho trail (exception No.1) provided Mr. Shipman will turn his private road (Keaau Road) to the Government, but Mr. Shipman would not agree. So, therefore, the Board of Supervisors has instructed Honorable W.H. Beers, County Attorney, and myself to take the matter up with you and Mr. McGhee and request the

surveying and reservation of all the old trails below the Kapoho-Waiakea trail (exception No. 1) and at least one trail above the Kapoho-Waiakea trail (exception No. 1) to the Pahoa-Olaa Government road as noted in red on the blue print submitted herewith.

It is recalled that Papai and Papuaa were quite large villages formerly and there were trails along the beach as well as on all parts of the Island of Hawaii where fishermen had the free right to go fishing any time and anywhere with few exceptions.

While you were last you mentioned about helping me to locate and reserve the trails for the Public. Mr. Beers also pointed out that the above subject is a Territorial matter and should be taken care of by the Territory.

However, the County is more that willing to cooperate, so therefore kindly advise me as to what steps to follow.

The Board of Supervisors instructed me to spend not more than \$1,000.00 to have the trails surveyed, therefore, I believe with the help of Mr. Charles Murray, your assistant, we can push the work thru. I'll have Mr. John Smith, Surveyor, and some radiomen to help out.

Mr. Beers has already asked Mr. McGhee to postpone hearing of the petition... (State Survey Division File – Land Court Application 1053)

November 19, 1932

***E.R. McGhee, Third Deputy Attorney General; to
Robert D. King, W.H. Beers, and E.L. Wung:***

...Land Court Petition 1053 of W.H. Shipman, Limited, came up to me today in the Land Court, at which time the court granted a continuance until the 16th day of December within which time the Territory and the County of Hawaii to answer.

In granting the continuance, the judge stated that unless answers were filed on or before December 16, he would not be inclined to grant further extensions unless the County of Hawaii could present to the court at that time a record of progress on the survey of certain old trails lying within the land in question and indicating that every reasonable effort had been made to complete the surveys and to prepare the answer within the time specified.

In a conversation with A. Lewis, Jr., attorney for the applicant, I suggested the possibility of merging the ten-foot old government beach road known as Exception No. 1 with the trail running along the seashore from probably Paki to Pahoa Olaa government road, and I now suggest that your Department consider this suggestion and advise me whether or not such a merger would be to the interests of the Territory.

In any event it is urged that if the trails are to be surveyed, the same be done immediately, and that kamaaina testimony and record of evidence as to the existence of these old trails be gathered in order that the same may be considered prior to this Department's making claim to the trails. This is for the reason that such information will be necessary to determine whether the Territory shall claim the fee or merely an easement, or whether, in fact or in law, such claims could be supported... (State Survey Division File – Land Court Application 1053)

November 21, 1932

Land Court Application 1053

**R.D. King, Surveyor, Territory of Hawaii; to
Harry R. Hewitt, Attorney General:**

...In acknowledging the receipt of your communication of the 19th instant, in the above entitled matter, I beg to advise you that I am just in receipt of a letter from the County Engineer of Hawaii regarding the trails in the land of Keaau, and I have informed him that the assistant of this department stationed in Hilo has been instructed to cooperate to the extent of supervising and advising the surveyor retained by the county engineer to locate the trails. This I believe is all that I need do at present, as the county supervisors have appropriated \$1000.00 to have these surveys made which amount should be ample, and a letter received this morning from Assistant Murray informs me that Surveyor J.N. Smith, retained by the county has already commenced work...

[recounts limited documentation regarding the claim, previously cited in above communications]

With respect to the third paragraph of your letter referring to your suggestions to A. Lewis Jr. attorney for the applicant, of the possibility of merging the ten foot old government beach road known as Exception 1 with the trail running along the seashore, your attention is drawn to the fact that the road described as Exception No. 1 is the old government road from Waiakea to Kapoho and is a well built road so that the Government's title in this should be retained.

With respect to possible merger of the inland trails, I should suggest that any opinion on this point be reserved until the results are known of the surveys now being made... (State Survey Division File – Land Court Application 1053)

November 23, 1932

WE.L. Wung, County Engineer; to

E.R. McGhee, Third Deputy Attorney General, Territory of Hawaii:

...Replying to your letter of the 19th inst., regarding Government Trails in Land Court Petition No. 1053 of W.H. Shipman, Ltd., I am pleased to inform you that the Board of Supervisors have ordered me to proceed with the survey of the trails and to get affidavits from old Hawaiians to testify on those trails.

We have been gathering affidavits since Monday and hope to finish the work by today. I will send the affidavits to you by this week-end.

The survey for the trails are going on in full blast now but no matter how fast I can push the work it will take about two months time to finish.

Mr. Chas. Murray from the Territorial Survey Department is helping us and Mr. John Smith is doing the work for the County.

The suggestion in your letter of merging the ten-foot old government beach road known as Exception No. 1 with the trail running along the seashore is a good one and the reservation of one trail only from the beach to the Olaa-Pahoa main road is practically fixed by the Board of Supervisors...(State Survey Division File – Land Court Application 1053)

AFFIDAVITS – LAND COURT APPLICATION 1053

Upon conducting a review of the Land Court and Survey Division files, it was found that the affidavits referenced in several of the preceding communications had not been kept with their files (neither paper- or microfilm copies of the records could be located). Through the courtesy of Roy Shipman Blackshear and Tom English, two affidavits were located, that of David Malo, who was 80 years old at the time, and Keoki Ma'i, who was 64 years old. Malo was born at Maku'u, and Ma'i was born at Pākī, where he lived until the outbreak of World War II (see interviews with John Ka'iewe, Roy S. Blackshear, and Albert Haa Sr.). The two sworn affidavits provide readers with important historical accounts about the trails and access to coastal Kea'au up to the time, of the statements, and are cited below in their entirety.

AFFIDAVIT OF DAVID MALO

DAVID MALO, of Keaukaha, S. Hilo, Hawaii, being first duly sworn and upon his oath, deposes and says as follows:

I was born in the year 1852, at Makuu, Puna, Hawaii.

I am 80 years old.

I was brought up in Makuu, Puna, and lived there for many years, up to the time when my father died. I was then about 18 years old.

The King Highway or Main Public Highway starts from Puumaile, Waiakea, and goes through Waiakea, Keaau, Kapoho, Kalapana along the seacoast and on Panau to the Volcano. It lies from Puumaile to Kapuepue, thence it turns down to Haena where it crosses a Fish Pond (*Loko Ia*), thence it goes on till it passes *mauka* of a flat where Keaau school house was located, thence it continues on till it passes *mauka* of a (school and church house) which was located there, at Paki, thence it goes on to Keauhou and on to Hopoe, and through Waikahekahe-nui and Waikahekahe-iki.

At Keaau school house which was located on a flat, an old fish trail turns off *makai* of the King Highway at a point Hilo of the school house and passes *makai* of said school house, and it goes on till it passes *makai* of school and church house, at Paki, between the seashore and the King Highway, and it goes on along the seashore to Keahualiloa where it meets again with the King Highway.

The old Volcano Highway starts from Hilo and goes through Puuainako, Waiakea, and goes on to the present 4 mile bridge, thence it turns off to the right or *mauka* side of the 4 mile bridge and goes on till it crosses the present

main public highway about 7 miles, thence it goes on till it meets again the present main public highway at 8 miles, thence it goes on to 9 miles Olaa, thence it goes on to Kuolo, and on the *pahoehoe* to Mahinaakaka, and on to Waiuli where Hawelu's Hotel was located, thence it goes on to Kalehuapua, Kapae, Kapueuhi, and on to Kekee where Shipman's cow pen is, where it meets with the present highway, thence it goes on to the Volcano. The old Volcano Highway separates Keaau from Olaa.

The people that were living in Olaa were tenants at will (*Komo Kino*) while under Queen Emma. My father was the Queen's Konohiki. The people that were living in Keaau paid money for living on the land. Only tenants were allowed to go on the land.

The people of Waiakea were not allowed to go on Keaau without permission.

The boundary mark of Waiakea and Keaau is at Wiokawa¹⁰ on the beach, thence the boundary line runs from there on to the King Highway, and on the present Volcano Highway.

There were people living at Paukupahu, Papai and Papua [Papuaa]. There was a big village *mauka* of Keaau in Olaa.

The only main trail or main Public Highway that was used by everybody at that time is the trail that starts from about 12 miles Olaa, and goes down to Waipahoehoe, and on to Makuu till it meets the King Highway.

There were many other trails running down to the King Highway and the beach, some of them were made by cowboys for driving cattles, and some of them were made by cows.

Close to where the school house was located on a flat at Keaau, there is a checker board made on *pahoehoe* with many holes into the *pahoehoe*. On this the children at that time played checkers.

At Waikahekahe there was a village. The children of that village went to school at Makuu...

Subscribed and sworn to before me this 15th day of December, A.D. 1932.

¹⁰ i.e. Kawiokawa Heiau.

AFFIDAVIT OF MAI KEOKI [George Mai]

MAI KEOKI, of Keaau, Puna, Hawaii, being first duly sworn and upon his oath, deposes and says as follows:

I am 64 years old.

I was born May, 1868, at Paki, Keaau, Puna, Hawaii.

I have lived in Keaau, Puna all my life time.

Only one Keaau.

When Keaau came in to Mr. Shipman's possession, the people that were living in Keaau became tenants at will (*Komo Kino*).

The people of Olaa lived in Olaa and the people of Keaau lived in Keaau.

I went to school in Keaau. Mr. Kamakahiki was the teacher.

The people that were living at Keaau were tenants at will (*Komo Kino*).

Hawelu's Hotel was on Olaa. Mr. Hawelu was Mr. Shipman's foreman.

The trail or road from Olaa to Makuu is the main road upon which the *kamaaina* and strangers travelled from Makuu to the old Volcano Road, and from Olaa to Makuu. This main trail is the road which David Malo had described.

Another small trail starts at 12 miles Olaa and goes down to Keakuamakakii, where it passes Hilo of the Stone Crusher *makai* of the Pahoia Highway, thence it goes on to Lopaiki, and on to two cocoanut trees, thence it goes on to Kaikoo where it branches off. One branch goes down to Keauhou and another branch goes down to my place. On this trail the people of Olaa came down to my place.

During Obed Spencer's time there were no tenants at will. Since the fence was put up along the Pahoia Road, this trail has not been used by anybody. Nobody has used this trail since 1910 or 1911. When the people were made tenants at will, the people have not used this trail since.

Pahoia Public Highway was put through before 1900, long before the plantation was started in 1899.

Capt. Willfong planted Rami at Kuolo. At that time a road was cut by us from the school house at 9 miles Olaa, down to Keauhou. This road was made to haul Rami on ox car down to Keauhou.

The trail that goes to Makuu I had gone over that road till I reached Waikahekahe, at the Ahua where the gate is now on the King Highway.

Another road or trail starts from the school house at 9 miles, Olaa, and goes down to the school house at Makuu. There are piles of stone along this road. This road was made at the direction of Mr. Shipman.

The road which David Malo has described, running from 12 miles Olaa, down to Makuu and meets the King Highway, is the main road or trail that was used by everybody...

Subscribed and sworn before me this 17th day of December, A.D. 1932.

January 21st, 1933

ANSWER AND CLAIM OF THE TERRITORY OF HAWAII

- ...I. That the Keaau Road running from Exception No. 1 (old government road) to Exception 8-A (Volcano Road), as said road is shown on the map accompanying the within application, is subject to a public and perpetual easement in favor of the Territory of Hawaii and the County of Hawaii for use as a public highway;*
- II. That the land sought to be registered in the within application is subject to public and perpetual easements in favor of the Territory of Hawaii and County of Hawaii, consisting of the right of free and unobstructed passage over and across all of those certain trails, each six feet in width, as said trails are more particularly shown on the map thereof hereto attached, made a part hereof and marked Exhibit "A";*
- III. That all roads shown on the map accompanying said application are subject to a public and perpetual easement in favor of the Territory of Hawaii and the County of Hawaii for use as public highways... (Land Court Application File, Pages 194-196)*

April 21, 1933

Land Court Application No. 1053

R.D. King, Surveyor, Territory of Hawaii; to

Chas. L. Murray, Asst. Gov't. Surveyor:

...I have just received word from Deputy Attorney General McGhee that the Board of Supervisors of Hawaii has by some form of motion or resolution abandoned its previous stand directing the County Attorney to claim as public easements certain roads and trails situate within the exterior boundaries of the land described in the above entitled application.

Mr. McGhee holds that the board is not competent to disclaim in this manner but that if there are in fact public easements in existence on the ground, the Government, as represented by his department, must continue to press the claim. He has called on me to question you as to your knowledge, if any, of what public rights-of-way are in existence on the ground.

Will you be good enough to write me regarding observations taken on the ground whilst you were surveying this tract, with particular emphasis respecting

the use by the public generally of roads or trails connecting with established highways (Volcano Road, Upper Puna Road and the Lower Puna trail), or extending to points on the exterior boundaries of this Application.

I do not think the Attorney general's department contemplates that this department shall secure evidence and affidavits or make special locations of possible rights-of-way as has already been done by the county officials, but desires to be advised from your general knowledge of conditions as you may have observed them whilst engaged on the check survey of this Application... (State Survey Division File – Land Court Application 1053)

April 22, 1933

Land Court Application 1053

**Chas. L. Murray, Assistant Government Surveyor; to
Robert D. King, Surveyor Territory of Hawaii:**

...In reply to your letter re the trails and roads of my survey of the above Land Court Application I have noted that the only road not reserved in the Application that has been consistently in use by the public is the road to the mill (Olaa Sugar Co.) from Olaa Village and out again to the Volcano Road. The railroad depot and the post office are located near the mill. As to the trails it seems by their present condition that they have not been used for many years... (State Survey Division File – Land Court Application 1053)

May 16th, 1933

Court Findings Note:

In regards to Item No. I., communication of January 21st, 1933 in "ANSWER AND CLAIM OF THE TERRITORY OF HAWAII," the Court found that the:

...said Territory and the said County did withdraw their said respective claims for any public and permanent easements over the said Keaau Road and said plantation roads for use as public highways, and also their respective said claims for public and perpetual easements consisting of the right of free and unobstructive passage over and across said trails.

The Court further finds that the applicant, W.H. Shipman, Limited, has excepted and excluded from the lands, the title to which is to be registered, the following public roads and described the same in the following numbered exceptions: (a) the Old Puna trail or Government Beach Road, ten (10) feet in width and extending about nine (9) miles across the entire width of said applicants lands, and designated as Exception No. 1; (b) the New Volcano Road, fifty (50) feet in width, extending from the Waiakea boundary or Hilo side of said applicant's lands, many miles *mauka* toward the volcano of Kilauea, and designated as Exceptions Nos. 8A and 8B; (c) the Pahoia Road, fifty (50) feet in width, running from the said New Volcano Road, many miles across the remaining width of said applicant's lands toward Pahoia and designated as Exception No. 12; and *the Court further finds that the Territory of Hawaii and/or the County of Hawaii have or has no claim or claims, right or interest in said lands described or referred to in said application for highway, road or trail purposes, no easement for highways, roads or trails or any easement of any nature over or across said applicant's lands other than as set forth in said Exceptions Nos. 1, 8A, 8B and 12. The boundaries of all highways, ways and*

roads have been determined. There are no boundaries of any trails to determine as the Court finds there are no trails in which the said Territory or County have any interest... (Land Court Application File, Pages 257-258)

Land Court Application No. 1053 (Map 1), in the collections of the Land Court, State Survey Division, and Bureau of Conveyances—specifically trail and road exclusions and actions which extinguished them—was determined by the above records.

