STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

February 9, 2004

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Dear Ms. Salmonson:

The Draft Environmental Assessment for the Ohai Loop Trail project on Maui was published in the OEQC Bulletin of December 23, 2001. During the public comment period, nine written comments were received. Based on the comments received and subsequent discussions about the planned trail, the Na Ala Hele Trails and Access program plans to enhance the trailhead area to include a scenic overlook, guardrails, and a picnic table and to construct a permanent rampway from the parking area to the scenic overlook/picnic area to improve access for disabled visitors. In addition, Na Ala Hele intends to re-route the trail corridor eliminating the proposed eastern trailhead and ending the trail before the fenced Ohai enclosure. These routing changes were made in response to comments expressing concern about hikers walking along the roadway and about potential harm to the endangered Ohai plants. The Final Environmental Assessment has been revised to reflect these changes to the project.

After review of the public comments and the Final Environmental Assessment, the Division has determined that this project will not have significant negative effect on the environment. Thus, we have issued a Finding of No Significant Impact. Please publish this notice in the next OEQC Environmental Notice.

Enclosed are four copies of the Final Environmental Assessment, including comment letters received for the Draft EA and the response made to those comments, and a completed OEQC publication form. Please call me or Christen Mitchell, DOFAW planner, at 587-0051 if you have any questions.

Sincerely,

MICHAEL G. BUCK
DOFAW Administrator

Enclosures

2004-02-23 FONSI
OHAI TRAIL

FINAL
ENVIRONMENTAL ASSESSMENT
for
CONSTRUCTION and PUBLIC USE
of the
OHAI TRAIL
KAHAKULOA, MAUI

Department of Land and Natural Resources
Division of Forestry & Wildlife
Na Ala Hele Trails & Access Program
Maui District Office

January 2004

Introduction

The Na Ala Hele Trails & Access Program was created in 1988 through Chapter 198D of the Hawaii Revised Statutes. Chapter 198D assigns to the Department of Land and Natural Resources the responsibility of planning, developing, acquiring land or rights for public use of land, constructing, and engaging in coordinating activities to carry out a statewide trail and access system. The Division of Forestry and Wildlife (DOFAW) administers the Program.

While the Program coordinates with Forestry and Wildlife to maintain a trail system within Forest Reserves, it is also mandated to develop trails outside the Forest Reserve areas where there is compelling public interest. On the island of Maui, in the northern part of West Maui in Kahakuloa, the Maui Na Ala Hele Advisory Council has recommended trail development

Na Ala Hele seeks to expand its Maui Branch trail system to include the proposed Ohai Trail. The trail would provide a low impact recreational trail amounting to a self-guided interpretive walk for beginner and intermediate visitors in an unused makai (oceanside) portion of the Kahakuloa Game Management Area, Kahakuloa, West Maui. A determination of No Significant Impact is anticipated.

Background

Since the turn of the century, the Kahakuloa area has been used for cattle grazing by local family ranchers. The area was designated as Territorial Pasture during a period of drought in 1952. After nearly 40 years of grazing, cattle were formally removed from the area in 1991. Today, this old pasture's rolling topography provides an outstanding platform for scenic and interpretive recreational opportunities. As of 1989 this area became part of the Kahakuloa Game Management Area, although hunting is not allowed below (or makai of) the road.

A proposal was made to the Maui District Division of Forestry and Wildlife to create a shoreline area trail along the cliff side in the fall of 1999. The idea started as a request by a local commercial tour operator to create an additional trail tour opportunity in the Kahakuloa-Nakalele area.

Members of the Na Ala Hele Maui Advisory Council visited the area with DOFAW Staff in October of 1999. While inspecting the shoreward area above the cliffs, a series of 52 *Sesbania tomentosa* (Ohai) plants, officially listed by the U.S. Fish and Wildlife Service as threatened and endangered (T&E), were discovered. The number of plants found effectively doubled the known population of the species along the north shore of West Maui. Since the discovery of the Ohai, several other native plant species have been found. A fence exclosure was designed and built to protect the highest concentrations of the plants from trampling by visitors and occasional wanderings by derelict cattle. Construction was completed in February 2001 with the use of volunteer labor and donated materials.

Discovery of the Ohai plants prompted a shift in the original concept and theme of the proposed trail to incorporate the native plant elements; the simple shoreline cliff trail theme with scenic and minor land forms interpretive capacities would be significantly enriched by adding information focusing on the Shoreline Cliff plant habitat..

Forestry and Wildlife personnel, with consultation with the State Historic Preservation Division Staff preformed a preliminary archaeological and botanical survey in November of 1999. A Draft Environmental Assessment (EA) for the project was published in December 2001. Based on comments received on the Draft EA and subsequent discussions about the planned trail, Na Ala Hele plans to enhance the trailhead area to include a scenic overlook, guardrails, and a picnic table. A permanent rampway from the parking area to the scenic overlook/picnic area will be constructed to improve access for disabled visitors to the trailhead. (Exhibit #3). Na Ala Hele intends to work with the Department of Transportation to pave the shoulder adjacent to the roadway to provide safer parking. In addition, Na Ala Hele plans to re-route the trail corridor from that initially proposed in the Draft EA. Changes to the routing include the following: (1) elimination of the eastern trailhead at the edge of Alapapa Gulch, (2) ending the trail before the fenced Ohai enclosure, and (3) adding benches along the trail for visitors to enjoy the

scenery. These changes were made in response to comments expressing concern about hikers walkin along the roadway and about potential harm to the endangered Ohai plants.

The Trail

From its planned western trail head at Kahekili Highway (#30) near the Game Management Area (GMA) at Poelua, the trail will run nearly about ½ mile eastward above Poelua Bay, traversing a rolling terrain c windswept promontories covered with pasture grasses, native and nonnative shrubs of Papanalaho Point (Exhibit #1). The trail will stop at an overlook, and in its initial phase, will be an out-and-back trail, so that visitors return to the trailhead along the same route. A potential extension of the trail would run upslope through a complex of native grasses, shrubs and sedges and then turn westward, returning t the trailhead along a pathway adjacent to Kahekili Highway. The return path will be shielded from the Highway by existing vegetation. Whether this trail extension is constructed or not will depend upon usage of the out-and-back trail and user interest in a longer trail that provides a different hiking experienc Minor changes to the trail route may occur as needed based on the terrain and vegetation to protect th *natural resources and to enhance public safety and enjoyment of the trail.*

The Ohai Trail is intended as a scenic and interpretive trail focusing on the local geomorphology an native plant resources of the area. Intended to be no more than a footpath for novice to medium-level experienced hikers, the trail will offer an excellent educational and recreational opportunity for daytime recreational use only. All wheeled vehicles, horseback riding, and other non-pedestrian uses will b prohibited as will overnight camping on or along the trail. The trail will be included as a NAH feature an allow regulated use by commercial trail tour operators, pending approval of the Board of Land and Natural Resources pursuant to Chapter 130 – HAR.

1. Proposing Agency

State of Hawaii
Department of Land and Natural Resources
Division of Forestry and Wildlife

2. Approving Agency

State Department of Land and Natural Resources,
by its Board

3. Agencies Consulted in Making the Assessment

State:
Department of Land and Natural Resources
- Historic Preservation Division
- Aquatic Resources Division
- Land Management Division
- Conservation and Resources Enforcement Division

Department of Transportation
Tri-Isle RC&D Council

County:
Planning Department
Department of Parks and Recreation

Federal:
National Park Service
U.S. Fish & Wildlife Service
Natural Resource Conservation Service

4. General Description of Technical Actions

The project will be completed in five stages. Construction time for Stages One through Four will take approximately six months; Stage Five, if and when completed, is anticipated to take up to two years, depending on funding.

Stage One: The first stage has been completed and involved an initial biological and historic site reconnaissance survey of the trail area. Identification of sensitive elements, the specific length of fencing, area of the enclosure, and finally, flagging of the potential trail bed course were completed by DOFAW personnel.

Stage Two: The second stage included the installation of the exclosure fencing. An area of approximately 170,000 square feet was identified as adequate for the enclosure. This phase was completed in February 2001.

Stage Three: The third stage includes defining the trail corridor through low-profile markers and very limited removal of native and nonnative vegetation and debris (brushing) from the planned trail bed. This action will reveal and define the actual extent and course of the proposed trail bed. It will also uncover any additional sensitive native plants, historic sites or artifacts missed (if any) during the first stage. If any additional Federally-listed T&E species, archaeological sites or historical materials are located, trail construction will halt and the appropriate agencies will be notified. Every effort to reroute the trail course to avoid these elements will be made.