V. PUNA TRAIL ORAL HISTORY INTERVIEWS AND CONSULTATION PROGRAM (July–November 1998)

Study Background

This section of the study presents readers with an overview of how the Puna Trail Oral History Study was designed and undertaken, and an overview of the accounts recorded through interviews and consultation. The full released interview transcripts are presented in *Appendix A*. As noted in the release of interview record forms (at the end of each interview), the transcripts in this study may supersede the recorded narratives. This is the result of the review process—when interviewees may make corrections or additions to their transcripts, and/or also ask that certain sensitive family information be removed from the public record.

Oral history interviews help to demonstrate how certain knowledge is handed down through time, from generation to generation. Often, because the experiences conveyed are personal, the narratives are richer and more animated than those that are typically found in reports that are purely academic or archival in nature. Thus, through the process of conducting oral history interviews things are learned that are at times overlooked in other forms of studies. Also, with the passing of time, knowledge and personal recollections undergo changes. Sometimes, that which was once important is forgotten, or assigned a lesser value. So today, when individuals—particularly those from outside the culture which originally assigned the cultural values—evaluate things such as resources, cultural practices, and history, their importance is diminished. Thus, oral historical narratives provide both present and future generations with an opportunity to understand the cultural attachment—relationship—shared between people and their natural and cultural environments.

Readers are asked to keep in mind, that while this component of the study records cultural and historical knowledge of the Kea'au vicinity, the documentation is incomplete. In the process of conducting oral history interviews and consultation, it is impossible to record all the knowledge or information that the interviewees possess. Thus, the records provide readers with only glimpses into the stories being told, and of the lives of the interview participants. The author/interviewer has made every effort to accurately relay the recollections, thoughts and recommendations of the people who shared their personal histories in this study.

As would be expected, participants in oral history interviews sometimes have different recollections of history, or give different accounts for particular locations or events of a particular period. There are a number of reasons that differences are recorded in oral history interviews, among them are:

- (1) they result from varying values assigned to an area or occurrences during an interviewees formative years;
- (2) they may reflect localized or familial interpretations of the particular history being conveyed;
- (3) with the passing of many years, sometimes that which was heard from elders during one's childhood 60 or more years ago, may transform into that which the interviewee recalls having actually experienced;

- (4) in some cases it can be the result of the introduction of information into traditions that is of more recent historical origin; and
- (5) some aspects of an interviewee's recollections may be shaped by a broader world view. In the face of continual change to one's cultural and natural landscapes, there can evolve a sense of urgency in caring for what has been.

In general, it will be seen that the few differences of history and recollections in the cited interviews are minor. If anything, they help direct us to questions which may be answered through additional research, or in some cases, pose questions which may never be answered. Diversity in the stories told, should be seen as something which will enhance interpretation, preservation, and long-term management programs of the historic Puna Trail-Old Government Road and Kea'au vicinity.

The author also notes here, that reconciliation of information among informants is inappropriate within the interview process, and is inconsistent with the purpose of oral historical research. The main objective of the oral history interview process is to record the ideas and sentiments personally held by the interviewees as accurately and respectfully as possible, without judgement. Adhering to these standards ensures both the quality and quantity of information obtained from individual interviewees, and facilitates the recording of information that will be of benefit to present and future generations. The oral history process also has another value to contemporary issues. It provides a means of initiating a meaningful dialogue and partnership with local communities by communicating on the basis, and in a form that is respectful of cultural values and perspectives of individuals representative of their community.

Development of the Oral History–Consultation Program

While preparing to undertake the present study, elicited recommendations for possible interviewees from staff of *Na Ala Hele*, DLNR-SHPD, native Hawaiian residents of Puna, members of the Shipman family, and Bonnie Goodell of PATH (People's Advocacy for Trails Hawaii). Following a format developed in consultation with DLNR-SHPD and *Na Ala Hele*, the author then developed a general questionnaire outline for the interview process (*Figure 16*). The questionnaire was used to set the general frame work for conducting the interviews.

In selecting interviewees, I followed several standard criteria for selection of who might be most knowledgeable about the study area. Among the criteria were:

- a. The interviewee's genealogical ties to early residents of lands within or adjoining the study area;
- b. Age. The older the informant, the greater the likelihood that the individual had had personal communications or first-hand experiences with even older, now deceased Hawaiians and area residents; and
- c. An individuals' identity in the community as being someone possessing specific knowledge of lore or historical wisdom pertaining to the lands, families, practices, and land use and subsistence activities in the study area.

General Question Outline for Oral History Interviews

Kea'au and Vicinity, Puna and the Coastal Puna Government Trail / Road

The following questions are meant to set a basic foundation for discussion during the oral history interview. Your personal knowledge and experiences will provide direction for the formulation of other detailed questions, determine the need for site visits, and/or other forms of documentation which may be necessary.

Name: _____ ... When were you born? _____

Where were you born? _____ Parents? (father/mother) _____

Grew up where? _____ Also lived at? _____ Raised by? _____

- Additional family background pertinent to the Kea'au-Puna study area — Such as generations of family residency in area... (time period)?
- Kinds of information learned/activities participated in, and how learned...?
- Naming of the *ahupua'a* or sections of the land that are of particular significance in the history of the land and to native practices...?
- Knowledge of *heiau* (or other ceremonial sites), other cultural resources (for example – *kū'ula*, *'ilina...*), and families or practices associated with those sites?

Knowledge of land based *ko'a* (cross *ahupua'a*) — ocean based *ko'a*; *kilo i'a* (fish spotting stations) locations and types of fish? Names of *heiau* and *ko'a* etc.? ... Burial sites, practices, beliefs, and areas or sites of concern (ancient unmarked, historic marked / unmarked, family)...? Representing who and when interred ...?

- Villages or house sites – church – stores – community activities — Names of native- and resident- families and where did they live?
- Fishing — describe practices (i.e., where occurred/occurring, types of fish; names of fishermen; and what protocols were observed...? (such as: permission granted, practices and methods of collection...?)
- Who were/are the other families that came and/or come to collect area resources, and protocol?
- Gathering practices (who and what)? Shore line and *mauka-makai* trail accesses?
- What have you heard about the Puna Government Trail/Road? When built; who used it; its' relationship to other communities of Puna and Hilo?
- Personal family histories of travel upon the trail/road...?
- Historic Land Use: Agricultural and Ranching Activities...?
- Do you have any early photographs of the area?
- Are there particular sites or locations in the *ahupua'a* of Kea'au and neighboring lands that are of cultural significance or concern to you?
- Recommendations on how best to care for the natural and cultural resources of the Kea'au-Puna Study area...?
- Do you have recommendations — such as cultural resource- and site-protection needs — regarding access along the Puna Government Trail/Road?

Describe sites and define boundaries of those sites/locations and of the area of access via the trail/road ...

Figure 16. Kea'au Oral History Study – List of General Questions

Interview Methodology

As noted above, the general list of interview topics (*Figure 16*) was used during the interviews, and at the request of some interviewees, was forwarded to them prior to conducting their individual interviews. Also, in the process of initiating contact with potential interviewees and introducing them to the oral history study, each individual was told about the nature of the study—the kinds of information being sought. Everyone was told that the study was being conducted on behalf of *Na Ala Hele*, to gather information about the Puna Trail-Old Government Road. When the interviewees indicated their willingness to participate in a formal interview arrangements were made to meet and conduct the interview.

During the interviews two maps were referenced to identify, and when appropriate, mark various locations being discussed. The maps were Land Court Application No. 1053 (Map 1), and the 1933 map prepared by the County of Hawai'i "*Trails in Keaau, Waikahekahe Nui and Waikahekahe Iki.*" *Figure 15* (at the end of this study) is an annotated map, identifying the approximate locations of sites referenced during the interviews. During each of the interviews clean copies of the maps were used, so that the interviewees would be able to mark locations they discussed, based on their own memory of historic sites and features.

The taped interviews were recorded on a Sony TCS-580V cassette recorder, using TDK D90 High Output standard cassette tapes. The interviews were transcribed and returned to the interviewees and follow up discussions were conducted to review the draft-typed transcripts of each interview. The latter process resulted in the recording of additional narratives with several interviewees. Following completion of the interview process, all of the participants in the tape recorded oral history interviews gave their written permission for inclusion of portions of their transcripts in this study.

The primary goals of the oral history study were to record —

- (1) traditional and historic knowledge—as handed down through families—about Kea'au and neighboring lands and trails and access;
- (2) information pertaining to land-use; traditional sites; religious and cultural practices; traditional values;
- (3) historic events in the lives of native Hawaiians and other individuals who share first-hand experiences in the study area (resulting from generations of cultural affiliation with the landscape and area resources; or are the result of extensive personal travel upon, or work in the area); and
- (4) record community views regarding activities, including trail access, interpretation and protection of resources.

As a result of the review process, the final released interviews supercede the original tape recorded interview. Because of the personal and sensitive nature of certain information recorded on tape, some of the interviewees withheld release of the interview tapes—the releases provide specific requirements as to the release of tapes and records.

All participants in the interview process and several consultation participants have received full copies of this study in order to help perpetuate the history in their respective families (or organizations), and in the development of community partnerships for stewardship of the resources. Released interview records and other documentation will be curated in the collections of *Na Ala Hele*, and the University of Hawai'i-Hilo Mo'okini Library.

Overview of Information and Recommendations Recorded in Oral History Interviews

The narratives below, provide readers with summaries of the primary information recorded about the historic Puna Trail-Old Government Road, and various cultural and natural resources of the Kea'au-Waikahekahe vicinity considered to be significant by interview- and consultation-participants. Please note, that while the information below provides readers with an overview of the cultural-historical documentation that was recorded as a part of the interviews, the full interview transcripts (in *Appendix A*), should be read for further details and to understand the context in which the information was discussed. *Table 2* below, provides readers with a general overview of interview participants:

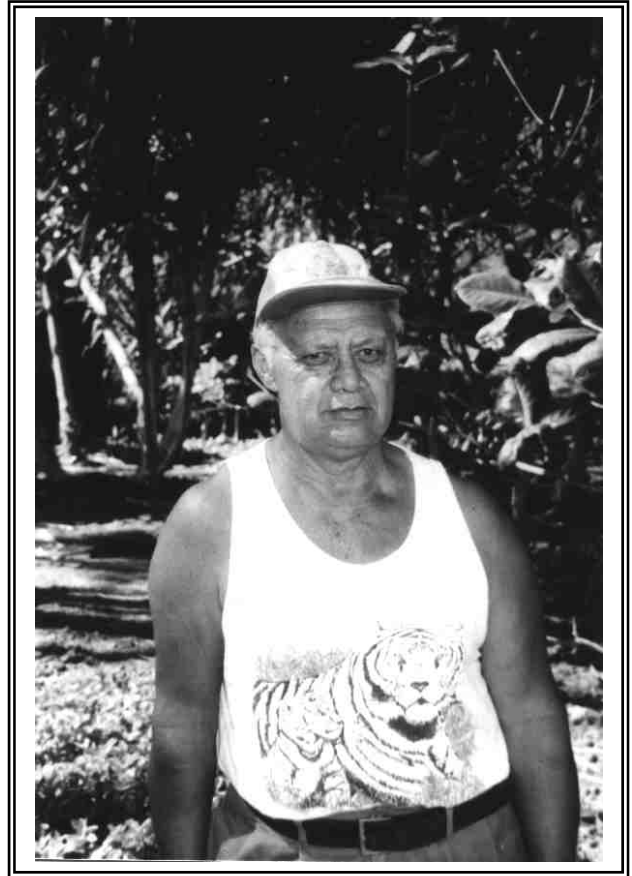
Table 2. Interviewee Background

<i>Name of Interviewee</i>	<i>Ethnicity</i>	<i>Year Born</i>	<i>Birth Place</i>	<i>Male (M) Female (F)</i>	<i>Place of Residence</i>	<i>Comments</i>
Roy Shipman Blackshear	Part Hawaiian	1923	Hilo	M	Kea'au Bay	Descendant of W.H. and Mary Shipman, family purchased the <i>ahupua'a</i> of Kea'au in 1882. Raised at Hilo and Kea'au; retired land manager.
John Ka'iewe	Hawaiian	1929	Kea'au	M	Kea'au	Descendent of native Hawaiian families who have resided in the Kea'au-Maku'u vicinity since before 1840. Raised at Kea'au (family worked for the Shipmans); retired from the National Park Service.
Albert Kahiwhiwaokalani Haa Sr.	Hawaiian	1930	Kapoho	M	Waiākea	On paternal side of family, a fourth generation resident of Kea'au; with generations of residency in the Puna District on his maternal side. raised at Kea'au (family worked for the Shipmans); retired from the Military and State Corrections Office.
Albert K. Haa Jr.	Part Hawaiian	1953	Honolulu	M	Waiākea	Son of A. Haa Sr.; raised by grand- parents at Kea'au. Hawaiian practitioner.

Further details on recommendations made by interviewees (and through consultation efforts) on use of the historic Puna Trail-Old Government Road and care of the natural and cultural resources, are presented in the Executive Summary and in *Section VII* of this study. General historical accounts and recommendations are cited below.

**John Ka'iewe Jr.
Oral History Interview of July 16, 1998
and Walk Along the Puna Trail- Old
Government Road (November 16,
1998¹¹)**

John Ka'iewe Jr. was born at Kea'au, in 1929. He has lived at Kea'au all his life, and his family has lived in the Kea'au-Maku'u vicinity for many generations. John's elders lived at Maku'u, Keauhou, Pākī, and Kea'au-Hā'ena, and as a child he traveled along the old Government Road and *mauka-makai* trails with his family to their various places of residence and on fishing journeys. He and his elders traveled the Puna Trail (and smaller *mauka-makai* trails in between the shore and the main trail) all the way from Kaloli-Keauhou in the south to Pāpa'i in the north. Also, as a youth, John's Tūtū Ma'i, still lived at the place of his birth, Pākī Bay, and today, John is among the last few individuals alive, to have lived at Pākī with his elders. This interview provides readers with important historical accounts of the relationship that native families shared with the land.



From his grandfather, Solomon Ka'iewe, John learned that his family used to live at Keauhou Bay. They had houses there, fished the ocean and cultivated taro, sweet potatoes and other crops in the area between the shore and the Government Road, and on the *mauka* side of the road as well. There were other relatives living between Keauhou and Pākī as well. When John was young, Tūtū Ma'i and some of the other old-timers were still cultivating mixed crops in walled enclosures in the *pu'e* (mulched, mound planting) style, behind Pākī. The 1946 tsunami had a significant impact on this section of the Puna shoreline. Tūtū Ma'i's house was destroyed, as were a number of stone wall features on the *makai* side of the government road.