Stage Four: The fourth stage will involve supervised construction of the trail bed and removal of denser vegetation. The Division of Forestry and Wildlife Best Management Practices for Maintaining Water Quality will be incorporated into all construction activities as applicable (Attachment #2). Very little ground disturbance is anticipated. Trail construction will utilize materials immediately adjacent to the trail. The trail will be cut to a grade of no more than 10 to 15 percent where possible in keeping with established NAH specifications outlined in the NAH Program Plan, pages V-7 through V-9. (Attachment #1) Removal of woody roots and stumps will be done only where doing so will not destabilize the ground surrounding the trail bed or the trail itself. Short-lived systemic herbicides may sometimes be used as a maintenance tool for the trail. Label use of Roundup (Isopropyl amine salt of Glyphosate) and Garlon 3A (Triclopyr) on cut stumps may be employed. Their use prevents the regeneration of nonnative woody shrubs in places where proper footing is necessary. Signage will be erected as part of the initial construction of the trail, with more signs added as construction is complete. These signs will be placed at strategic locations along the trail to inform, educate and convey sense of place to visitors. Additional signs requiring users to follow safety rules and trail etiquette will be conspicuously placed.

Stage Five: The fifth stage involves developing the trailhead area as a scenic overlook and includes the construction of guardrails, the addition of picnic tables, and construction of a rampway from the parking area to the overlook. Conceptual site plan drawings are attached as Exhibit 3. Construction of the rampway will require approximately 300 yards of fill to meet the planned grades. The rampway itself will likely be constructed of concrete. This stage may also include paving additional areas adjacent to the roadway to provide parking for visitors to the trail, as coordinated with the Department of Transportation and the County of Maui. All construction activities will incorporate the Division of Forestry and Wildlife Best Management Practices for Maintaining Water Quality as applicable (Attachment #2).

Brushing of vegetation, clearing of debris, removal of trash, spot-restoration of trail structures, and maintenance of interpretive and informational trail signs will comprise the routine maintenance program.

5. Summary Description of the Affected Environment

The proposed trail site is located wholly within the former Territorial Pasture of Kahakuloa. Running between the 220 and 280-foot contours, it lies below the West Maui Forest Reserve on the northern slopes of the West Maui Mountains (Exhibit #1). It lies in the District of Wailuku, Tax Map Key 3-1-003:006 (Exhibit #2). The trail will meander through the landscape and lie entirely between Owaluhi

Gulch on the west and Alapapa Gulch on the east. The entire project area is in the General Subzone of the Conservation District and is in the Special Management Area.

The site enjoys usually clear weather conditions in the morning hours until clouds build up and envelop the upper slopes above 2,000 feet in the afternoon. Rain is the exception and not the rule in this area. Gusty trade winds blow on-shore directly shaping the erosive shoreline cliffs and its vegetation. Winter storms occasionally bring heavier winds and rain amounting to 20 to 40 inches annually. During late summer/early fall periods, winds may cease completely, creating a leeward climate locally. There are no perennial streams in the area.

Public Utilities

The nearest public utilities (electrical, water, sewer, or other) to the east are in Kahakuloa town, approximately 2.5 miles away, and 2.2 miles to the west at Honokohau Valley. There are no potable water sources or other amenities existing or planned for the trail.

Public Access

The Trail will have only a western trail entry point, located makai (oceanside) from Kahekili Highway above Poelua Bay. The trailhead is approachable by passenger car where informal parking for approximately five passenger cars along the broad road shoulder is currently available. Paving to provide for additional parking will be developed in cooperation and further discussion with the Department of Transportation – Highways Division.

A permanent ramp from the roadway to the rise adjacent to the trailhead will be constructed to provide access for disabled visitors to the scenic overlook adjacent to the trailhead. This overlook will include interpretive information about the trail and surrounding area, guardrails, and a picnic table, enhancing public access to the scenic shoreline cliffs area.

Costs for completing the project and maintaining the trail in the future will be borne by the State of Hawai'i. Volunteers of the Na Ala Hele Trails and Access Program will substantially defray the estimated labor costs. Materials, planning, necessary documentation, and all parts of the project development (not including long-term maintenance) are expected to remain below an estimated $50,000.00. Long-term maintenance will require approximately 4 Person-days/year.

The value of the landscape's wild land character offers a special outdoor experience for both Maui residents and visitors. The sweeping panoramas of the Pacific Ocean and the windward shrub land combine with the quiet isolation consistent with the character of this relatively remote area creating a unique encounter.

Na Ala Hele successfully relies on the efforts of volunteers for brushing and light maintenance of its trails. As with other Na Ala Hele projects, individual and group volunteers will gain a feeling of accomplishment and ownership of the trail intended to benefit the resource and the community.

Flora

The trail will pass through a severely disturbed, low-diversity, nonnative plant community and grassland complex. No threatened or endangered native or endemic species of flora were seen along the flagged portion of the trail course during the botanical survey. The prostrate form of *Sesbania tomentosa* (Ohai) occurs along the shoreline cliffs away from the trail area. Another protective fence exclosure, shields a smaller Ohai population located roughly .75 miles east of Alapapa Gulch at Mokolea Point.

Plants found along the entire trail course are listed below.

Nonnative:

Abutilon grandiflora	hoary abutilon
Anagallis arvensis	scarlet pimpernel
Atriplex semibaccata	salt bush
Casuarinas equisetifolia	ironwood
Cenchrus ciliaris	buffelgrass
Cenchrus echinatus	sand bur
Chamaecrista nictitans	partridge pea
Chloris barbata	finger grass
Chrysopogon aciculatus	golden beardgrass
Conyza canadensis	horse weed
Coronopus didymus	swine cress
Cynodon dactylon	Bermuda grass
Desmanthus virgatus	slender mimosa
Desmodium triflorum	three-flowered beggar weed
Digitaria ciliaris	Henry's crab grass
Digitaria insularis	sourgrass
Eleusine indica	wiregrass
Emilia forsbergii	pualele
Indigofera suffructicosa	*indigo*
Lantana camara	lantana
Malva parviflora	cheese weed
Malvastrum coromandelianum	false mallow
Oxalis corniculata	oxalis
Panicum maximum	Guinea grass
Phymatosorus scolopendria	laua'e fern
Portulaca oleracea	pigweed
Portulaca pilosa	pigweed
Psidium guajava	guava
Schinus terebinthifolius	Christmasberry
Setaria verticillata	bristly foxtail
Sonchus oleraceus	sow thistle
Stachytarpheta jamaicensis	Jamaican vervain
Stachytarpheta urticifolia	vervain
Stylosanthes fruticosa	Stylosanthes
Syzygium cumini	Java plum
Thespesia populnea	milo
Tridax procumbens	coat buttons

Native:

Boerhavia repens	alena
Chamaesyce degeneri	akoko
Cocculus trilobus	huehue
Dodonaea viscosa	a'ali'i
Fimbristylis cymosa	mauu aki aki
Heliotropium curassavicum	kipukai
Heteropogon contortus	pili
Jacquemontia ovalifolia	pauohiiaka
Lycium sandwicense	ohelo kai
Mariscus phleoides	
Osteomeles anthyllidifolia	ulei
Panicum fauriei	
Panicum torridum	kakonakona
Psydrax odoratum	alahee

Santalum ellipticum	iliahi
Scaevola sericea	naupaka kahakai
Sesbania tomentosa	ohai
Sesuvium portulacastrum	akulikuli
Sida fallax	ilima
Waltheria indica	uhaloa
Wollastonia integrifolia	nehe

Fauna

A variety of nonnative birds and mammals occur throughout the area. Of the native Hawaiian speci only the Pueo or endemic Hawaiian Owl (*Asio flammeus sandwichenis*), is resident in the general are Represented sea birds include the Frigate bird or Iwa (*Fregata minor palmerstoni*), Black Noddy or Noi (*Anous minutus melanogenys*), and the White-tailed Tropic Bird or Koae Kea (*Phaethon leptu dorothea*). The Pacific Golden Plover (*Pluvialis fulva*), a winter visitor, is also found in the ar However, due to the erosive nature of the highly weathered local soils (weathered ash deposits an unconsolidated a`a lavas carrying high concentrations of calcium, magnesium and aluminum) seab nesting in the area is virtually nonexistent.

Nonnative birds (including some introduced game bird species) of the general area include:

Acridotheres tristis	Common Myna
Alauda arvensis	Eurasian Skylark
Cardinalis cardinalis	Northern Cardinal
Carpodacus mexicanus	House Finch
Cettia diphone	Japanese Bush Warbler
Francolinus pondicerianus	Gray Francolin
Francolinus francolinus	Black Francolin
Garrulax conorus	Hwamei
Geopelia striata	Barred Dove
Lonchura malabarica	Warbling Silverbill
Lonchura punctulata	Nutmeg Mannikin
Mimus polyglottus	Northern Mockingbird
Phasianus colchicus	Ring-necked Pheasant
Streptopelia chinensis	Spotted Dove
Tyto alba	Common Barn Owl
Zosterops japonicus	Japanese White-eye

Mammals observed or otherwise known to inhabit the general area include:

Canis familiaris	feral dog
Felis catus	feral cat
Herpestes auropunctatus	mongoose
Mus musculus	house mouse
Rattus spp.	rat
Sus scrofus	feral pig

Lasiurus cinereus semotus, the Hawaiian Hoary Bat, although known to occur elsewhere on Maui, ha not been observed to inhabit the project area.

Historical/Archaeological and Cultural Sites

No obvious historic sites or artifacts were located during the initial trail route inspection. Flexibili routing the trail will be a relatively easy matter as the terrain allows for redirecting trail building to s avoid any historic sites that may be encountered.

The most notable historic features in the area are the ruins of a Territorial Prison Camp approximately one mile to the east of Alapapa Gulch and a large boulder lying above Kahekili Highway within 250 feet of the old Prison Camp site. This rock is known locally as the Pohaku Kani, "Bell Stone" and was mythologically transported to that location.

A Cultural Impact Assessment was prepared for the project by Cultural Surveys Hawai'i, Inc. (included as Appendix A). Historic research of the project area was carried out to identify any cultural resources or traditional practices associated with the area encompassing the proposed trail corridor and surrounding vicinity. An attempt was made to contact present and former residents of Kahakuloa, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in the vicinity of the Ohai Trail project area. Three individuals were identified and formally interviewed, and other community members shared valuable information.

Historic research of the Kahakuloa area indicated that Kahakuloa was one of five population centers on the island of Maui, most noted for the cultivation of wetland taro. At the time of the Mahele, there were 154 applications for quiet title to land in Kahakuloa, of which only 75 were awarded. Majority of the kuleana lands were awarded in Kahakuloa Valley with a few isolated LCAs in the mauka regions. Kahakuloa Valley is located approximately three miles east of the proposed Ohai Trail project area.

Previous archaeological study areas in Kahakuloa are dispersed in and around Kahakuloa Valley, as well as a few isolated mauka areas. However, there are no documented archaeological sites identified in the immediate vicinity of the Ohai Trail area.

Two burial grounds have been documented at Kahakulo Gulch and Hononana Gulch, but no burials have been identified in or near the Ohai Trail corridor. Given the rocky terrain of the project area and its isolated location, the possibility of inadvertent burials is unlikely.

One traditional cultural practice was identified in the vicinity of the project area. Gathering marine resources is an ongoing tradition for local residents of Kahakuloa. Kama'aina are known to frequent the shores off the Ohai Trail project area to fish for uhu, enenue, mu'ulua, akule, and occasionally when conditions are right, opihi and pupu picking is possible. Based on consultation with residents and fishermen in the area, construction of the trail will not restrict public access to gather marine resources.

Although a community of Ohai (*Sesbania tomentosa)* is present makai of the Ohai Trail project area, there is no indication of any ongoing gathering of the Ohai flower. As noted earlier, the Ohai shrub is rare and kama'aina mentioned that poor weather conditions make it difficult for the flowers to grow to full maturity and that ohai picking for lei making is very rare.

There also appears to be no continued or ongoing hunting practices noted in the vicinity of the Ohai Trail project area. Furthermore, no traditional Hawaiian trails were identified as traversing the proposed trail corridor, and no cultural properties have been documented or identified in the immediate vicinity of the project area.

Chapter 6E, Hawaii Revised Statutes law will be followed in developing and managing the trail. If any historical sites, burials, artifacts or other structures are found on or within sight of the trail, all appropriate parties, including the State Historic Preservation Division, will be notified immediately, and trail construction will halt. If necessary, appropriate management and mitigation measures will be taken immediately.

Adjacent Natural Resources

The reddish weathered ash ridgelines of Puu Haunako, Kaikaina, Haunaa and Umi dominate the upland landscape. Poelua Bay adds its strikingly scenic shoreline cliffs with those extending eastward to Kahakuloa Bay and Puu Koae (Kahakuloa Head).

On either end of the proposed trail, access on Waikalai, Hononana, and East Poelua Roads lead into the West Maui Forest Reserve and GMA where pig hunting is allowed on weekends. Watershed enhancement projects along Waikalai and East Poelua Roads include native tree planting and reforestation projects. The Division of Forestry and Wildlife manages these projects.

Although the shoreline cliffs have never formally been a recreational area, locals have utilized the fishing grounds and visitors regularly visited Papanalahoa and Mokolea Points during the winter months to watch the annual humpback whale migration and enjoy the ocean view. Turtles and schools of fish can occasionally be observed from the shoreline.

Sensitive Habitats

The botanical survey revealed a clearly defined concentration of Ohai. No other sensitive native or endangered plant specimens appear within the proposed trail bed area (defined as 25 feet on either side of the trail course). Though not directly within the trail area, the Ohai core population (contained within the fenced exclosure) will lie beyond the trail and initially will not be directly viewable from the trail. As the population stabilizes and expands, the trail may be extended in the future to allow viewing of the Ohai. Signs will provide interpretive information about the native vegetation and the value of the windward Hawaiian shoreline habitat, including the endangered Ohai, and will help protect the plants from human impacts.

Support for the protection of the plants will take the form of regularly scheduled visits by members of the Native Hawaiian Plant Society (the Society) and regular Na Ala Hele Volunteer Groups. The Society was consulted on the design, maintenance and management of the Ohai exclosure, and will assist DOFAW in protecting the plants by a written agreement establishing a presence at the site. Na Ala Hele will rely on the Society's expertise for interpretive development of the trail and explore development of docent responsibilities to be undertaken by Na Ala Hele volunteers during regularly scheduled visits.

6. Identification and Summary of Major Impacts and Alternatives Considered

Major Impacts - Positive

The proposed trail development will provide excellent opportunities for presenting rich interpretive information and recreational diversions for visitors to the Kahakuloa area. The trail and ancillary interpretive signage will be designed with the goal of enhancing an appreciation of the unique and sensitive native habitats that occur along Maui's northwestern windward coast. It will open new opportunities for West Maui residents and visitors to stop and enjoy such activities as hiking, picnicking, whale watching, bird watching, and native plant appreciation. There will also be an economic gain due to the increased commercial operators traffic in the area

Fence line construction and the development of an interpretive plan will both directly and indirectly benefit the preservation of the Ohai species and other native plants in the area. The series of construction, maintenance and management techniques detailed in the description of technical actions should be adequate to relieve negative impacts from trampling by unguided public and cattle.

An active volunteer program led by Na Ala Hele will provide for additional maintenance and management of the trail. It will also promote the interpretive context and an appreciation of the setting for trail users and volunteers alike.

Major Impacts - Negative

It is probable that as more trail users are attracted to the area, additional associated impacts will occur. The spread of nonnative plants, vandalism, fires and littering may increase with more frequent visitor use. However, signage, regular maintenance, routine inspections and a sense of ownership among volunteers for managing the trail may counteract these potential impacts.

Motorcycles are known to illegally use off-road trails in the Game Management Area and adjacent Forest Reserve. Trail signs barring off-road motor vehicles will be installed at the trailhead. If necessary, physical barriers such as wood, stone, plastic, or metal trail bollards will be constructed and installed to prevent access to motorcycles and other unapproved modes of transportation.

Alternatives Considered

Alternative 1 - No Trail/Build Plant Exclosure Only: The alternative of not providing a trail and simply enclosing the Ohai with protective fencing was considered. This alternative was rejected considering the loss of interpretive and recreational opportunities represented by the addition of a public trail and the possible damage by increased pedestrian traffic not confined to a designated trail corridor.

Alternative 2 - Locate Trail Elsewhere: Another alternative, of locating the trail in the area between Kahakuloa Town and Nakalele Point was considered and rejected. The lands oceanside of Kahekili Highway above Mokolea Point offered one alternative. This alternate, though offering stunning view planes and interesting geological resources, did not compare favorably with the Papanalahoa area trail. Mokolea is frequently overrun by four-wheel drive vehicles, is subject to illegal dumping, and presents a high concentration of potentially unsafe viewpoint locations considered too numerous and costly to mitigate effectively. It also did not offer the concentration, range or variety of Hawaiian plant species that would support interpretation.

Alternative 3 - No Trail/No Exclosure: The possibility of not building the trail or exclosure was rejected for two reasons. First, not building a trail would withhold the potentially rich resource opportunities for public education and enjoyment in a geographically remote area of Maui devoid of these opportunities. Second, not building the exclosure would further expose a dwindling population of endangered plants whose habitat is vanishing due to changing land uses, nonnative plant recruitment, feral animal impacts and impacts from an uninformed and growing public seeking recreational experiences without appropriate information and exposure to sensitivity-producing interpretive programs.

7. Proposed Mitigation Measures

No strategies or techniques to reduce impacts can be considered absolutely effective. However, constructing the trail to avoid sensitive native elements would enhance plant protection. Although the Ohai plant is a federally listed endangered plant, mitigation of impacts through the maintenance of the fencing exclosure, continued monitoring, and initially routing the trail to end before the exclosure protecting the core population should provide protection for the plant from negative impacts. If additional T&E species are located, Na Ala Hele staff will consult with the State Botanist and further rerouting of the trail will be made as necessary. Rerouting the trail can be done to protect native plants or archaeological sites, if found.