John recalls that in his youth, and as he was told, in the preceding years, there was a close relationship between his family and the Shipmans (that relationship is still important to family members to this day). In those early years, John described a *Konohiki* type relationship

¹¹ The initial interview took place with Mr. Ka'iewe and Kepā Maly. The follow up walk along the Puna Government Road and section of the coastal trail was done with Mr. Ka'iewe; Tom English and Bob Saunders of W.H. Shipman; and Pat Thiele of the State's Nā Ala Hele (Trails and Access) program. Portions of the discussion while walking the trail were recorded and pertinent excerpts are included at the end of this transcript.

between the families and the rights which they were granted for use and care of the land, ocean and various resources necessary for sustaining the well-being of the native families. One example shared by John in regards to access and collection of marine resources, was in the area of the present-day collection, “wiping out” of ‘*ōpihi* for sale. John noted that before —

...they don’t do that. They come in, they pick up, and then when my uncle comes down, he sees them over there, he’d tell them “What you fellas get now, you folks take. Take what you get.” That’s all. But because of the boundaries, he [Shipman] had from Keauhou. From Keauhou side all the way to Pāpa’i... People didn’t just come into Kea’au.

He observed that before there were all kinds of fish, ‘*ōpihi*, *wana* and *limu*, but now, because so many people take so much, the place has been cleaned out. John suggested that there be some sort of rules like before days, to manage how much and when fish can be taken from along the Kea’au-Puna Coast.

In speaking about the old government road and some of the *mauka-makai* trails, John noted that the mango trees were purposefully planted by his family and others who traveled the trails. The trees provided shelter, and in season, mangoes were always appreciated by those who traveled the trails. Also, Tūtū Ma’i and a few other elder members of his family continued to do repair work on sections of the old government road that they traveled until about 1942 — when World War II broke out, access was restricted for a while, and the section of the road from Kaloli to Hā’ena was opened up for military vehicles. John noted that it was the custom of the people who traveled the roads to take care of them. He remembers many trips where he and elder family members would carry ‘*ili’ili* to fill in the road, and that they would also set the larger stones back in place.

When asked his thoughts about increased use of the old government road and the care of native Hawaiian sites, John commented that the trail was very special to him, and urged that the trail be restored in a traditional manner—that it not be paved as some people have suggested—and that the Hawaiian sites be:

Taken care of, as much as possible. I would like to see those things left just as they are.... Within the government’s rights, if they’re going to make the road, we can’t stop progress, you know. But, if they can kind of respect the area... If they could leave it as a historical area, that other people, like interpreters could tell people about...

John did not recall ever hearing of a specific site between Kea’au Bay to Pākī that was a *heiau*, but he does recall that there were special places that were respected by the old people—there were places with *mana* (spiritual power). He also had not seen any burials exposed, but from conversations with various elders, he feels that there are burial sites along the coast—some belonging to his *kūpuna* who lived at various places between Kea’au to Maku’u in ancient times. In this century, some members of his family have been buried at the Kea’au (Shipman) Cemetery near the shore.

Further north along the shore line, at Pāpa’i, John has heard of *heiau* and burial sites, and he recalls that there is one area along the trail (not far from the old boundary wall) that the family was always cautious about because peculiar things would happen there.

John recalled that at Pākī, the names etched in the stone (the petroglyphs) were written by several of the old families that lived in the area. His mother also told him that some times, people who were visiting the families living on the shore would etch their names into the stone. It was quite a custom among the people at the time, “Pākī was famous for the names on top of the rocks.”

Roy Shipman Blackshear

Oral History Interview at Kea’au Beach, Puna

July 23, 1998 and Site Visit of September 24, 1998 — with Kepā Maly

Roy Shipman Blackshear was born in 1923, at the Shipman family home in Hilo. Roy’s grandparents, William H. and Mary Elizabeth Johnson-Shipman (a descendant of the Kauwē-Davis lines) first traveled along Kea’au Beach and the Puna shoreline—between Hilo and Kapoho—on the “King’s Trail” in the early 1870s. In the later 1870s, W.H. Shipman and partners in the Hawaiian Agricultural Company entered into a series of lease agreements with the estate of King William Lunalilo for the *ahupua’a* of Kea’au where ranching operations agricultural interests were being developed. The Shipmans have owned most of the *ahupua’a* of Kea’au since ca. 1882.

Roy has lived along the shore of Kea’au for much of his life, either as a full-time or part-time resident. During his youth, he traveled along the old Government Road and coastal lands of Kea’au with his family and other Hawaiian and part-Hawaiian families who have lived on the land for many generations. The interview transcript includes rich descriptions of the landscape, practices of the families who called Kea’au home, and historical events, which he learned from elders, or personally experienced.

In his early years, Roy learned about and saw various Hawaiian sites in the coastal region of Kea’au. Among the important places that he discussed in the interview, and which were always respected by his family and the few other Hawaiian families that lived there were:

- The Kea’au Fishpond and *mākāhā* (rights to gathering fish from the pond were based upon work done to repair the pond features and keep the pond in working order).
- Two *kū’ula* (fish god stones) on Kea’au Bay.
- The famous stone Hōpoe, which was lost in the 1946 tidal wave.
- A possible burial site above the Hōpoe vicinity, on the *mauka* side of the Puna Trail.
- The old sweet potato cultivating field behind Hā’ena Point
- Old house sites and walls along the Old Government Road from Hā’ena to Pākī and Keauhou.
- South of a paddock-boundary wall (Site 21269) are two ancient petroglyphs in the forms of a turtle and fish near the high water line.
- The old *heiau* and burial sites crossed by the Puna Trail in Waikahekahe Nui. Roy noted that he never heard of any other *heiau* sites in the Kea’au Bay-Hā’ena vicinity, and during his youth no one from outside of the immediate Hawaiian families of Kea’au made offerings at any sites in the coastal region of the *ahupua’a*.
- The *māwae* where Kamehameha I was attacked, and numerous other sites between the coast and Puna Trail, extending from Kahului to Pāpa’i in the north.

When asked what he'd heard about the early residents in the coastal region of Kea'au, Roy shared what he remembered of his grandfather's description of the area, and the relationship of the native tenants to the land in the 1870s-1880s:

RSB: ...I asked my grandfather, "When you first bought the property, were there very many Hawaiian living around here?" And he said, "Not very many." So where the population of Hā'ena went, I don't know. But he said, "There weren't too many." But he was telling me this fresh water pond out here, he said that after he bought the property, "The Hawaiians that were around here, asked him if they could fish in the pond." I think that it had been restricted before.

KM: Sure, the Konohiki fishery rights of Lunalilo.

RSB: Yes. And he said, "Yes, you can fish in the pond." And he said, "For everyday that you fish in the pond, you give me one day of building stone walls around the edge of the pond." So that's how the walls were built. So that worked out pretty good...

In discussing the Puna Trail-Old Government Road, protection of resources (both cultural and natural), and public access, Roy shared that his family has worked hard to keep the land intact, and in its natural state:

RSB: ...Over the years, you know, we've had people come up to me and say, "You know, you have such a beautiful place down there, I' surprised you don't have hotels and condos and everything else." And I said, "That's why it is a beautiful place. Because we don't have all of that. This is one of the natural spots on the island."

The family is very concerned about growing public access and proposals to pave the trail. Roy shared that much of the concern lies in the fact that already, he and other family members are cleaning up the rubbish left behind by people who carry in what they want, but fail to pack it back out. Also, since 1918, the family has been involved in a *nēnē* breeding program, the oldest of its kind, and one that is significantly responsible for keeping the endemic Hawaiian *nēnē* from becoming extinct. People who approach the *nēnē*—or worse yet, their dogs—can impact the breeding cycle and in the worst case, loose animals can destroy birds. On the shore, it is not uncommon to see turtles and seals hauled out as well. People and loose animals also impact them. Roy also noted that not too long ago, someone had cut the head off of one of the turtles on the shore, and just left the dead turtle there. In these matters, the family has maintained a long-term resource stewardship program with the DLNR-DOFAW, and all cases are reported to the department.

Roy feels strongly that the cultural and natural resources need to be protected, and he understands that the Old Government Road is a public right-of-way, *that is ten (10) feet wide*. He feels it is important that people know about and respect the sensitive cultural and natural resources, and it is hoped, that trail users will also respect the property rights of the Shipmans.

**Albert Kahiwaikiwaokalani Haa¹² Sr. (AKH)
and Albert K. Haa Jr. (AH)
November 10, 1998
Oral History Interview with Kepā Maly**

Albert Kahiwaikiwaokalani Haa Sr., was born at Kapoho, Puna, in 1930, and raised at Kea'au. His father's family had worked for the Shipman family almost since the Shipman's arrival in Hawai'i in the 1850s. Living at Kea'au Beach, members of the Haa family worked the lands of the Shipman Ranch, including Kea'au, Keauhou, and Mauna Kea (the Pu'u 'Ō'ō-Pua 'Ākala vicinity). Mr. Haa's great grandfather was the often spoken of "loane."



loane was a close friend and steady companion of Willie Shipman (see interview with Roy Shipman Blackshear), Eben Low, and many families who had ties to activities in Puna and various lands on Hawai'i. loane was known as a healer, and by all accounts, he was very knowledgeable of sites, practices, and customs associated with the land.

During his youth and teen years, Mr. Haa lived at Kea'au, and it was in those years that he heard some of his elders speaking about Kea'au. During the interview, the elder Mr. Haa was joined by his son Albert K. Haa Jr. The younger Haa was raised by his *tūtū* (Edward Haa) at Kea'au *makai* (and later inland). Together, father and son shared some of their family history

and thoughts about Kea'au, protection of Hawaiian cultural sites, and travel along the Puna Trail-Old Government Road.

Recalling things he'd heard as a youth, Mr. Haa Sr. shared that in the last century, a number of people lived between Pākī and Keauhou, that there was even a school there. Tūtū Ma'i was the last resident in the area, and Mr. Haa often stayed at Pākī with the elder Ma'i. Mr. Haa also traveled the entire shore line of Kea'au, fishing. When asked about walking the Old Government Road, Mr. Haa said he almost never walked on the government road, instead he walked the shoreline trail from Hā'ena to the Pākī vicinity. Going to the north (Hilo side of Kea'au), he recalled that he and his father *mā* traveled the entire trail from Kea'au Beach past Pāpa'i, almost to Pu'umaile in Waiākea, they ran cattle through most of the *makai*

¹² At the family's request the name is written "Haa," as Mr. Haa's *makua* and *kupuna* wrote it, without any of the modern diacritical marks. While written "Haa," it is noted here, that both of the letters "a" are pronounced (pers comm. November 19, 1998).

lands. His father told him about a large cave some where along the coast line, that was so big a plane could go inside (Mr. Haa was never taken to the cave).

Mr. Haa also shared his recollections of the two *kū'ula* in front of Kea'au Beach; he heard that it was his father who set them there to protect them. *Ho'okupu* were still made by his father and others throughout his youth. When asked about *heiau* at Kea'au, Mr. Haa commented:

Well, my father tells us, but he didn't tell me the location. Like I told you, the special, important things, he didn't say too much...To them, it's a secret that goes with them...

Later, Mr. Haa did say that he had been told about *heiau* near Pāpa'i and Pāpua'a. Both father and son urge that people not be *maha'oi* (intrusive - nosy), that they leave the Hawaiian places alone. Proposals to pave the old trail are unacceptable to them.

In response to a question about making public access to the Puna Trail more widely known, father and son both expressed concerns, referencing some of the recent activities that have received media attention. The elder Mr. Haa summed it up in a very personal Hawaiian manner, as one who's family is buried on the land:

AH: ...Kea'au, I don't like people to go over there, leave 'em alone. They don't know what they are doing. These guys that have been going down there, they make any kind *heiau* and praying. But they don't belong there,

AKH: [tears welling up in his eyes] We see that and that's *kāpulu*, that's not what our folks did. My family, we have been at Kea'au for a long time. My uncle Henry Haa is buried there in the Shipman Cemetery, and we are attached to the land for eternity.

VI. CULTURAL-HISTORIC RESOURCES OF THE HISTORIC PUNA TRAIL-OLD GOVERNMENT ROAD (KEA'AU SECTION)

Overview – The Cultural Landscape of Trails

When people in Hawai'i think of historic sites and cultural resources, they generally visualize large stone features such as *heiau* (ceremonial sites), *kahua hale* (residential complexes), *loko i'a* (fishponds), *mahina 'ai* (agricultural field systems), and a wide range of sites of varying functions and importance in the history of Hawai'i. Though not always thought of as cultural-historic resources, the *ala hele*, *ala nui* and *ala loa* (trails and thoroughfares) which cross the land, are also integral features of the cultural landscape. *Nā ala hele* (the trails) are the link between individuals, communities, and the natural and manmade resources which sustained the island population. Along trails kingdoms were made and even lost. A significant example of trailside history is found near the *ala loa* alignment of the Puna Trail. While pursuing a few natives at Pāpa'i Bay (Kea'au), Kamehameha I chased them up the *ala hele* rising from Pāpa'i to the Puna Trail. Along the way, Kamehameha stepped into a *māwae* (crack) in the lava, and caught his foot (*Figure 15*). Unable to free himself, those who he pursued attacked him, striking him over the head with a paddle and then fled. Upon retrospect, seeing the fault was his, Kamehameha proclaimed the *Kānāwai Māmalahoa* (Law of the Splintered Paddle), making it safe for old and young to travel and rest along the trail sides.

In addition to learning a rich collection of native traditions and early historical accounts of the Puna Trail, people who travel along the *ala nui* may also view several cultural and historic sites. The sites along the Kea'au section of the trail range from the prehistoric to historic periods, and include both manmade sites and the "storied" natural features of the landscape—the *wahi pana*. Two examples of *wahi pana* or cultural landscapes through which the *ala nui* passes, and which are significant in Hawaiian traditions are the coastal lava plains of Hōpoe and Hā'ena. In the native tradition of Pele and Hi'iaka (Emerson 1915), Hōpoe and Hā'ena were companions and master chanters and *hula* dancers who lived along the shore of Kea'au, in the vicinity of the two points which now bear their names (*Figure 15*). Hōpoe embodied the *lehua* forest of Kea'au that extended across the flats that make up what is now called Kaloli Point. She also had a human form, but in a fit of rage she was turned to stone by Pele. Until the tidal wave (*tsunami*) of April 1, 1946, the stone figure of Hōpoe could be seen rocking in the waves on the south side of Kea'au Bay, near the point called Hā'ena (see oral history interviews with Roy S. Blackshear and John Ka'iewe). These traditions and sites were of significance to families who once lived in the vicinity of the trails (and they remain important to some of the descendants of the early builders and travelers on the *ala nui*).

In ancient times, trails were built and maintained by residents of a given land area—those who used them. The larger trail systems like the *ala loa*, and later the *ala nui aupuni* (government roadways), were built and maintained through public works programs to which all members of the community contributed—in return for the privilege of using the trail, one took the responsibility of caring for it. Because the trails were used regularly, they were maintained and over time, as needs and the landscape changed, the trails were also modified. Thus the Puna Trail, like other trails around Hawai'i, exhibits a variety of construction methods and time periods.

Following the early nineteenth century, western contact brought about changes in the methods of travel—horses and other hooved animals were introduced, and by the mid century, wheeled carts were being used on the trails. In some cases the old *ala loa*, were realigned (straightened out), widened, and smoothed over, and others were simply abandoned for newer more direct routes. In establishing modified trail- and early road-systems, portions of the alignments were moved far enough inland so as to make a straight route, thus, taking travel away from the shore line (as documented in the historical records cited in this study, this was the case with portions of the Puna Trail). By the 1840s, the modified alignments became a part of a system of “roads” called the “*Ala Nui Aupuni*” or Government Roads. Work on the roads was funded in part by government appropriations, and through the labor or financial contributions of area residents. The detailed documentation cited earlier in this study traces the history of development, use, and near abandonment of the Lower Puna Road.

By 1900, the Lower Puna Road was generally abandoned. Except for a few descendants of the old area families, no further maintenance was done on the alignment until 1941 and the outbreak of World War II. At that time, the United State military opened up the Old Government Road from the Waikahekahe Nui boundary to the area just behind Hā’ena. The alignment was smoothed out and four-wheel drive military vehicles were driven along the corridor for about a four year period (see oral history interviews with Roy S. Blackshear and John Ka’iewe). Even though the road supported vehicular activity, much of the cobblestone and pebble paving, bridge work, and curbstone alignments are still visible, and registered on the State Inventory of Historic Places (Site Number 50-10-36-21273).

Archaeology and Historic Resources

While this study presents readers with detailed documentation on the pre-history and historical (nineteenth and early twentieth century) significance and uses of the Puna Trail, only limited archaeological field work in the present study area has been undertaken. The primary work (Lass 1997), conducted for the *Na Ala Hele* program does provide program managers and landowners with an adequate overview of the trailside resources, so as to enable managers and trail users to travel the trail in a manner that is respectful of the cultural-historical landscape. As funding becomes available, the state, land owner, and interested community groups could form a partnership to further the field work, complete the recordation of sites, and formalize long-term protection and interpretation plans for the area.

The most recent archaeological work done along the historic Puna Trail-Old Government Road was conducted in 1997, when Barbara Lass, Ph.D. (then of the University of Hawai’i-Hilo, Department of Anthropology) conducted a limited reconnaissance survey along the Old Government Road (Kea’au) section (*Figure 17*). Lass’ work was undertaken at the request of *Na Ala Hele* (the Department of Land and Natural Resources-State Division of Forestry and Wildlife) to determine the nature and extent of cultural resources in the vicinity of the Old Government Road. Lass conducted the survey with the help of students of the Department of Anthropology, as a field school project. Work included field study—identification and limited recordation of sites—and limited historical research.

As a result of the reconnaissance survey, a total of fifteen (15) archaeological sites ranging from features of Hawaiian origin to historic features and World War II sites, were identified. These sites include the Old Government Road, various walls, enclosures, and features

associated with fortification of the coast line during World War II. Additionally, outside of the immediate road survey area, other features including habitation complexes, possible ceremonial sites, agricultural complexes, possible burial sites, petroglyphs, and other sites of the historic period were viewed. Lass summarized her findings and recommendations in regards to pedestrian use and interpretation of the Old Government Road noting:

The portion of the Old Government Road studied for this project passes through one of the few areas of northern Puna which is still relatively undisturbed and as such contains essentially intact archaeological sites. However, development of the Old Government Road as a hiking trail should not negatively affect these sites, and in fact, development of a trail would be an ideal opportunity for public interpretation of the area (Lass 1997:2).

Table 3 below, presents readers with State Inventory of Historic Places (SIHP) site numbers and a brief description of all sites recorded to date. The primary source of the following documentation was recorded by Lass (1997), though a few supplemental notes have been included from the work done as a part of this study.

Table 3. Sites Identified Along and Near the Historic Puna Trail-Old Government Road

State Inventory of Historic Places Site (SIHP) Number 50-10-36:	Site Type:	Description and Comments:
21273	Old Government Road – Puna Trail	The main thoroughfare in the district of Puna for much of the nineteenth century (with portions of the road being built upon the early <i>ala loa</i>) The alignment includes <i>‘ili‘ili</i> and larger cobblestone pavements, curbstone and wall siding, raised or filled areas, and worn paths across open <i>pāhoehoe</i> flats.
21259	Rock wall	Parallel to the <i>mauka</i> side of the Old Government Road (OGR) – perhaps dating to the period of construction of the formal road (ca. 1870 +)
21260	Rock wall enclosure and associated features	This site is on the <i>mauka</i> side of the OGR. A rectangular rock wall encloses several features. Among those features are smaller walled enclosures, a rock pile, a small segment of a retaining wall. These features are presently interpreted as being of agricultural functions. One additional site within the enclosure was interpreted as a possible burial platform (no further investigation was conducted). The site may incorporate both pre-historic and nineteenth century features in it.
21261 & 21262	Adjoining rock wall enclosures	Situated on the <i>makai</i> side of the OGR, across from Site 21260. These enclosures were interpreted as nineteenth century agricultural features.
21263	Rock wall	Situated on the <i>mauka</i> side of the OGR, paralleling the alignment (age and function unknown).

Table 3. (continued)

State Inventory of Historic Places Site (SIHP) Number 50-10-36:	Site Type:	Description and Comments:
21264	Rock enclosure wall	<p>Situated on the <i>makai</i> side of the OGR, this site is a roughly oval shaped enclosure with several interior walls which appear to divide the area into smaller compounds. At the time of the survey, two of the smaller enclosures held standing water. The site and associated features are interpreted as being agricultural sites.</p> <p>Lass also observed several features <i>makai</i> of Site 21264, an annotated summary of her comments is provided here:</p> <p>Between Pākī and Keauhou above a rough jeep path (probably the general alignment of the old fisherman's trail from the old Kea'au school house, past Pākī and Keauhou, and continuing on to Keahuakalīloa), is a large complex and possible <i>heiau</i> (situated at the place called Pōhakualea – cf. Cook 1913 in this study). Inland of this site, proceeding to the OGR and Site 21264 are numerous agricultural features and a possible burial mound (the latter is similar to the possible burial feature identified at Site 21260).</p> <p>Immediately <i>makai</i> of the old Pākī residential site (home of George – Keoki Ma'i, who lived at Pākī until ca. 1942), are a series of petroglyphs on the <i>pāhoehoe</i> flats. These petroglyphs are in the form of names and some dates, primarily dating between ca. 1860 to 1920. (cf. Lass 1997:31-32)</p>
21265	L-shaped wall	<p>Situated on the <i>makai</i> side of the OGR, paralleling the alignment (age and function unknown).</p>
21266	Rock enclosure wall	<p>Situated <i>makai</i> and adjacent of the OGR. Within the site are several stone piles, and plantings of <i>tī</i>. The site is interpreted as a nineteenth century agricultural feature.</p> <p>Lass also noted:</p> <p>On the <i>mauka</i> side of the OGR, across from Site 21266 is an apparent residential complex, not easily visible from the road. (Lass 1997:31)</p>
21267	Modified hollow	<p>Situated <i>makai</i> of the OGR, this site is a roughly oval-shaped hollow, with interior portions of the hollow lined by rock walls. The site is interpreted as being an agricultural feature.</p>

Table 3. (continued)

State Inventory of Historic Places Site (SIHP) Number 50-10-36:	Site Type:	Description and Comments:
21268	Rock wall	This site is a long rock wall, situated parallel to and on the <i>mauka</i> side of the OGR. (The wall fronts the Clara Shipman-Fisher property.)
21269	Rock wall	This site is a rock wall that is situated <i>makai</i> of the OGR, extending from the road alignment towards the shore. (The wall was a boundary and paddock wall built as a part of the Shipman Ranch operations.)
21270	Concrete trough	This site is on the <i>mauka</i> side of Site 21268, inland of the OGR. (The site is associated with the Fisher Chicken Farm—ca. 1923-1942.)
21271	Concrete bunker	Situated on the <i>mauka</i> side of the OGR, this bunker was one of two such features—one each on the south and north sides of Kea’au Bay—built as fortifications during World War II.
21272	Modified trenches	Situated on an uplifted <i>pāhoehoe</i> mound, on the <i>makai</i> side of the OGR. The trenches are made in the natural <i>māwae</i> (fractures) in the top of the mound. They were interpreted as dating from World War II.

Findings of the Reconnaissance Survey (Lass 1997)

The following documentation was given by Lass in chapters of her report titled “*Results of Field Investigation, Conclusions,*” and “*Recommendations.*” Lass’ texts are generally presented as she reported them, with only a few minor modifications so as to standardize use of diacritical marks on Hawaiian words, and to clarify a few her observations. Lass took several photographs in the field (not included with her report), and prepared a series of illustrations of the identified sites. In this study, Lass’ illustrations and three site photographs are included with site descriptions below (Lass’ texts are printed in first level indentation).

The present author, having had the benefit of reviewing Lass’ work and conducting further archival-historical research and oral historical interviews, has answered several questions raised by Lass, and added further documentation to the nature and use of several sites identified to date. Where appropriate, additional site and historical documentation and site photos (taken by the author) are included with Lass’ site descriptions (indicated by second level indentation).

RESULTS OF FIELD INVESTIGATIONS (Lass 1997)

This section discusses in turn the characteristics and condition of the Old Government Road, sites recorded along the road, and other sites noted in the vicinity of the survey area. A summary and interpretation of this information is provided in the next section (i.e., Conclusions).

Old Government Road (50-10-36-21273) [Figure 15 and 17]

Between Hawaiian Paradise Park and the turnoff to Pākī Bay at site 50-10-36-21266 the Old Government Road is currently used by four-wheel drive vehicles.

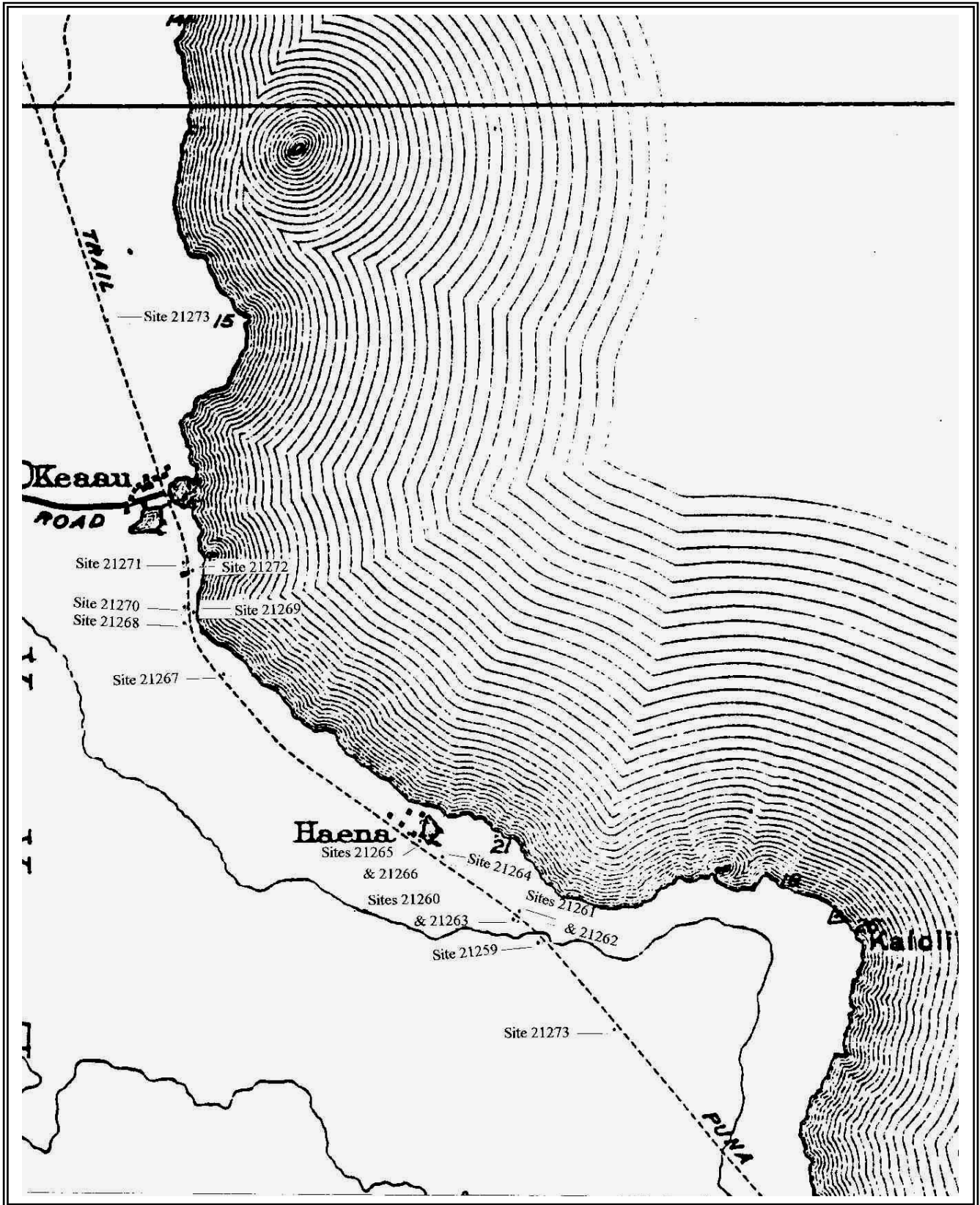


Figure 17. The Historic Puna Trail-Old Government Road; Showing Approximate Locations of Archaeological Sites Identified by Lass (1997:Figure 2)

It is readily apparent as two parallel tracks or ruts within an open corridor which is eight to ten feet (2.5 to 3.5 meters) wide. The corridor is maintained by vehicle traffic which regularly flattens any vegetation on, between, and for some distance to either side of the tracks/ruts. There is surprisingly little obvious damage to the road from vehicles. Original curbstones and cobblestones are preserved here almost as frequently as they are in other less traveled portions of the survey area. From the Pākī Bay turnoff to the beach at Hā'ena the route of the old Government Road is used as a walking trail only. The original road can be seen and followed quite easily when vegetation is cleared with the exception of the portion of the road just south of the beach at Hā'ena. Here there is extremely thick ground cover which is difficult to clear. Even when small areas were cleared during the field survey, however, no evidence of the original road was seen which may suggest that the road was damaged or obliterated by activities associated with the Shipman residences, the Shipman ranch, and/or World War II.

Within the survey area the Old Government Road crosses both open relatively unvegetated areas on *pāhoehoe* lava and forested areas with soil. On the *pāhoehoe* curbstones from the original road can sometimes be observed. These are loose blocks of lava rock simply resting on the surface of the ground at irregular intervals along the edge or edges of the original road. They are isolated stones and do not abut or adjoin each other to form low walls. The curbstones are relatively small measuring approximately 30-45 centimeters (12-18 inches) by 30-45 centimeters. Other than curbstones there are no indications of road construction in the *pāhoehoe* areas.

Curbstones are also found in forested areas, but here they do usually adjoin to form low walls which extend along one or both sides of the road for distances of up to several meters. And, instead of simply being placed on the surface of the ground the curbstones are partially buried or embedded in soil.