No protected animal species have been found to inhabit the trail construction area. No impacts to historical sites or cultural practices are expected to result from the construction or use of the trail. If any historical sites or burials are encountered during construction, all work will immediately cease and the appropriate agencies, including the State Historic Preservation Division, will be consulted to determine the appropriate course of action.

Integrating a suitable management plan with an active volunteer program should be effective in mitigating the bulk of user-related impacts. Trail use will require routine monitoring with a simple yet effective interpretive signage program. Visitors to the trail will be directed via signage to stay on the trail in particular where the trail runs near native vegetation. Scheduled maintenance of the trail corridor will be done. Interpretive signage will include information on the risk of fire and its destructive impact and encourage no smoking at the scenic overlook and on the trail. Seasonal closures may be necessary during dryer months due to increased fire hazards. Motorized vehicles, bicycles and horses will be prohibited from using the trail. Passive barriers may be constructed if required.

Volunteers utilized to assist in the maintenance and interpretation of the trail's resources will also serve to blunt impacts resulting from use of the area. Volunteers will be informed so as to recognize not only threatened and endangered plant species, but also native species to avoid damage to these plants during construction and maintenance trail work. In addition, volunteers will be instructed about invasive weed species and methods to prevent the introduction and spread of invasive plants during and after construction.

8. Anticipated Determination

A Finding of No Significant Impact is anticipated for this project as no significant negative impacts to the environment are expected to result from construction and public use of the trail. By establishing a protective program for the endangered Ohai, public appreciation and understanding of native coastal plant ecology may be fostered through establishing a new and novel interpretive program for the community.

9. Findings and Reasons Supporting Determination

The anticipated Finding of No Significant Impact is based on the evaluation of the project in relation to the following criteria identified in the Hawai'i Administrative Rules § 11-200-12.

1. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.*

The proposed trail will not impact the visual character of the area. The trail is compatible with the surrounding land use plans and programs being implemented for the region. The trail is located within the Kahakuloa Game Management Area, which is public land, and will increase general accessibility to the area for the public.

The Ohai Trail is anticipated to enhance public appreciation for rare native plants, through interpretive signage and possible exposure to Ohai (*Sesbania tomentosa*). No archaeological or historical sites are known to exist within the trail corridor. Should any archaeologically or culturally significant artifacts, bones, or other indicators of previous onsite activity be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources, State Historic Preservation Division.

2. *Curtails the range of beneficial uses of the environment.*

The trail will expand the range of beneficial uses within the environment by increasing recreational opportunities in the Kahakuloa area. Appropriate public access to and use of the area will be increased.

3. *Conflicts with the state's long term environmental policies or goals and guidelines as expressed in Chapter 344, Hawai'i Revised Statutes.*

The proposed development is consistent with the Environmental policies established in Chapter 344, HRS, and the National Environmental Policy Act.

4. *Substantially affects the economic or social welfare of the community or state.*

The proposed project is not expected to substantially affect the economic or social welfare of the community or State. The proposed project is designed to support surrounding land use patterns, will not negatively or significantly alter existing residential areas, and will not stimulate unplanned population growth or distribution. Funds for implementation are coming from normal government operational budgets and volunteer labor. Social impacts are expected to be positive, as the project's development is in response to public requests for increased hiking opportunities. Use of the trail by commercial operators may result in some economic benefit to the State and to the community as a whole.

5. *Substantially affects public health.*

The proposed project will provide a contribution to Maui's future population by providing residents with the opportunity to improve their general health and well-being by exercising and enjoying the natural beauty of the Kahakuloa area. The activities associated with hiking trails work to dramatically increase one's health.

6. *Involves substantial secondary impacts, such as population changes or effects on public facilities.*

The proposed project in itself will not generate new population growth, but will provide needed recreational values to the area's present and future population. No public facilities will be impacted.

7. *Involves a substantial degradation of environmental quality.*

The proposed trail will utilize existing undeveloped State lands within the Kahakuloa Game Management Area that are not open for hunting. The overall design of the project will complement the general use of the area. The trail itself and the associated trailhead improvements (scenic overlook, guardrails, and picnic table) will have a small footprint and are not expected to result in a substantial degradation of environmental quality. Any endangered species found in the project area will be protected from harm during and after construction.

8. *Is individually limited, but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.*

Construction and use of the planned trail is not anticipated to have a cumulative impact on the environment, nor is it a commitment for larger actions. Increasing the number of recreational opportunities and improving the Na Ala Hele trails system is compatible with the long-term goals of the State.

9. *Substantially affects a rare, threatened or endangered species or its habitat.*

There are no rare, threatened or endangered species within the trail corridor. There is a cluster of Ohai plants (*Sesbania tomentosa*) in the vicinity of the trail. An exclosure fence has already been constructed to protect this plant population from feral animals and from humans. As proposed, construction of the Ohai Trail is not anticipated to substantially affect rare, threatened or endangered species or their habitat.

10. *Detrimentally affects air or water quality or ambient noise levels.*

Due the terrain in the project area and the nature of the trail and associated improvements, there is not anticipated to be any impact to near-shore ecosystems resulting from surface runoff. All construction activities will incorporate DOFAW's Best Management Practices for Maintaining Water Quality. Some noise will be generated during trail construction; however, this activity will take place only during daylight hours, far from any residential area, and is anticipated to be minimal. Impacts will be significantly positive in terms of public health and enjoyment as compared to the "no action" alternative.

11. *Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.*

Development of the trail is compatible with the above criteria since the project area is not in a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal waters. Moreover, development of the trail is not likely to harm environmentally sensitive areas, because the project area was designated as Territorial Pasture and used for grazing for nearly 40 years.

12. Substantially affects scenic vistas or view planes identified in county or state plans or studies.

Due to the rolling topography of the area and existing vegetation, the majority of the trail will not be visible from the roadway. No views will be obstructed or be visually incompatible with the surrounding area. Construction of the trail will open up new scenic vistas of the ocean and of the West Maui Mountains for the public along the trail.

13. Requires substantial energy consumption.

Construction of the proposed trail will not require substantial energy construction. Na Ala Hele is a volunteer program, and the general public is anticipated to provide the manual labor. After completion of construction, there will be minimal demand for energy use, limited to periodic maintenance efforts.

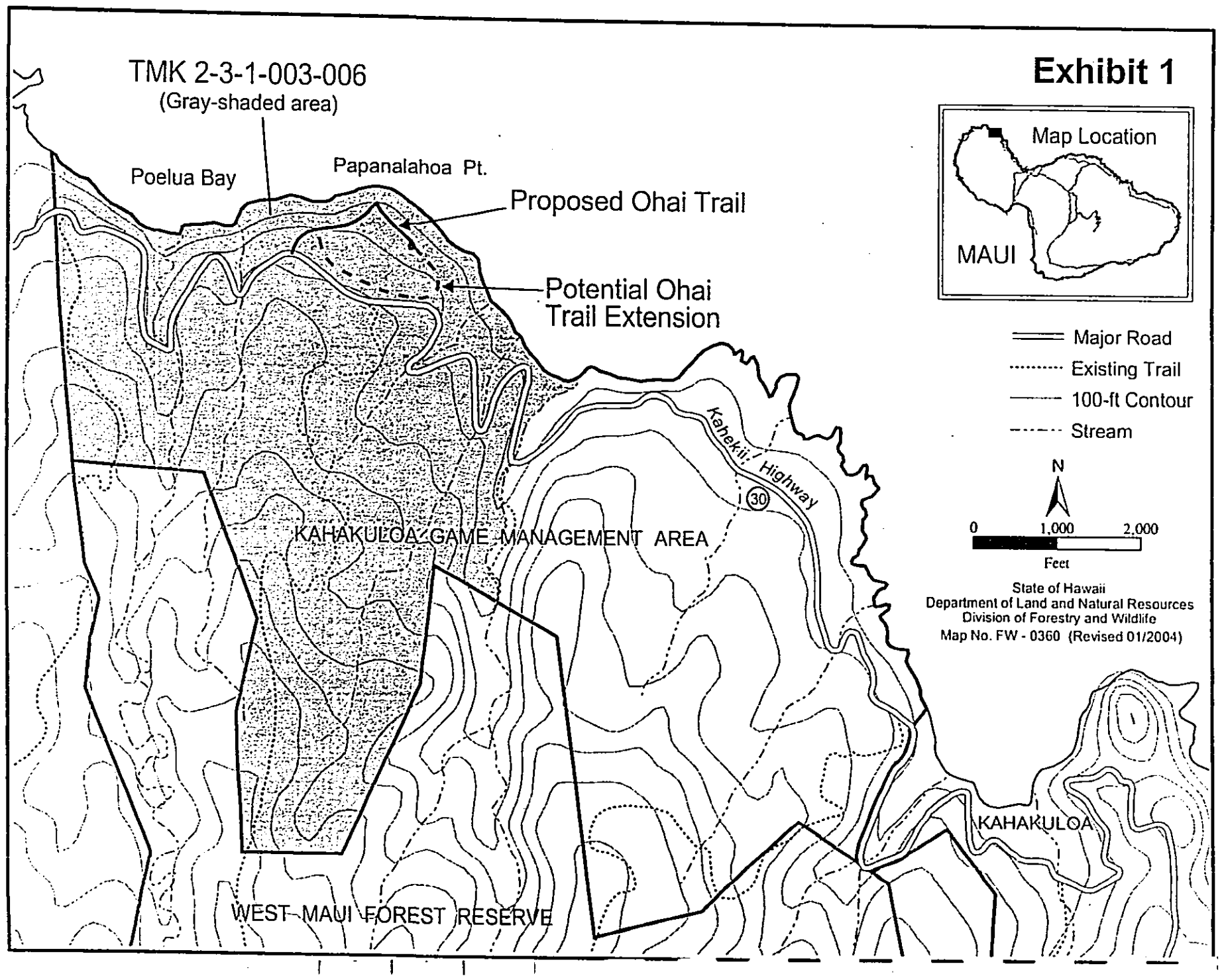
10. List of Permits Required

Construction of the project requires approval by the Board of Land and Natural Resources. No other permits are anticipated.