**Figure 18. Cobblestone Pavement Near Pākī Trail
(Lass Neg. # 14)**

In areas with soil the road bed also contains concentrations of cobblestones or rounded, waterworn rocks along with smaller rounded pebbles and gravel (*'ili'ili*).

Such waterworn rocks must have been transported to the road from beach areas. They were apparently placed on the road to form a rough, uneven sort of pavement. This was probably done in an attempt to prevent or ameliorate muddy road conditions. In some places cobblestones were used to build up or cross low places which would have been particularly wet. These built-up areas sometimes have low curbstone walls.

The *pāhoehoe* sections and the forested sections of the Old Government Road are interspersed at varying intervals. Some portions of the road extend over *pāhoehoe* lava or through forest for several hundred meters at a time. However, other portions of the road consist of 18 meters on *pāhoehoe*, 3 meters of cobblestones, 64 meters on *pāhoehoe*, 9 meters of cobblestones, and so on. In addition, in some areas *pāhoehoe* and cobblestones are interspersed across the width of the road; for example the *mauka* side of the road may be on *pāhoehoe* but the *makai* side may contain cobblestones. The width of the road varies from 2.5 to 3.5 meters with an average width of 3 meters or approximately 10 feet. This is typical of Type C roads which were built to accommodate two horses and is consistent with early twentieth century maps which identify the Old Government Road as the “10 Foot Government Road” (cf. County of Hawai‘i Map, 1933 & Apple 1973).

As a Type C road, the Old Government Road is relatively straight containing only small bends or curves along its route. It passes over many small dips and rises in the lava terrain however. As was characteristic of nineteenth century road building high places were apparently not leveled, but as described above, many low-lying places were filled or built up with cobblestones. There is a relatively deep depression in the swampy area just south of Hā‘ena, and the Old Government Road once crossed the stream at Hā‘ena as well. There is no evidence of how these obstacles were crossed and in particular no evidence of bridges of any kind. A local informant (Auwae 1997) says that there were never any bridges and that the stream at Hā‘ena was simply waded across; mules were supposedly more adept at making the stream crossing than horses.

Sites Along the Old Government Road (Lass 1997)

The fourteen archaeological sites recorded along and within view of the Old Government Road include five stone walls, five walled enclosures, a modified depression, a concrete trough with associated architectural features, a World War II bunker, and a site with two trenches which are probably associated with World War II as well. These sites are described below in the order in which they are found along the road beginning at the south end of the survey area [Figure 17].

Site 50-10-36-21259 is a stone wall adjacent and parallel to the *mauka* (i.e., inland) side of the Old Government Road. It is 29 meters long, .6 meters wide, and varies from .9 meter to .7 meter in height. Small portions are collapsed and others entwined with tree roots. The terrain on the *mauka* side of the wall is almost a meter higher than the surface of the road, and the wall may have functioned as a retaining wall to prevent soil erosion. If so, the wall was probably erected during the last half of the nineteenth century when the Old Government Road was being constructed and maintained.

Site 21260 is a roughly rectangular rock wall enclosure adjacent and parallel to the *mauka* side of the road [Figure 17]. It measures 109 meters in length on the side nearest to the road and 102 meters in length on the opposite side; the north end is 47 meters long and the south end 37 meters. The enclosing wall is .5 meter wide and varies from .8 to .9 meter in height. Small portions are collapsed, and others covered with vegetation.

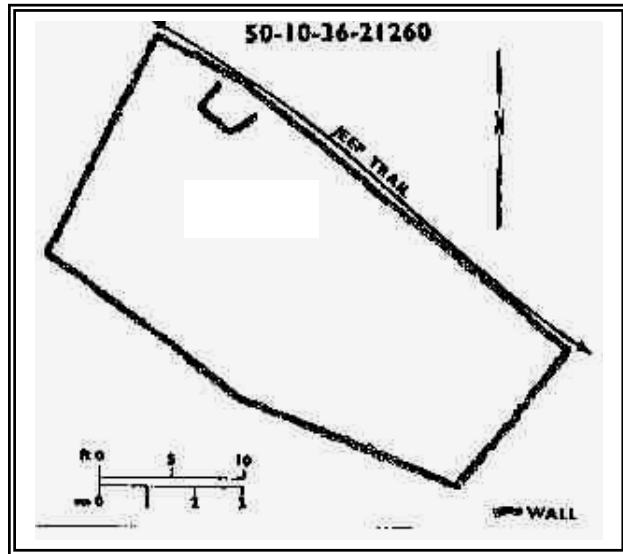


Figure 19. Plan of Site 50-10-36-21260

The interior of the enclosure contains several features.

These include a smaller walled enclosure, a rock pile, a small segment of a retaining wall approximately .7 meter high, and an apparent burial platform measuring 1.5 meters x 2.5 meters x .6 meter in height which contains waterworn beach rock. Throughout the enclosure it appears that rocks were once collected and then thrown or piled on and against *pāhoehoe* outcrops. In the low lying areas from which the stones were presumably removed three to six inches of moist dark organic soil is found. The enclosure itself was most probably constructed after European contact, probably in the first half of the 1800s, to keep cattle out of gardens which had previously been established in the fertile soil. With the exception of the [possible] burial platform, the features within the enclosure were probably associated with

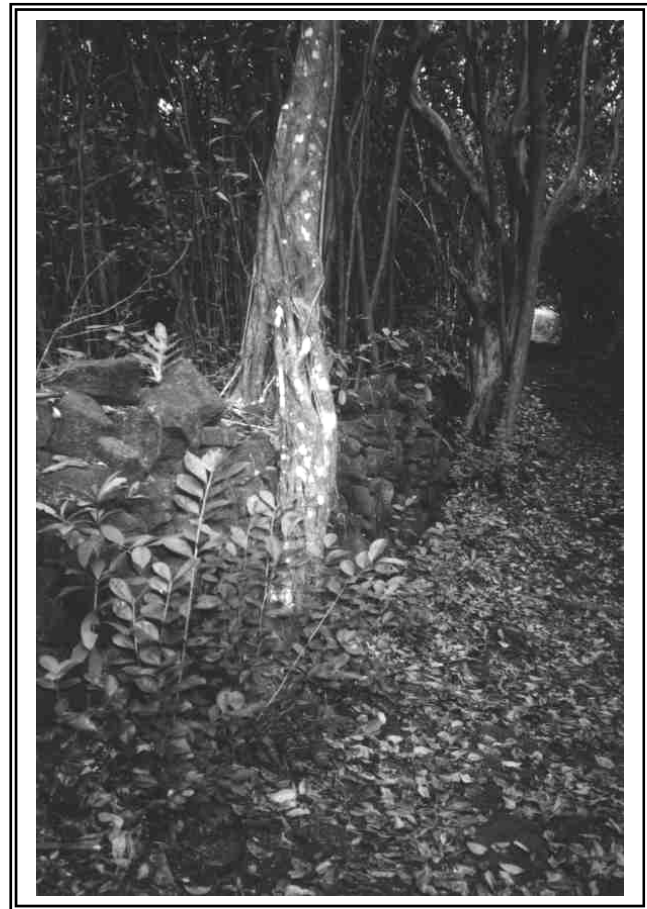


Figure 20. Portion of Site 50-10-36-21260 Wall along Roadside

horticulture; the smaller enclosure could have been used for composting, the retaining wall used for minor terracing, and the rocks piled and moved to clear garden patches...

Sites 21261 and 21262 are adjoining rock wall enclosures located across the Old Government Road from the enclosure described above as site 21260 [Figure 17]. Like site 21260 both are adjacent to the road and both are roughly rectangular in shape although unlike site 21260 the long side of each enclosure is perpendicular to the road rather than parallel to it. The southern enclosure, site 21261, is 69 meters long on its north end which it partially shares with site 21262; the south end measures 87 meters in length, and the remaining sides are both 50 meters long. The southwest corner adjacent to the road contains a circular enclosure measuring 4-5 meters across which may have been a composting area.



**Figure 21. Portion of Site 50-10-36-21261
(Lass Neg. # 4)**

The northern enclosure, site 21262, is 60 meters long on its north end, 73 meters on the south end shared with site 21261, 56 meters long on the side adjacent to the road, and 63 meters long on the remaining side. Small wall portions are collapsed; other portions are obscured by vegetation. The interior contains one isolated wall of indeterminate purpose which is 17.5 meters long and .5 meter high. Within both enclosures rocks have been piled on lava bubbles and pāhoehoe outcrops, the low-lying areas without rocks contain organic soil, and numerous coconut and mango trees grow throughout. Like site 21260 these sites were most probably garden enclosures constructed in the nineteenth century.

Site 21263 is a rock wall on the *mauka* side of the Old Government Road. It parallels the road, and is 16 meters long, .6 meter wide, and .8 meter high. Its age and original purpose is not known.

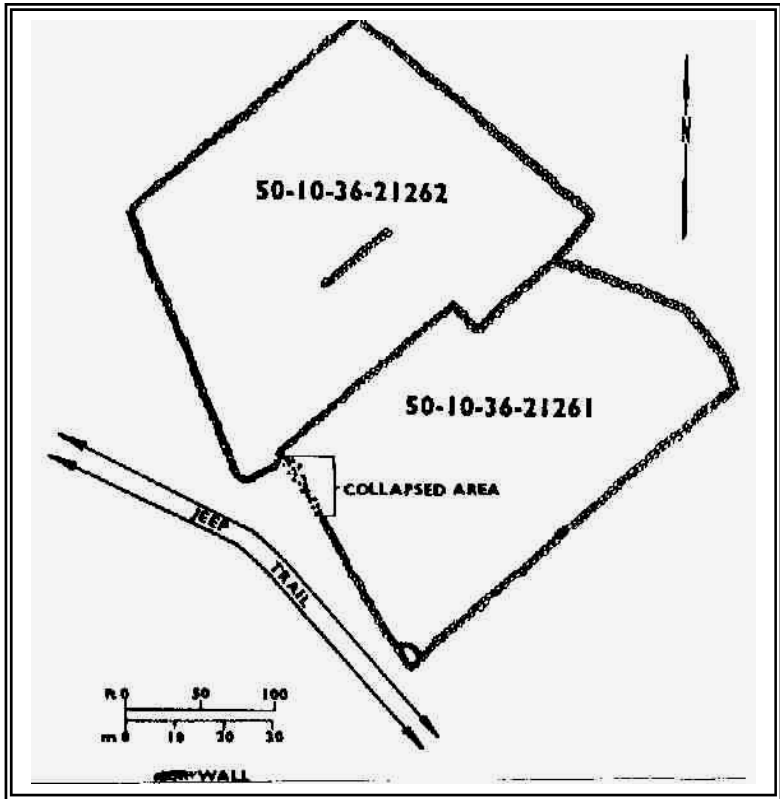


Figure 22. Plan of Sites 50-10-36-21261 & 21262



**Figure 23. Portion of Stacked Waterworn Stone Wall
Site 50-10-36-21263**

Site 21264 is an enclosure of irregular, roughly oval shape located on the *makai* (i.e., ocean) side of the Old Government Road [Figure 17]. It is approximately 90 meters long and 50 meters across with its long axis lying parallel to the road. The enclosing wall is .5 meter wide and .8 to .9 meter high. Small portions of the wall are collapsed and other portions overgrown. This enclosure contains several interior walls which divide the area into smaller compounds. Two of the compounds along the *makai* wall contain standing water.

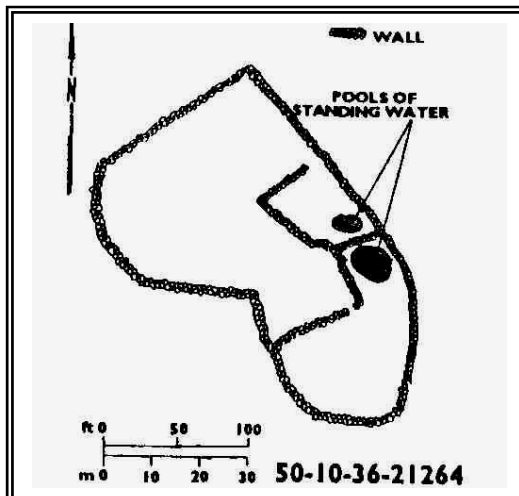
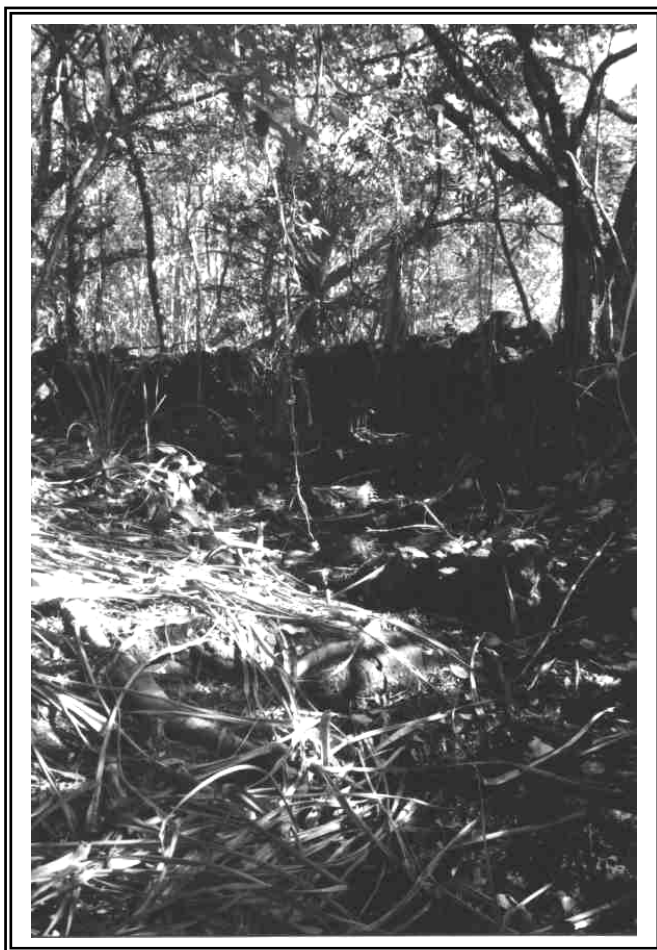


Figure 24. Plan of Site 50-10-36-21264



There are other marshy areas with smaller amounts of standing water within the enclosure as well. The enclosure contains a few small rock piles, and as in the other enclosures rocks were apparently also collected and piled on lava outcrops; the low-lying areas contain soil. Like the other enclosures described above, this site was most probably a gardening enclosure. The marshy conditions within this enclosure would have allowed taro cultivation.

Figure 25. Photo of interior of Site 50-10-36-21264

Site 21265 is an L-shaped wall located on the *makai* side of the Old Government Road. The wall is located 5 meters from the road. The long portion of the wall which parallels the road is 10 meters long, and the remaining portion perpendicular to the road is 5 meters long. The wall is 1 meter high and .5 meter wide. Its purpose and date of construction are not known.

Site 21266 is a square to rectangular enclosure located adjacent to the road on the *makai* side [Figure 17]. It measures 50m in length on the two sides parallel to the road, 36 meters in length on one end, and 33 meters in length on the remaining end. The enclosing wall is 1 to 1.2 meters high and .5 meter wide. Small portions of the wall are collapsed. The interior of the enclosure contains some piled rock, some areas with soil, and some *tī* plants. This site is probably a nineteenth century agricultural enclosure.