11. Environmental Assessment Preparation Information

This Environmental Assessment was prepared by staff of:
Hawai'i State Department of Land and Natural Resources
Division of Forestry and Wildlife
Na Ala Hele Trails and Access Program
Maui District Office
54 South High Street
Wailuku, HI 96793

Exhibit 1


TMK 2-3-1-003-006
(Gray-shaded area)
Poelua Bay
Papanalahoa Pt.
Proposed Ohai Trail
Potential Ohai
Trail Extension
Kahekili Highway
30
KAHAKULOA GAME MANAGEMENT AREA
WEST MAUI FOREST RESERVE
KAHAKULOA
Map Location
MAUI
Major Road
Existing Trail
100-ft Contour
Stream
N
0
1,000
2,000
Feet
State of Hawaii
Department of Land and Natural Resources
Division of Forestry and Wildlife
Map No. FW - 0360 (Revised 01/2004)

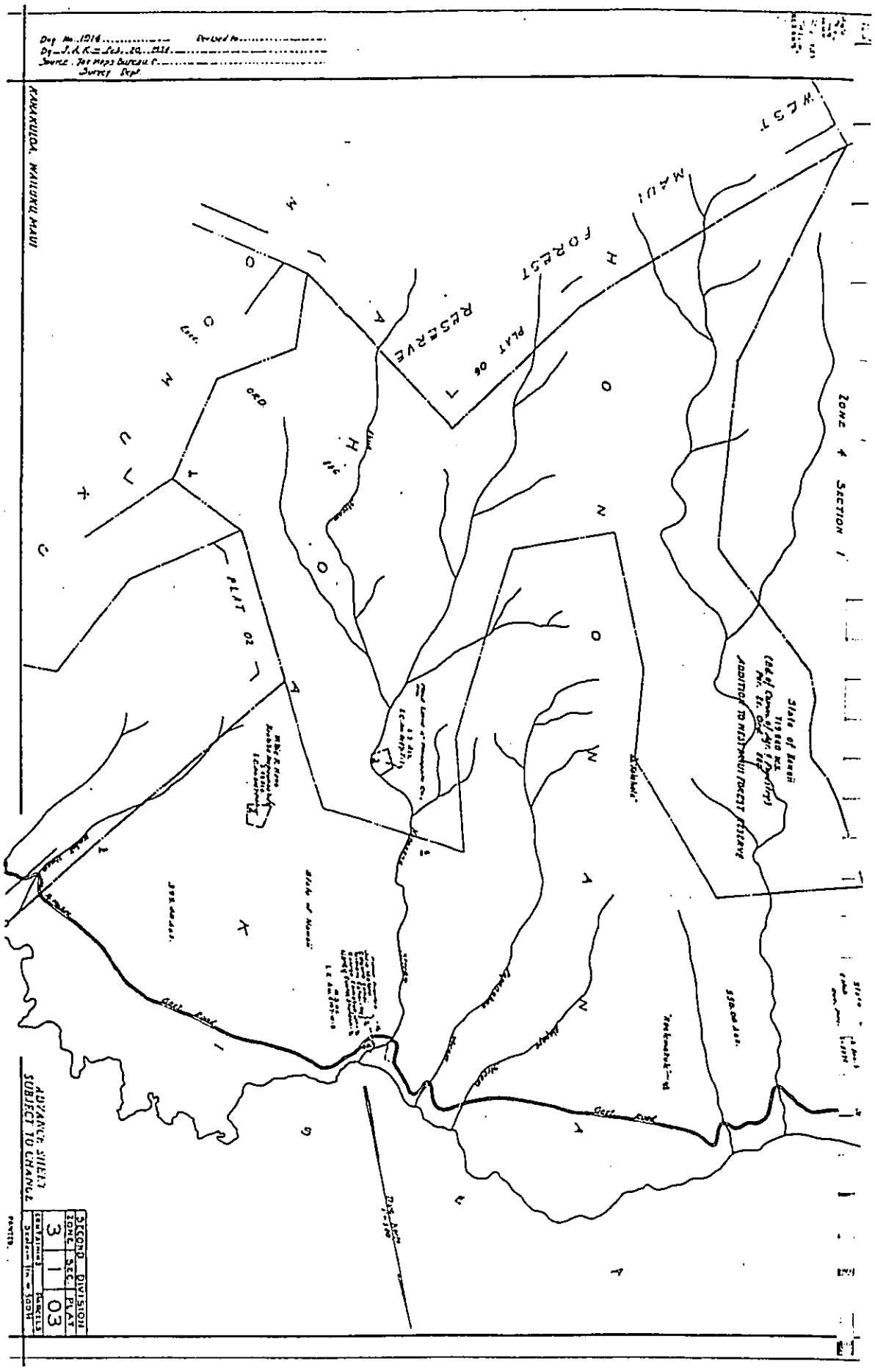
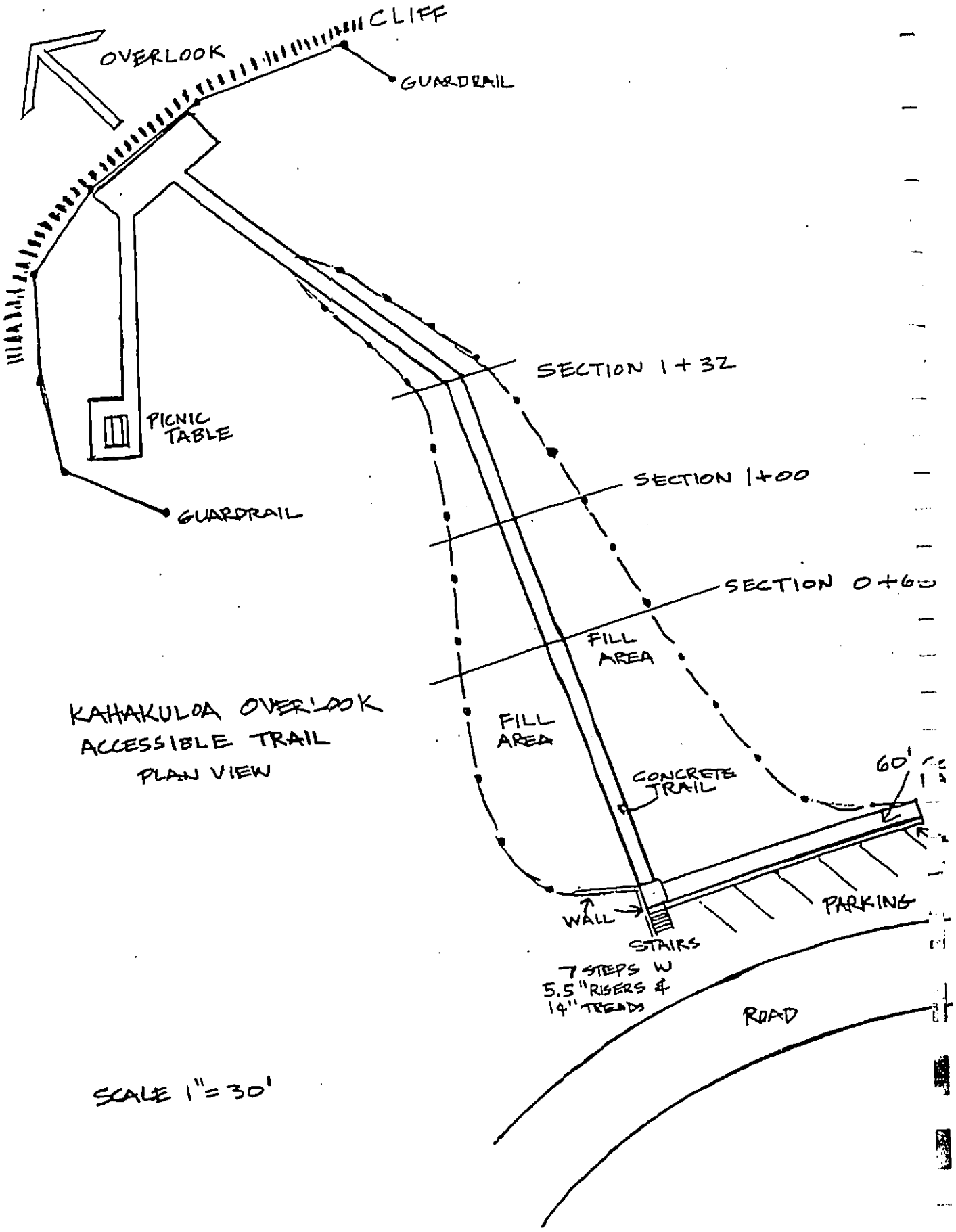