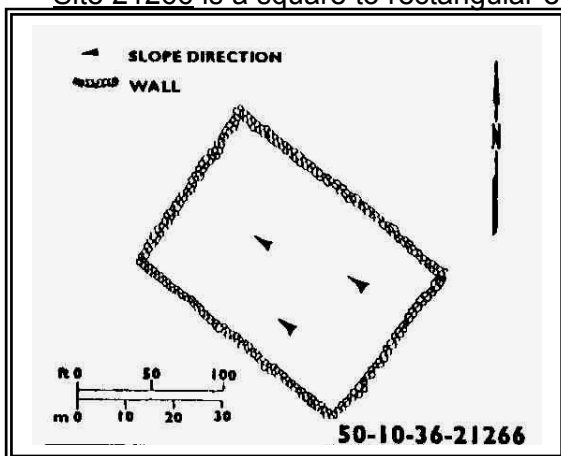


Figure 26. Plan of Site 50-10-36-21266

Site 21267

is a modified depression or *kīpuka* located adjacent to the Old Government Road on the *makai* side. It is roughly oval in shape and measures approximately 11 meters in length, 9.5 meters in width, and 1.5 meters in depth. The long axis of the depression lies parallel to the road. Portions of the interior are lined or retained with rock.

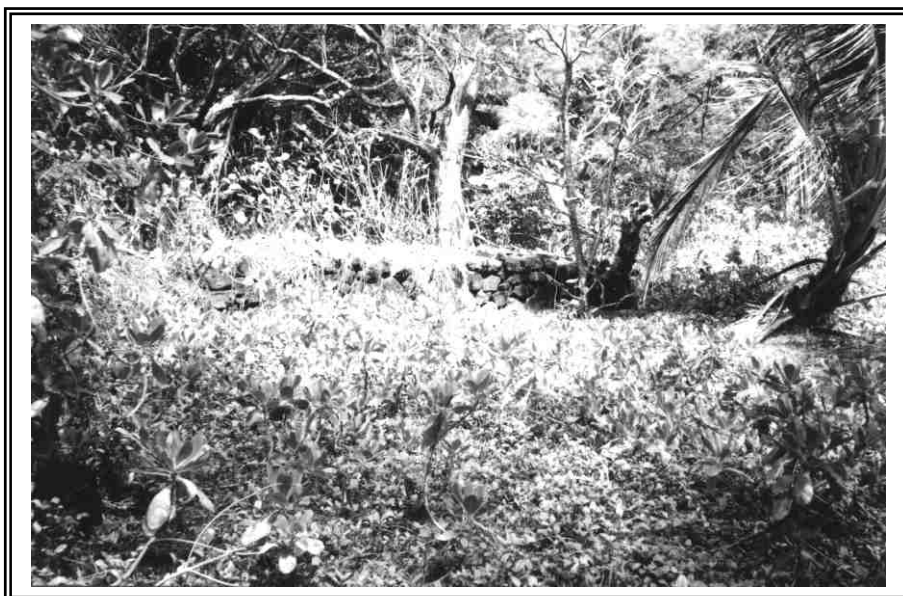


Figure 27. Portion of Wall - Interior Site 50-10-36-21267

In addition, the north end contains a possible ramp way or pedestrian entrance constructed with rock. This site may have been a gardening and/or composting area. Two pieces of broken dishware were found near the edge of the *kīpuka* at the south end, but no other trash was found in the vicinity, and no artifacts of any kind were found in the depression itself.

Survey documentation and historical records place this site in the vicinity of School Grant 4 Lot 18; one of two coastal school sites at Kea'au. Hitchcock to Bishop (1865 – in this study) described school lots being entirely enclosed with walls to keep animals out of cultivated plots kept by the students; and the subsequent use of steps over the walls for student access.

Site 21268 is a wall adjacent and parallel to the *mauka* side of the road. It is very long extending over a distance of 425 meters [Figure 17]. The wall is obscured by vegetation in some areas. It varies from 1.2 to 1.8 meters in height and is .8 meter wide/thick. At a point 165 meters from its south end the wall is breached by a metal gate of recent construction, the gate measures 4.4 meters across and blocks an unsurfaced road leading inland. A County of Hawai'i tax map for 1949 shows that this road leads to the Shipman cemetery and other parts of the Shipman property *mauka* of the pond near the residence(s). The wall is in excellent condition, the gate is of obviously recent origin, and there is no evidence that any preexisting wall was destroyed in order to erect the gate. These facts, along with the proximity of the site to the Shipman residences, suggest that this site is of relatively recent origin although the World War II bunker (Site 21271), discussed below, was apparently constructed on top of the wall which means that the wall must predate the 1940s. The wall may have been associated somehow with the Shipman ranch and/or to create the illusion of a residential compound at and near Hā'ena. At one time, before World War II activities in the area, the wall could have extended closer to Hā'ena than it does today. (see further discussions under Sites 21269, 21270, & 21272)

Site 21269 is a wall located on the *makai* side of the Old Government Road. It is perpendicular to the road and appears to have originally extended from the road to the shoreline although portions of the wall are now collapsed and a significant portion at the shoreline end is missing entirely. The entire length of the wall was probably once 35 meters but currently the wall consists of 12.2 meters of intact wall at the *mauka* end, then 7.6 meters of collapsed wall, then a 15.3 meter gap, and finally a large isolated rock at the *makai* end... It is possible that the wall has been damaged and destroyed by high surf. The height of the existing wall is 1.1 meters and its width 1 meter. The age and purpose of the wall is not known. (Lass 1997:29-30)

Oral history interviews document that this wall served dual purposes. The wall was built as a part of the ranching operations and divided a paddock, and also serves as a boundary on the *makai* side of the Shipman family (Fisher's) residence parcels. At one time a gate closed the opening across the Old Government Road, and the wall ran all the way to the shore. The wall also served as the backdrop of an archaeological dig for an episode of Hawai'i-50 (see interviews with Roy S. Blackshear and John Ka'iewe).



**Figure 28. Portion of Wall (Site 50-10-36-21269).
The Puna Trail proceeding south through the wall**

Site 21270 is a concrete trough and associated architectural features located approximately 6 meters *mauka* of the long wall which is Site 21268. The trough measures 2.2 meters x 1.6 meters and is 1 meters high. It is likely that the trough was constructed on the site as three distinct layers of concrete can be observed in the sides of the trough; these would have been formed by successively filling a form with cement. The trough has a concrete bottom which rests on the surface of the ground. Inside of the trough the bottom is covered with approximately six inches of mud, water, and decaying vegetation. Probing with a machete revealed that the bottom of the trough contains a raised central platform which is approximately 1 meter long, 45 cm wide and 20 cm high. Outside but immediately adjacent to the trough were found a large copper float and the rusting remains of what appears to have once been a water heater with copper wiring and porcelain insulators. Two to three meters *mauka* of the trough are two stone walls with concrete mortar. Both are parallel to the road, and both are approximately 1 meters high and 1 meters wide. Twentieth century trash was found scattered in the vicinity of the site; this included early twentieth century medicine bottles, glass food containers dating to the 1950s and 1960s, and plastic food containers of more recent date. This site is clearly of twentieth century use and given the well-preserved water heater it is possibly of quite recent construction. It may represent a house or bathhouse associated with the Shipman ranch or possibly a facility associated with military activities in the area during World War II.

This feature and other associated features was once a part of the Fisher's chicken farm complex which was operated between ca. 1923 to 1942. The feature was under the floor of one of the long chicken houses, and is thought to have been associated with processing activities. Historic

photos in the interview with Roy S. Blackshear show the buildings of Fisher's farm (cf. interviews with Roy S. Blackshear and John Ka'iewe).

Site 21271 is a concrete bunker located adjacent to the road and atop the wall which comprises site 21268. It measures 3.5 meters on each side and 1.9 meters from the ground to the top of the slightly overhanging roof. The back or *mauka* side has an attached covered entrance. A viewing slit encircles the structure at a height of 1.1 meters from the ground; the slit is 35 cm high. Within the bunker rusting metal platforms for observation instruments and/or gun mounts are found on the *makai* north, and south sides. The site is somewhat overgrown with vegetation but is otherwise very well preserved. The bunker is identical to those found elsewhere throughout Hawai'i which were constructed during World War II. It was probably intended to defend the potential landing site at the beach at Hā'ena.

Site 21272 is located on the *makai* side of the Old Government Road approximately 66 meters south of the bunker. It consists of two artificially constructed trenches located on a relatively high v-shaped lava formation [Figure 17]. The point of the V faces the road and is 9.5 meters from the road. The trench on the north end of the hill is 14.2 meters long, 2 meters wide, and 1 meter deep.

The south trench is 14.5 meters long, 1.4 meters wide, and 1 meter deep. Unlike the other trench, it is divided into four sections by stone walls. These trenches were probably constructed during World War II. Although approximately the same width as trenches built elsewhere in Hawai'i for refuge the trenches at site 21272 are only about half as deep. Their proximity to the coastline and their location on a hill suggests that they were intended for use in shoreline surveillance or defense and not for refuge in case of attack.

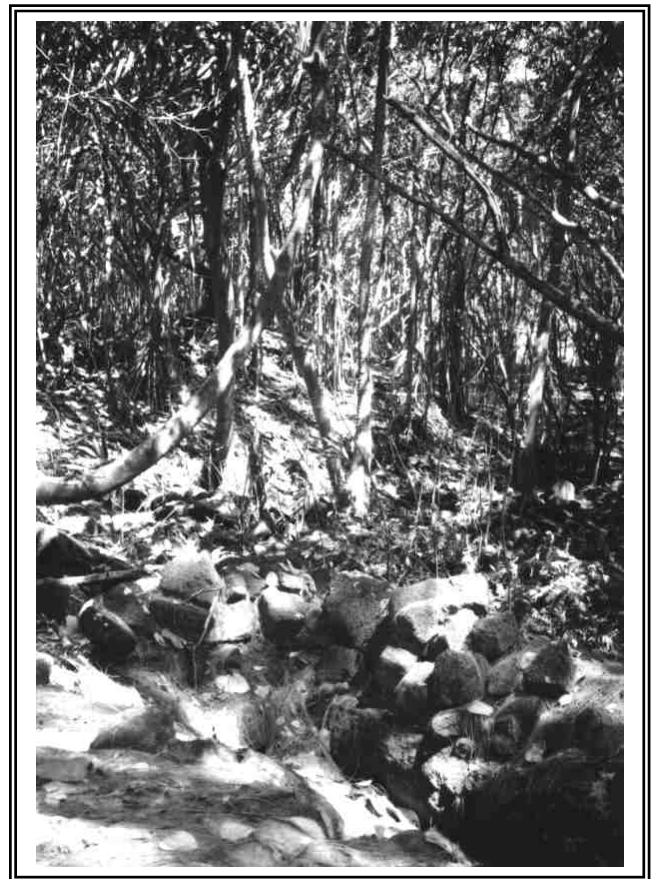
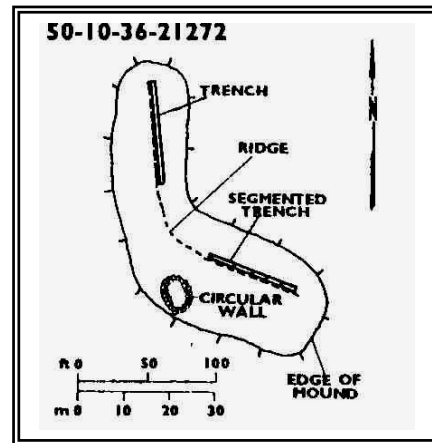


Figure 29. Modified Trench at Site 50-10-36-21272

Site 21272 also contains a circular enclosure located between the road and the north trench at a distance of 9.5 meters from the trench. It measures 3.6 meters x 4.1 meters, and the surrounding wall is .6 meter high and .8 meter wide. The age and function of this feature is unknown. (Lass 1997:30-31)

Figure 30. Plan of Site 50-10-36-21272



The area between this *pāhoehoe* mound and the stone wall-property boundary on the *mauka* side of the Old Government road was the primary camp site for the army during World War II. It is thought that the modified trenches are associated with that period. Roy Blackshear posits that outhouses may have been built over them. John Ka'iewe recalled the site being used by fishermen as a shelter when he was a youth. Stones on the flat area *makai* of the site may be the ruins of older sites as well (see interviews with Roy S. Blackshear and John Ka'iewe).

Other Sites in the Vicinity of the Survey Area (Lass 1997)

Sites were noted although not formally recorded near Site 50-10-36-21266 and at and near Pākī Bay. Across the road (*mauka*) from site 21266 is an apparent residential complex not easily visible from the road. It contains three enclosures, one rectangular and two circular; the rectangular enclosure resembles other enclosures in the survey area assumed to have been agricultural compounds, but the function of the circular enclosures is not known. The site also contains terraced platforms on a prominent hill or rise which may represent house platforms. This site is the only site so far found within the survey area which may have been a habitation site occupied by people who used the nearby agricultural enclosures.

An apparent *heiau* is located south of Pākī Bay on the *mauka* side of a four-wheel drive track which passes along the beach. It is irregularly shaped measuring 13.7 meters on its *makai* side, 66 meters on the north side, 27.3 meters on the south side, and 38.4 meters on the *mauka* side. The *mauka* side forms part of a much longer enclosing wall which extends around the [possible] *heiau* to the north and the south. The [possible] *heiau* is an impressive stone platform up to 3.3 meters high in some places. Some terracing of the platform is present at the south end. The top of the platform contains several features including low walls which form figure eight-shaped enclosures, other low walls, and pits dug into the platform. It is possible that some of these features, particularly the pits, indicate post-contact alteration of the platform. In particular, the [possible] *heiau* may have been used as a source of construction stone. The [possible] *heiau* is covered with dense vegetation including numerous *hala* trees.



Figure 31. Portion of complex (with possible heiau) on shore at Pōhakualea, between Pākī and Keauhou (Lass Neg. # 15)

Mauka of the [possible] *heiau*, particularly between it and Site 21264 on the Old Government Road, are located other agricultural enclosures and a [possible] burial site similar to that found at Site 21260. The marsh at Pākī Bay extends to Site 21264 where it finally ends in the small pools of standing water found at that site. It is clear that sites are found continuously from the coast to and beyond the road. This may suggest the former existence of a dispersed community in the vicinity of Pākī Bay.

It will be noted that this study presents testimonies given before the Boundary Commission and for Land Court Application 1053 (LCApp.) which make references to the community that extended from Pākī to Keauhou in the nineteenth century. In his LCApp. testimony, David Malo (born at Maku'u in 1852) stated that the old church-school lot (Grant 8) was situated at Pākī. *Makai* of the church-school lot, the old fisherman's trail (which began at the Kea'au School – Grant 18) passed this lot and continued on to Keahuakalīloa, where it rejoined the "King's Trail" (the OGR). Keoki Ma'i who also testified in the application, was born at Pākī in 1868. At one time there were enough people living there to keep the school open. Both John Ka'iewe (who stayed at Pākī with his Tūtū Ma'i) and Roy Blackshear describe Ma'i's ongoing residency at Pākī to about 1942. Through the early part of this century, activities in the area included residential use, planting, and fishing (see interviews with R. Blackshear, J. Ka'iewe, and A. Haa Sr.). The place name, Kīpaepae (stone pavement), recorded on some early maps for this area between the shore and Puna Trail-Old Government Road, is in fact descriptive of features on this landscape.