KAHAKUILOA, WAILUKU MAUI
Dwg No. 1916
Drawn by
Checked by J. A. K. Feb. 20, 1958
Source: Tax Maps Bureau of Survey Dept
ZONE 4 SECTION 1
MAUI
FOREST
PLAT 08 7
RESERVE
PLAT 02
Gulch
Creek
SECOND DIVISION
ZONE SEC. PLAT
3 1 03
ADVANCE SHEET
SUBJECT TO CHANGE

Exhibit 2

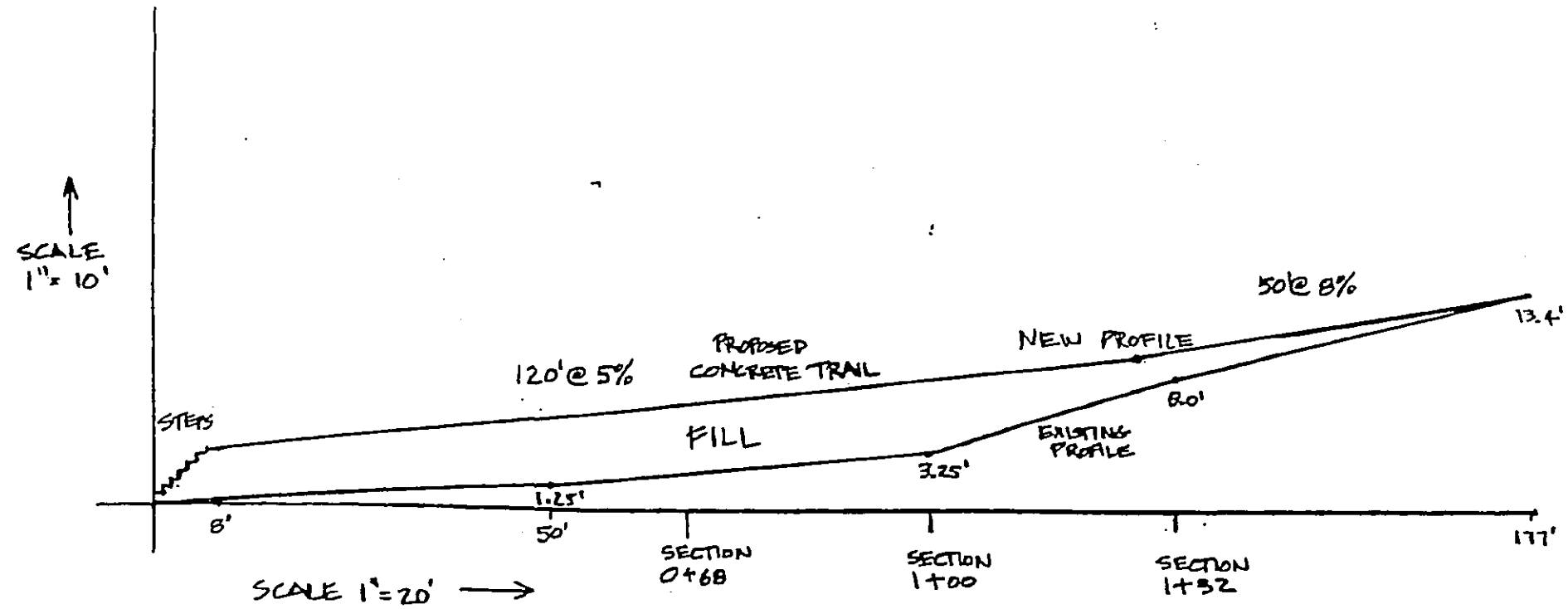
Exhibit # 3

Conceptual Site Plan Drawings



KAHAKULOA OVERLOOK
ACCESSIBLE TRAIL
PLAN VIEW

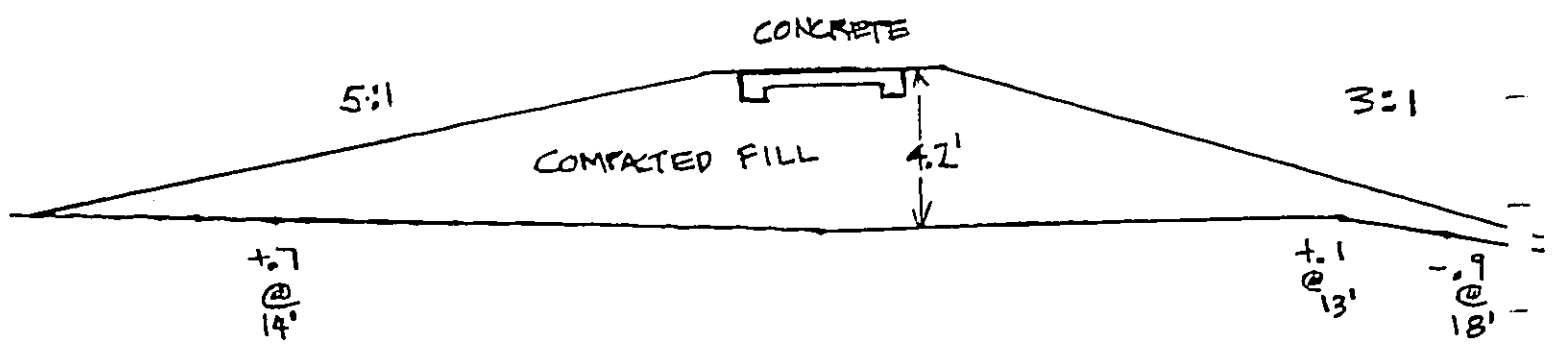
SCALE 1" = 30'



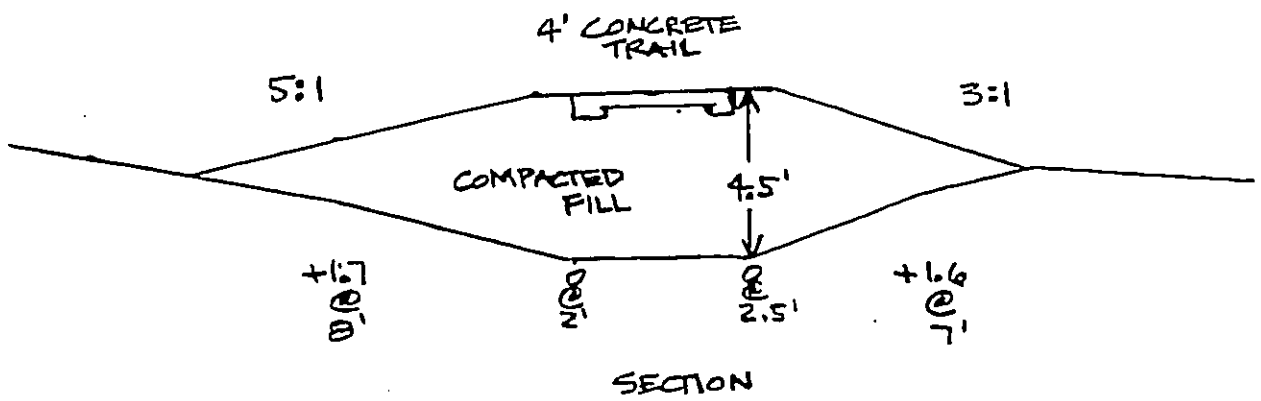
7 STEPS W
5.5" RISERS
& 14" TREADS

60' RAMP ALONG PARKING
GETS WHEELCHAIRS TO
5'

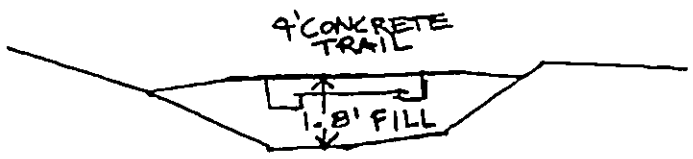
SCALE: 1" = 5



SECTION
0+68
(LOOKING UPHILL)



SECTION
1+00
(LOOKING UPHILL)



SECTION
1+32

Attachment #1
Na Ala Hele Guidelines

Management actions are also more likely to be accepted if the public is consulted and in when various actions are being considered. Trail and access users have a stake in many manag n decisions. Involving the public (via the Na Ala Hele advisory councils) is recommended when a feasible. The councils can help managers by outlining their preferences with respect to manager actions and by facilitating communication between user groups and managers. The advisory c ir user groups can also be instrumental in public information or education programs which const: i indispensable aspect of ongoing management.

D. TRAIL AND ACCESS DEVELOPMENT, DESIGN, AND MAINTENANCE

1. GENERAL TRAIL AND ACCESS DEVELOPMENT GUIDELINES

Na Ala Hele's trail and access development guidelines apply differently depending on the type. Existing or historic trails, roads, and other access ways will often not conform to recomm c guidelines. Na Ala Hele does not intend to redesign or reconstruct these trails unless absolutel necessary. Na Ala Hele consults with the Historic Preservation Division in historic trail restoratio maintenance concerns which are discussed later in this section.

"High quality trail design is primarily a balance between beauty and function. Natural features and scenery exist ideally in creative juxtaposition with the continuity, efficiency, and durability of a proposed route." (From Trail Building and Maintenance, 2nd ed. Proudman and Rajala, 1981)

RECEIVED AS FOLLOWS

The following information is applicable to the construction of new Na Ala Hele trails an accesses or to existing, non-historic trails/accesses in need of reconstruction. Specific design gui for various trail types and modes of transport are presented in Figures V-4. through V-6.

- Initial Construction and Ongoing Maintenance - Routes should be designed to req minimal future maintenance. The need for vegetation removal, grading, and other modifications should be minimized. Trails should be located where the soil is stable well-drained.

- Erosion - Routes should conform to the natural terrain. Long, straight sections, suc abrupt changes in direction, and steep grades should be avoided. Switchbacks, wate and steps should be used to promote erosion control.

- Safety - Stream and road crossings should be planned to minimize the potential for accidents. Bridges may be necessary. Warning signs may be needed.

- Trail Experience - The trail experience can be more interesting with the incorporatio a diversity of biological, climatic, scenic, and topographic features along the route. T should include areas where the public can safely access scenic views.

Additional general information on trail development, including design, layout, and constructic contained in the many source materials in the Na Ala Hele library. Especially valuable materials are listed in Figure V-3.

Figure V-3. Recommended Sources on Trail Building and Maintenance

Proudman, Robert, and Rajala, Reuben, Trail Building and Maintenance, 2nd Edition. Appalachian Mountain Club in association with the National Park Service, National Trails Program, Boston: 1981. **This is easily the best single volume source on trail construction and repair and is strongly recommended as a handbook for groups actively involved in trail work.** Each DOFAW District Office has a copy. Handbooks can be purchased by writing to:

Appalachian Mountain Club Books
5 Joy Street
Boston, MA 02108

Hooper, Lennon. NPS Trails Management Handbook. United States Department of the Interior, National Park Service. 1983.

State of Indiana, Department of Natural Resources. Indiana Trails Construction and Maintenance Manual.

State of New Mexico, Natural Resources Department. Adopt-a-Trail Handbook. Volunteers for the Outdoors. 1984.

Ashbaugh, Byron. Trail Planning and Layout. National Audubon Society. New York: 1965.

RECEIVED AS FOLLOWS

2. SPECIFIC TRAIL AND ACCESS DEVELOPMENT GUIDELINES

Refer to Figures V-4. through V-6. for details on trail and access design, layout, and construction.

3. ACCESSIBILITY FOR PERSONS WITH DISABILITIES

a. What the Law Requires

Chapters 502 and 504 of the Rehabilitation Act of 1973 require that programs, services, buildings, and facilities that are supported by Federal monies be accessible to persons with disabilities. Section 103-50, HRS, requires that all public buildings and facilities constructed by the State and Counties conform to the "American Standards Specifications for Making Buildings and Facilities Accessible to and Usable by the Physically Handicapped."

The "Uniform Federal Accessibility Standards" are used by the Federal Departments of Interior, General Services Administration, Defense, Housing, and Urban Development, and the U.S. Postal Service.

Even though the Na Ala Hele program has not applied for or received Federal funding, the program must comply with Federal accessibility requirements because Na Ala Hele is part of DOFAW and DLNR, both of which receive Federal monies for a variety of programs.

b. Accessibility

The previously mentioned "American and Uniform Standards" work to prevent architectural barriers so that disabled persons can enjoy access to governmental services that should be equally accessible to all people. Accessibility is not limited to structures and facilities. Federal law also requires programs to be equally accessible. This includes making information available to visually and hearing impaired persons on the availability and location of services, programs, and facilities.

There are no established standards for trails, camping grounds, and picnic shelters. The State of Hawaii's Commission on Persons with Disabilities (Department of Health) is available to review program and structural plans and advise on ways to provide equal access to the maximum extent feasible. In the absence of established standards, it is important to voluntarily determine what can be done to facilitate access to outdoor areas. A balance needs to be maintained between accessibility needs, safety, and environmental and historic preservation concerns.

A wheelchair accessible path requires sufficient width, gentle slopes, and a firm, slip-resistant surface. To construct and maintain to safety standards, such a trail in historic, wildland, or sensitive trail environments may result in unacceptable levels of impacts on the trails and their surroundings. Wherever accessible trails/accesses are located, parking, restrooms, water, and other facilities must be built to standards that enable use by disabled persons, particularly if such facilities are present for the non-disabled.

Kanaha Pond, a major wetland habitat for waterbirds on Maui, has wheelchair accessible trails and viewpoints. Keanae Arboretum, a DOFAW project on Maui, is in the process of developing trails that will be wheelchair accessible. However, at this time neither area has any restroom facilities.

Figure V - 4. Trail Guidelines

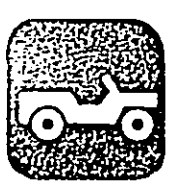
		Tread Width	Tread Material	Clearing Width: Trees/Logs	Clearing Width: Brush/Logs	Vertical Clearing	Maintenance Comments
	Urban	6 Ft. Min.	Concrete or Asphalt	1 Ft. to each side of tread	2 Ft. to each side of tread	7 - 8 Ft.	Trails/accesses should be cleared four times a year in wet climates where vegetation grows rapidly. Once a year clearing is sufficient for certain trails/accesses. Trails/accesses should be cleared at a frequency that maintains safe conditions. Maintenance frequency is affected by climate, intensity and types of public use, as well as the availability of a labor force to do the work. TRAIL TREAD WIDTH is generally determined by the trail type and intended use (foot, bike, etc.), but adjustments for the side slope and gradient may be necessary. On steeper slopes, using the minimum tread width will reduce the environmental impact and lower construction costs associated with trail cuts and fills. However, in areas with dangerously steep slopes or cliffs, the trail should include sections which are wide enough to allow two parties (which may include horses or mountain bikes) to pass safely. Interpretive trails should also be wider than normal to accommodate large groups and facilitate interaction between trail users.
	Rural	4 - 6 Ft.	Asphalt or Packed Dirt				
	Wildland	3 - 4 Ft.	Packed Dirt or Woodchips				
	Sensitive	3 - 4 Ft.	Boardwalk				
	Urban	3 - 6 Ft.	Asphalt/Packed Dirt	Tread only	2 Ft. to each side of tread	7 - 8 Ft.	
	Rural	2 - 4 Ft.	Natural/Woodchips				
	Wildland	2 - 3 Ft.	Natural				
	Sensitive	2 - 3 Ft.	Natural/Woodchips/ Boardwalk as nec.				
	Urban	3 - 6 Ft.	Dirt/Asphalt for short dist.	1 Ft. to each side of tread	3 Ft. to each side of tread	9 - 10 Ft.	
	Rural	2 - 4 Ft.	Natural				
	Wildland	2 - 3 Ft.	Natural				
	Sensitive	---	----				
	Urban	3 - 6 Ft.	Concrete/Asphalt	2 Ft. to each side of tread	2 Ft. to each side of tread	9 - 10 Ft.	
	Rural	3 - 4 Ft.	Packed Dirt				
	Wildland	3 - 4 Ft.	Packed Dirt				
	Sensitive	---	-----				
	Urban	10 Ft. Min.	Asphalt	2 Ft. to each side of tread	2 Ft. to each side of tread	9 - 10 Ft.	
	Rural	10 Ft. Min.	Natural				
	Wildland	---	-----				
	Sensitive	---	-----				