Just south of Pākī Bay itself approximately thirty-five names have been scratched or carved in a flat *pāhoehoe* exposure. The expanse of *pāhoehoe* is immediately adjacent to the water and is completely submerged at high tide although it is possible that the site was always above water prior to recent coastal subsidence [ca. 1924]. The names were apparently carved at different times in different styles and do include some of obviously recent origin such as the name Curt accompanied by a rectangle and the name Sam accompanied by the date 1738. As far as can be determined the complete list of names includes Hannah, Naweli, Elia, Ema, Kieki[e-?], Kane, Rose, Maka, Lui, 1902 Kamaka, 1738 Sam, Kalani, Joe Na, Wessel, Henry Ma'i April 2, 1897, Moses, S.K. Puukohola (appears twice), M[?]jiku, Ioe N 1911, Mai 1875, B. Stewart, Halala, Momikii, Kiu, JA Kaihawai Dec 13 19[??], Iwaholia[?], Kona, Curt (with rectangle carved under name), Sarah, Ko Awn[?], and I E Kahoukua. (Lass 1997:31-32)

Several of the individuals whose names are present can be identified. The name Wessel which appears in contemporary style printing was probably carved by Maggie Wessel; she was a high school student in the 1940s who socialized with young members of the Shipman family and attended picnics and parties on the Shipman property at Hā'ena (Cahill 1996: 231-232). Other names are of

earlier origin. Papa Henry Auwae, a local informant, says that the Kaiawai [i.e. Ka'iewe and Ka'iawe] family and the Ma'i family including Henry Ma'i lived at Pākī Bay in the late nineteenth and early twentieth centuries. S.K. Pu'ukoholā was Simon or Simeon Pu'ukoholā who was Papa Auwae's father-in-law (Auwae 1997).



Figure 32. Petroglyph at Pākī – Name of S.K. Puukohola etched into the *pāhoehoe*

Tax collection ledgers for 1869 show that someone named Pu'ukoholā paid taxes in the *ahupua'a* of Kea'au (Interior Department Tax Assessment Records 1869); this would not have been Papa Auwae's father-in-law but rather a family member of the preceding generation. Many of the older names are carved in block printing (Roman capital letters) which was the style of writing taught by missionaries (Cox and Stasack 1970:53, Kwiatowski 1991:68-69). The carving

of Henry Ma'i's name contains a reversed or inverted "N" suggesting that the carver had only an elementary knowledge of writing.

The names at Pākī Bay resemble petroglyphs in size, general arrangement, and nature of carving, and it can be argued that they represent a continuation of petroglyph making well into the post-contact period. A number of petroglyph sites in Hawai'i, including sites in Puna, Ka'ū, and North Kona on the Big Island, contain lettered names, dates, or words although, unlike the site at Pākī Bay, they also contain drawings of traditional and/or introduced objects (Cox and Stasack 1970:53; Kwiatowski 1991:68-69,74; McBride 1969:27,29). Words were carved after missionary schools were established in the 1830s (McBride 1969:29). It is often suggested that all petroglyph carving, including the carving of letters, had ended by the mid 1870s (Cox and Stasack 1970:53; Kwiatowski 1991:68-69), but the names at Pākī Bay, some of which were apparently carved in the 1870s, 1890s, and early 1900s seem to refute this idea. The depiction of objects may have ceased, but petroglyph carving may have continued in some places such as Pākī Bay as the carving of names and dates only. Sometimes new areas were chosen for post-contact petroglyphs (Kwiatowski 1991:74), and Pākī Bay may represent an area which was devoted entirely to lettered carvings made relatively late in the post-contact period. Some have suggested that names and dates were carved to make a record of a trip (Cox and Stasack 1970:53; Ellis 1963:334), and others have suggested that Hawaiians recorded their names, the date, and sometimes the places they came from to mark the occasion of learning to write (Kwiatowski 1991:74). Another intriguing theory suggests that petroglyphs containing names and dates were made by someone other than the person named to mark or commemorate the person's birth (Cox and Stasack 1970:53). (Lass 1997:32)

CONCLUSIONS (Lass 1997)

The Old Government Road between Hawaiian Paradise Park and Hā'ena is well-preserved. It is quite easily followed when vegetation is cleared with the exception of the portion just south of Hā'ena where it is obscured by dense vegetation and possibly damaged or destroyed as well. Archaeological evidence of the original road consists of curbstones on *pāhoehoe* and curbstones and cobblestones in forested areas with soil. The road is approximately 3 meters wide, is built up over low places, and follows an essentially straight course suggesting that it was a Type C road constructed to accommodate two horses walking side by side. Documentary information indicates that the old Government Road was probably originally a pedestrian trail that may have been modified prior to 1870. It was definitely modified in the 1870s but by 1890 had been largely superseded as a transportation route by the Volcano Road and spur roads leading from the Volcano Road to the Puna coast

Fourteen archaeological sites were recorded within the survey area along the route of the Old Government Road. Five of these sites are agricultural enclosures and another a modified depression probably used for gardening as well. These horticultural sites were probably established in the pre-contact period. They would not have been enclosed with walls however until the 1800s when enclosures were built to keep cattle out of gardens. The fact that the enclosures are oriented parallel to the Old Government Road does not

necessarily indicate when they were built as they could have been constructed along a pedestrian and/or equestrian trail which predated the construction of the road which is visible today.

Not unexpectedly, the six agricultural sites are all found in forested areas with accumulations of soil. The five walled enclosures are clustered within the portion of the survey area south of the Pākī Bay turnoff. This plus the presence of (a) [possible] burial features at Site 21260 and between the coast and Site 21264, (b) a possible habitation site near the enclosure which constitutes Site 21266, and (c) an apparent *heiau* near Pākī Bay all suggest a settlement in the vicinity. This dispersed settlement may have originally included Pākī, Hā'ena, and virtually the entire survey area, but less evidence of settlement is now visible near Hā'ena where activities associated with the Shipman residences and World War II have disrupted the landscape. The names carved on the rocks at Pākī, tax records, historic accounts, and information from oral informants all indicate that Hawaiians were living in and near the survey area in the nineteenth and twentieth centuries. This habitation of the area was probably a continuation of settlement established in pre-contact times as fertile soil, ample rainfall, natural wetlands, and fresh water would have made this portion of the Puna coast exceptionally well-suited for agriculture, aquaculture, and general habitation.

Of the five walls recorded within the survey area Site 21259 appears to have been a retaining wall associated with the Old Government Road Another wall, Site 21268, contains a gate clearly intended to regulate access to Shipman property and is probably associated with the Shipman ranch or residences The age and purpose of the other three walls (Sites 21263 21265, and 21269) recorded within the survey area are unknown- Sites 21263 and 21265 are small isolated walls located south of the Pākī Bay turnoff near the agricultural enclosures and could be related to pre and/or post-contact agriculture and habitation in that area. Site 21269 is located closer to Hā'ena away from other sites in a soil-less location on the shoreline; it seems more likely that it was used for confining cattle, marking property boundaries, or for some other post-contact use. (Lass 1997:33-34)

The remaining three sites recorded within the survey area are all located near Hā'ena, and all clearly date to the twentieth century. One of these sites, Site 21270, is a concrete trough and the associated remains of a stone and mortar structure The other two sites are defensive features constructed during and as a result of World War II. Site 21271 is a concrete bunker, and is an exceptionally well-preserved example of hundreds of identical structures which were erected throughout the Hawaiian Islands. Site 21272 contains two trenches which were apparently dug to fortify a small hill near the coast.

Archaeologically, little is known about the windward areas of Hawai'i Island, and in particular, little is known about upper Puna. *The survey area discussed in this report is one of the very few locations in northern Puna where a concentration of archaeological sites still remains intact. Furthermore, the sites within the area illustrate and represent several important events and trends of the post-contact period [emphasis added].* These include changes imposed on

indigenous agriculture. the construction and evolution of transportation routes, ranching, and World War II. If documentary information is used to supplement archaeological findings nearly the entire story of post-contact Hawai'i including the story of missionary families and the long-reaching effects of changes in land tenure is encapsulated within the survey area. Clearly the area could yield interesting and important information to further investigations.

RECOMMENDATIONS (Lass 1997)

The field work conducted along the Old Government Road was a preliminary reconnaissance survey. The information obtained and presented in this report should be sufficient to determine whether the road can or should be developed as a public hiking trail, but complete archaeological investigations would include more detailed mapping of recorded sites and excavation of selected sites including, in particular, excavations within the agricultural enclosures. Also, if possible, more information on the Shipman ranch, Shipman residences, and post-contact changes in the landscape at Hā'ena could be obtained from living informants.

Improving and opening the Old Government Road as a public trail would probably not negatively affect the road or the sites recorded along the road. Archaeological remains within view of the road consist almost entirely of stone walls and concrete structures which are not particularly susceptible to damage. Furthermore, dense vegetation within a few feet of either side of the road would discourage most casual exploration of visible sites and would largely prevent the discovery of sites not within view of the road to start with. The Old Government Road is already quite heavily used by vehicles and pedestrians. Some of the more obvious sites along the road (i.e., the bunker) must already be well-known yet there is virtually no evidence of vandalism or other disturbance. (Lass 1997:34)

The Old Government Road would be an ideal candidate for public interpretation of area history. Over a relatively short distance people can see sites which represent several different time periods, and more importantly, represent important changes which occurred in the post-contact period. As discussed above, when archaeological evidence is combined with documentary evidence almost the entire post-contact history of Hawai'i is encapsulated within a relatively small area. An interpretive sign at the south end of the trail could provide information about the Old Government Road itself. Another sign somewhere south of the Pākī Bay turnoff could inform visitors that they might see walls or enclosures along the trail which represent Hawaiian agriculture and settlement. A final sign at the bunker near Hā'ena could inform visitors about World War II in Hawai'i and the kinds of sites associated with it. Finally, if access to the Hā'ena end of the trail is eventually developed so that people can begin walking there a second interpretive sign about the road itself could be placed there. (Lass 1997:35)

**VII. CONSERVATION AND PROTECTION:
GUIDANCE FOR IMPLEMENTATION OF A LIMITED SITE
PRESERVATION PLAN FOR THE HISTORIC PUNA TRAIL-
OLD GOVERNMENT ROAD**

This section of the study provides *Na Ala Hele* and others interested in management and protection of the historic and natural resources of the historic Puna Trail-Old Government Road with foundational recommendations for developing and maintaining a wise use program for those resources. The recommendations given below, are rooted in standard practice (i.e., Federal and State laws and guidelines), recommendations from the preliminary archaeological work for the study area (Lass 1997), and those shared by individuals who participated in the oral history and consultation program (*Table 4*) undertaken as a part of this study. The recommended actions set the framework for implementation of a limited preservation plan, including interpretive mechanisms. Increased awareness and wise use of the Historic Puna Trail-Old Government Road will help to ensure that the resources are protected to a time when more detailed integrated resources management- and preservation-planning can be developed.

Table 4. General Consultation Contact Log

Date	Agency/Organization	Type of Contact	Topic
March 23, 1998	Na Ala Hele	Meeting	Design of Study.
March 25, 1998	Na Ala Hele and DLNR-SHPD	Meeting	Design of study and Preservation Plan Development.
April 13, 1998	Na Ala Hele	Site Visit	Puna Trail Inspection.
April 16, 1998	Na Ala Hele	Meeting	Review and further development on study design and approach to preservation plan.
April 27, 1998	PATH (Bonnie Goodell)	Tele-comm.	Review plan for undertaking study and discussion on access concerns and methods, and preservation program.
June 9, 10, 28, & 30, 1998	PATH (Bonnie Goodell)	Tele-comm. & e-mail	Review program development and recommendations for public access and protection of cultural resources.
June 30, 1998	W.H. Shipman. Ltd. (Roy S. Blackshear, T. English, & B. Saunders)	Meeting	Review plan for undertaking study and discussion on access concerns and methods, and preservation program.
July 1, 1998	Na Ala Hele	Meeting	Review Oral History program format and discuss DLNR-DOFAW position on site preservation and methods of access.
July 30, 1998	PATH (Proposal)	Mail	"Transportation Enhancements Screening Form – Preliminary Draft for the Old Puna Road Trail – Phase One.

Table 4. General Consultation Contact Log (continued)

Date	Agency/Organization	Type of Contact	Topic
September 4, 1998	W.H. Shipman, Ltd. (Bob Saunders & Tom English)	Meeting	Review access and preservation, and private property issues. W.H. Shipman, Ltd., will prepare a statement.
September 24, 1998	Roy S. Blackshear and W.H. Shipman, Ltd. (B. Saunders & T. English)	Site Visit	Walked Puna Trail and reviewed various access, resource, and private property issues.
October 28, 1998	Na Ala Hele	Public Hearing	Hearing on proposed revisions to rules and regulations. During hearing, Testimony presented by various members of Hawaiian Community (Ka'ū, Puna, Hilo, and Hāmākua) regarding trail use and protection of Hawaiian cultural resources. Testimonies also included recommendations – some of which have been incorporated into this document – see Na Ala Hele transcripts for full records).
November 16, 1998	John Ka'iewe W.H. Shipman, Ltd., and Na Ala Hele	Site Visit	Walked Puna Trail with J. Ka'iewe, B. Saunders, T. English, and P. Thiele – discussed area history, public access, protection of cultural resources, and preservation plan actions.
December 11	Robert Lindsey (KSBE)	Meeting	Discussed access issues.
December 18, 1998	PATH (Bonnie Goodell)	Meeting	Reviewed program status and made arrangements for overview meeting with PATH Board.
January 7, 1998	W.H. Shipman, Ltd.,	Tele-comm.	Discussed status of report and development of land owner statement with T. English
January 7, 1998	PATH	Meeting	Reviewed study findings and general historic trail treatment proposals with B. Goodell, J. Olson, R. Reilly, and J. Luchau. Noted that primary recommendation from area natives and standard practice of Historic Preservation Division favored preservation and stabilization to be in keeping with historic landscape.
January 7, 1998	J. Melrose (KSBE)	Tele-comm.	Reviewed study and discussed concerns for public access, resource protection, and private property rights.
January 11, 1998	PATH	Community Meeting	Review concerns and recommendations for resource protection and public access.

Over time, as funding becomes available for undertaking detailed archaeological studies, further information on the nature and extent of the historic resources will be recorded. From that work more site specific treatment recommendations can be formulated so as to enable managers and trail users to care for the trail and resources in a manner that is more respectful of the cultural-historical landscape. Thus, the goal of this limited preservation plan—given the present economic constraints and the nature of on-going use of the historic trail—is to provide people with information to help trail and resource users approach the resources in a more informed manner. Indeed, one of the important objectives of a preservation plan is to foster an awareness among resource users, so that the users can share in the responsibility for care of the resource(s). For this reason, a preservation plan generally includes an interpretive plan. It is through interpretation that the agency, landowners, resource managers, and concerned citizens, can enhance the awareness of the public that uses the trail. Awareness can in turn foster appreciation for the unique and sensitive nature of the resources, and appreciation in turn fosters actions that can lead to increased protection of the resources.

It should also be noted here, that while this study and plan focused on the Kea'au section of the historic Puna Trail-Old Government Road, the right-of-way is part of a regional system. Certain recommendations here can be applied to the larger public trail, and further work on all of the right-of-way can be undertaken to ensure an integrated resources management approach to the historic trail system.

Historic Preservation Guidelines

Cultural resources management involves a delicate balance between caring for history and the cultural past—the long-term benefits of preservation planning—and the immediate needs of today. Cultural resources, like natural resources, are nonrenewable they are becoming increasingly endangered by activities which impact the resources and modify the landscape (cf. McGimsey and Davis 1977). Federal, state, and local laws require the mitigation of adverse impacts on cultural resources.

There are several approaches that are taken in cultural resources management, this discussion deals with preservation and conservation. *Preservation* is the specific act of protecting a site and its surroundings. *Conservation* is a program of site preservation combined with local community participation and education. Conservation strives to maintain the integrity of a site and the values (cultural, environmental, esthetic, and scientific) which contribute to its significance. In the latter integrated action, the involvement of landowners, Hawaiian community members, area residents, and management agencies in the conservation process and their long-term involvement in the protection and interpretation of the resources, is integral to the success of preservation efforts along the Puna Trail.

Hawaii Revised Statutes Chapter 6E, the State's Historic Preservation Law, includes historic trails in the definitions of "historic property" (§6E-2) Historic Preservation (§6E-3) (cf. DLNR-DOFAW 1991:IV-12). Na Ala Hele's partner agency, the State Historic Preservation Division (DLNR-SHPD) has formulated draft guidelines for the treatment of historic properties and the development of preservation plans—Title 13, Subtitle 13, Chapters 276 and 277 (Draft—December 12, 1996). These guidelines require the following areas of research and documentation of site treatments:

Historical background research; Consultation with individuals knowledgeable about the project area's history; Preservation of archaeological sites; Buffer zones; Short-term protection measures; Preservation tasks; Considerations for historic properties with cultural significance; Exhibition requirements; and Provision for perpetual preservation (Title 13, subtitle 13, Chapters 276-277, Draft Dec. 12, 1996).

These guidelines along with those of the Legislation and Law that direct *Na Ala Hele*, set the foundation for a successful plan of long-term resource protection, conservation, and interpretation. This limited preservation plan takes into consideration each of the areas set forth for plan development.

The Historic Puna Trail-Old Government Road: Site Treatment Actions

An archaeological site preservation plan seeks to set forth guidance and policies for both short-term and long-term preservation and interpretation of cultural sites identified as being significant to a particular landscape. In this case, because only preliminary archaeological work has been undertaken, and because the area of the public right-of-way is restricted to the historic Puna Trail-Old Government Road (Site 50-10-36-21273), it is fairly simple to design a basic plan which sets forth guidelines and actions that cover both short-term and long-term management goals.

Action # 1: All sites visible along the trail are to be avoided (viewed from the trail), and preserved-as-is, or stabilized as deemed appropriate by DLNR-SHPD¹².

The following actions and sub-sections describe further recommendations of the preservation plan. Initial implementation of the guidelines will fall to *Na Ala Hele* and other state agencies who share management responsibilities for public and historic resources.

Action # 2: *Na Ala Hele* will seek to facilitate the development of a community based resources management partnership in which native families of the Kea'au-Puna vicinity, the land owner(s), individuals knowledgeable about trails, and stakeholder agencies can coordinate long term management and conservation efforts along the Puna Trail-Old Government Road.

· In forming this partnership *Na Ala Hele* will seek out, and make every effort to work with descendants of the native families of Kea'au-Maku'u in the development of formalized site treatment plans, long term management of the historic Puna Trail resources, and identifying traditional based protocols for trail use.

· Members of families who participated in the oral history program conducted as a part of this study (have already stated their interest in participating) and descendants of other families identified in historical records cited in this study are likely candidates for the partnership program. A component of such a management plan might include a resident "trail host" or "stewardship" program (similar to that at the

¹² Based upon interviewee recommendations and historic preservation practices, proposals to pave the historic Puna Trail-Old Government Road with asphalt should be abandoned (cf. PATH July 30, 1998).

Kekaha Kai or Mālaekahana State Parks). It has been suggested that an individual or family descended from the traditional families of the Kea'au-Maku'u vicinity be sought out for such a position.

Protection and Access – Trail and Adjoining Sites

The entire historic Puna Trail-Old Government road (Site 50-10-36-21273) and all sites (those known—see *Table 3*—and unknown sites), are to be preserved-as-is. All management actions pertaining to the long-term preservation of the Puna Trail-Old Government Road will be coordinated by *Na Ala Hele* in consultation with DLNR-SHPD, the land owner (W.H. Shipman, Ltd., or its successors), and the community based organization(s) which will share in care for the resources. Any work which would entail trail stabilization will be done in consultation with DLNR-SHPD. DLNR-SHPD will also be notified if any changes occur (the result of either natural or man-made impacts) in site conditions. It is also recommended that periodic site visits be conducted by DLNR-SHPD to monitor trail and associated site conditions.

Action # 3: Monitoring — *Na Ala Hele* and DLNR-SHPD will develop an archival catalogue of existing site conditions. The catalogue will serve as the “control” for monitoring reviews to be conducted by *Na Ala Hele*–DLNR-SHPD, and participants in a trail stewardship program. The catalogue could be housed with *Na Ala Hele*–DLNR-SHPD, the offices of the Hawai'i County Planning Department, and by the designated community stewardship group.

Action # 4: Other than the careful removal of intrusive vegetation and stabilization of sections of the trail that are unsafe or in disrepair (under the supervision of DLNR-SHPD), no other site work will occur. Thus, until further archaeological field work is undertaken and issues regarding public access away from the government trail are resolved, all sites other than the historic trail are to be avoided. Entering sites (e.g. climbing over walls, removal of stones, and exploring beyond the bounds of the ten-foot government trail) will be discouraged.

Action # 5: Interpretation of the historic trail will include messages requesting that people do not leave the historic trail—public right-of-way—and informing them that the trail and other historic resources viewed from the trail are protected by State Law (cf. Chapter 6E-11).

Off-road motorized vehicles are presently impacting the natural and cultural resources of the trail and neighboring properties.

Action # 6: Because of the historical values and nature of the Puna Trail and the sensitive nature of the adjoining historic resources, it has been recommended that access along the Kea'au section of the Puna Trail-Old Government Road be limited to pedestrian and other non-motorized modes of transportation.

Action # 7: Access to public right-of-way — Presently, the historic Puna Trail (Kea'au Section) has only one easy point of access, that is on the southern, or Waikahekahe side of Kea'au, via roads belonging to the Hawaiian Paradise Park Community Association (HPPCA). While there are presently no restraints on access from the Waikahekahe side of the trail, the State and HPPCA may want to discuss access needs to ensure a successful access program.

Action # 8 Explore options for reestablishing a *mauka-makai* (pedestrian) trail access in Kea'au. Other possible accesses from Hilo-Waiākea and Kea'au could be explored and agreements reached between land owners and lessees.

Interpretation

As noted above, interpretation can play an important role in the long term protection and conservation of resources.

Action # 9: It is proposed that interpretive texts be developed from the documentation (archival and oral historical) presented in this study, and that signs—set at appropriate locations along the trail— and a pamphlet be designed to help ensure that people get the most from their travel along the Puna Trail.

The interpretive messages should include: (a) site descriptions and appropriate graphics; (b) citations of cultural-historic site protection laws; (c) description of the public right-of-way and private property rights of the trail; (d) traditional and historic references; and (e) personal safety statements. A combination of wayside exhibits and interpretive pamphlets could be used along the historic Puna Trail-Old Government Road to tie together various component features of the cultural and natural landscape of Kea'au-Maku'u. It is suggested that signs be placed at points of entry to the trail, and at selected interior locations along the trail. Signage to be developed will provide travelers with the basic information as described in items a, b, c, d, and e above (historical information would be included with each sign to enhance the trail experience).

General samples of wording for two types of signs are presented on the following pages. In addition to standard information written up on *Na Ala Hele* trail signs (e.g., safety and contact information), locational maps and appropriate graphics could be added to the signs. Sign design could follow the standard formats of the National Park Service and existing *Na Ala Hele* and State Parks signage.

Ala Nui Aupuni o Puna, ma Kea'au
(The Government Road of Puna, at Kea'au)

Ahupua'a of Kea'au
(SITE 50-10-36-21273)

**This historic trail is a portion of the Old Hawaiian Government Road system, it is an easement through private property.
Please Stay on the Trail.**

Ancient trails (*ala hele*) provided travelers with access to a variety of resources. They were the link between individual residences, resource collection sites, agricultural field systems, and larger communities. Today, while traveling along Hawaiian trails one can see a wide range of sites that are of significance to families who once lived in the vicinity of the trails. Because the trails were used over the generations, they also exhibit a variety of construction methods which range from ancient—for example worn alignments on *pāhoehoe* lava, or cobble stepping stone pavements—to historic curbstone lined roads with elevated stone filled “bridges” that level out the contour of the roadway.

Following the early nineteenth century, western contact brought about changes in the methods of travel (horses and other hoofed animals were introduced, and by the mid century, wheeled carts were being used on the trails). Some of the old native trails were realigned (straightened out), widened, and smoothed over, and others were simply abandoned for newer more direct routes. By the 1840s, the modified alignments became a part of a system of “roads” called the “*Ala Nui Aupuni*” or Government Roads. The right of usage of the roads was in part paid for through the labor or financial contributions of area residents.

By the 1840s, the trail you are walking on became the main Government road in Puna. The trail connected small coastal residence complexes at Keauhou Bay, Pākī Bay, and Kea'au Beach together. By this roadway, area residents also gained access to their schools and churches, and people from outside of Kea'au—those residing in neighboring lands of Puna and from the Hilo District—were provided access to Kea'au and beyond. By the middle nineteenth century many people from the Puna District traveled the *Ala Nui Aupuni* to sell their produce and handcrafts at Hilo.

In 1875, the Hawaiian Government developed a modified alignment of the *Ala Nui Aupuni*, and that alignment, the one on which you will walk today, remained in regular use by district resident until ca. 1895. By the latter nineteenth century, most of the coastal portion of Kea'au had been abandoned. The few remaining native families of coastal Kea'au worked for and moved into housing provided by W.H. Shipman (whose heirs still own the land). At the same time, the government opened up a new and more direct inland route between Puna and Hilo. That route is now the basic alignment of the Kea'au-Pāhoa Highway (now Highway 130).

In between 1895 to 1941, other than maintenance undertaken by the native residents of Kea'au and workers of the Shipman ranch, only limited work was done on the road alignment. With the outbreak of World War II, the United States military opened up the Old Government Road from the Waikahekahe-nui boundary to the area just behind Hā'ena. The alignment was smoothed out and four-wheel drive military vehicles were driven along the corridor for about a four year period. Even though the road supported vehicular activity, much of the cobblestone and pebble paving, bridge work, and curbstone alignments are still visible today.

**Please refrain from walking on adjoining historic sites
and do not remove any rocks from walls or other features.**

The Puna Trail-Old Government Road is a historic roadway. Damage to the trail or any archaeological sites along the trail is subject to penalties, as defined in Hawai'i Revised Statutes Chapter §6E-11.

At areas along the trail where adjoining features are visible, limited information could be provided. An example being:

SITE 50-10-36-21259
Ahupua'a of Kea'au, Puna

This site is interpreted as being a
historic road-side retaining wall.

Damage to this site, the historic trail or any archaeological sites
along the trail is subject to penalties, as defined in
Hawai'i Revised Statutes Chapter §6E-11.

Please stay on the historic trail,
the property bounding both sides of the trail is private property.

Trail Maintenance

As noted in Action # 4 above, part of the maintenance program will include the removal of inappropriate vegetation from the trail alignment. This work will be done by hand clearing and where purposefully set stones (e.g., curbstones, cobblestones, and other pavements) are set in place, roots will not be pulled. Vegetation will be cut to ground level, and an approved herbicide can be applied to the remnant growth to terminate it.

Action # 10: It is recommended that waste receptacles be situated on both the southern and northern ends of the Puna Trail-Old Government Road and at appropriate locations along the public right-of-way. Waste receptacles will be placed in such a way so as not to detract from the view plains, yet still be identifiable as waste receptacles.

Two bin styles which could be considered are: (1) heavy duty covered metal bins held in place between chain secured cemented pipes. The bins would be painted in a color that blends in with the natural surroundings; or (2) similar heavy duty bins set into cemented stone set cairns. The cement could be used in the joints and interior of the hollow cairns, leaving the exterior something like dry stacked stones. *Na Ala Hele* and a community-based trail stewardship group will establish a periodic site maintenance monitoring schedule for maintenance of, and collection from these receptacles as well as coordinate the general trail and signage maintenance (waste receptacles should be checked weekly).

Action # 11: In order to ensure culturally sensitive, long-term site maintenance and site protection, *Na Ala Hele* will develop a program that informs program volunteers and staff about the requirements for site preservation. Among the topics to be addressed are the following:

1. Training of individuals in appropriate maintenance techniques and of appropriate uses/visitation at the sites (e.g., no picnicking, camping, or playing on adjoining sites; no removal of sand, dirt, or stones, etc., from the sites). Staff and volunteers will be informed of who to call when inappropriate activities are observed;

2. Landscaping maintenance (no planting or use of herbicides, etc., will occur without DLNR-SHPD approval);
3. Waste receptacle locations and maintenance schedules will be established;
4. Development, installation, and maintenance of interpretive exhibits; and
5. Site condition monitoring and notifying *Na Ala Hele* – DLNR-SHPD of changes in site conditions.

Concerns for Special Natural and Cultural Resources and Private Property

As noted at the beginning of this study, and at various locations elsewhere in the study, the land owner (including descendants of the Shipman family—life long residents of Kea‘au) have concerns about increased use of the historic Puna Trail. Their concerns include protection of cultural resources, endangered natural resources, and protection of private property rights. *Appendix A* includes a communication from W.H. Shipman, Ltd., which gives details on some of these concerns. Several key issues are cited here:

- *Honu* (sea turtles), *‘Īlio holo kai* (monk seals), and *nēnē* (endemic geese) are endangered species; the *honu* and *‘Īlio holo kai* are known to haul out along the shoreline of the Puna Trail, and the Shipman Estate (Kea‘au Bay) is home to the oldest *nēnē* breeding program—established by 1918—in the world (without which it is likely that the *nēnē* would have become extinct).

Dogs and other animals should be kept on leashes at all times, and they should be kept away from these unique forms of Hawaiian wildlife. Likewise, people should stay away from them as well – make no move to approach these animals.

- The Shipman Estate is private property. The *loko i‘a* (fishpond) has been maintained by the Shipman family for well over 100 years; trail users and visitors to Kea‘au Beach should be asked to respect the private property rights of the Shipman family.
- While inviting, the grounds around the Shipman family residences are not a public park facility. All trail users should be asked to refrain from trespassing (trail signage and other interpretive materials will be developed with the necessary messages).

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