Figure V - 5. Trail Gradients

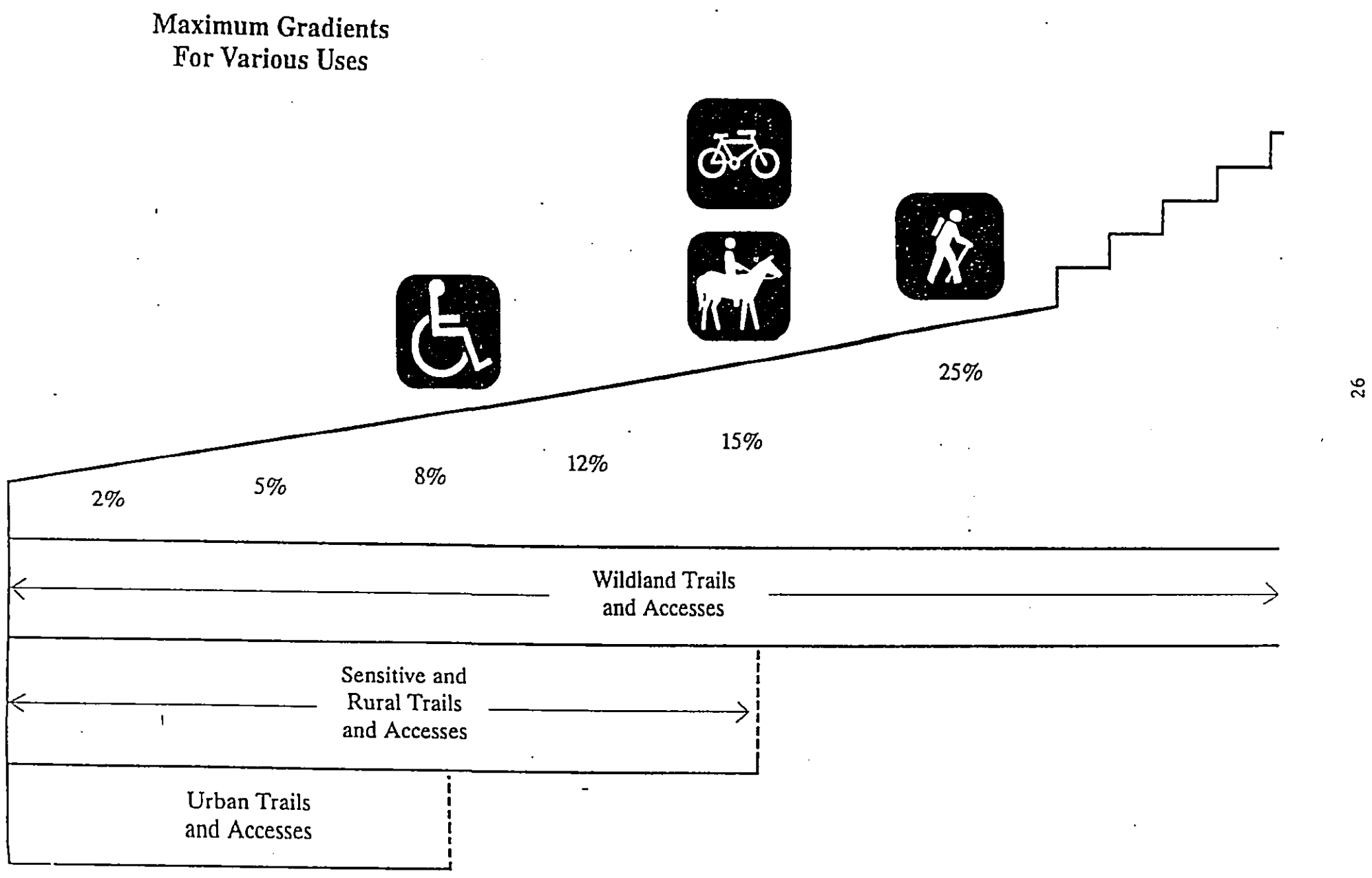


Figure V-6. Tread Materials

MATERIALS					MAINTENANCE	COMMENTS
CONCRETE	A	C	A	D	Medium/Low	•Needs to be Swept •Costly
ASPHALT	A	C	A	C	Low	•Labor Intensive to Install •Costly
BOARDWALK	B	B	B	C	Medium	•Expensive
GRAVEL	C	C	C-D	B	Medium	•Must be Well Graded •Needs Frequent Raking
WOOD CHIPS	C	B	D	A	High	•Needs Frequent Replacement
SOIL	C	A	B	A	Medium/High	•Maintenance Needs Very Variable

A: GOOD B: OK C: MARGINAL D: UNACCEPTABLE

Attachment #2

Division of Forestry and Wildlife
Best Management Practices for Maintaining Water Quality

BEST MANAGEMENT PRACTICES

FOR

MAINTAINING WATER QUALITY

IN HAWAII

State of Hawaii
Department of Land and Natural Resources
Division of Forestry and Wildlife
February 1996

BEST MANAGEMENT PRACTICES

1.0 Forest Roads

Standards and Use

Forest roads are managed to provide adequate access to lands for timber management, fire suppression, wildlife habitat improvement and a variety of dispersed and developed recreational activities. Generally, these are low volume roads that must carry heavy loads for short periods of time. The potential for adverse impacts from forest roads exists in areas where steep slopes, erodible soils, or where forest roads are located near water. **Forest roads cause more erosion than any other forestry activity.** Most of this erosion can be prevented by locating, constructing, and maintaining roads to minimize soil movement and pollution of streams. The need for higher standard roads can be alleviated through better road-use management. Design roads to the minimum standard necessary to accommodate anticipated use and equipment.

Planning, Design, and Location

A well planned access system is a sound method of reducing erosion and sedimentation in areas requiring frequent or temporary access. Proper location and construction of roads will provide for safety, longer operating periods, lower maintenance and operating costs, and minimal impacts to water quality. The value of the resource served and site characteristics will influence the choice of road construction standards and maintenance activities. The following practices are recommended:

(1) Use a design to minimize damage to soil and water quality.

(2) Roads should be designed no wider than necessary to accommodate the immediate anticipated use.

(3) Design cut and fill slopes to minimize mass soil movement.

(4) Provide culverts, dips, water bars, and cross drainages to minimize road bed erosion.

(5) Design bridge and culvert installations using stream flow data, with a margin of safety proportional to the importance of the road and the protected resources.

(6) Provide drainage where surface and groundwater cause slope instability.

(7) Avoid diverting water from natural drainage ways. Dips, water bars, and cross drainage culverts should be placed above stream crossings so that water can be filtered through vegetative buffers before entering streams.

(8) Locate roads to fit the topography and minimize alterations to the natural features.

(9) Avoid marshes and wetlands.

(10) Minimize the number of stream crossings.

(11) Cross streams at right angles to the stream channel.

(12) A road may not be located in a Streamside Management Zone (SMZ) except where access is needed to a water crossing, or where there is no feasible alternative. A road in any SMZ must be designed and located to minimize adverse effects on fish habitat and water quality.

Construction

Once the road's location and design is staked out, road construction begins. Timber is out, logs and vegetation are removed and piled along the lower side of the right-of-way.

Most forest roads are built by excavating a road surface. Road design and layout on-the-ground show machine operators the proper cut slopes and indicate cut slope steepness. The bulldozer starts at the top of the cut slope, excavating and sidecasting material until the desired road grade and width is obtained. Material from cuts is often pushed in front of the blade to areas where fill is needed. Road fill is used to cover culverts and build up flat areas. Since fill must support traffic, it needs to be spread and compacted in layers to develop strength. The following practices are recommended:

(1) Construct roads when moisture and soil conditions are not likely to result in excessive erosion or soil movement.

(2) The boundaries of all SMZs shall be defined on the ground prior to the beginning of any earth-moving activity.

(3) Construct a road sufficient to carry the anticipated traffic load with reasonable safety and with minimum environmental impact.

(4) When using existing roads, reconstruct only to the extent necessary to provide adequate drainage and safety.

(5) Avoid construction during wet periods, when possible, to minimize unnecessary soil disturbance and compaction.

(6) Road grades should be kept at less than 10%, except where terrain requires short, steep grades.

(7) Minimize the number of stream crossings. Stream crossing construction should minimize disturbance of the area in which the crossing is being constructed.

(8) As slope increases, additional diversion ditches should be constructed to reduce the damages caused by soil erosion; ditches, adequate culverts, cross drains, etc., should be installed concurrent with construction.

(9) To control erosion, cut and fill slopes should conform to a design appropriate for the particular soil type and topography.

(10) Stumps, logs, and slash should be disposed of outside of the road prism; in no cases should they be covered with fill material and incorporated into road beds.

(11) Stabilize the side banks of a road during construction to aid in the control of erosion and road deterioration; this may require mesh or other stabilizing material in addition to planting and/or seeding and other structural measures.

(12) Water bars should be located to take advantage of existing wing ditches and cross drainage. Water bars should be constructed at an angle of 30 to 45 degrees to the road. Water bars should be periodically inspected and damage or breeches should be promptly corrected. Install water bars at recommended intervals to provide the drainage. Water bar spacing recommendations are as follows:

Grade of Road	Distance Between Water bars
2%	250 ft.
5%	135 ft.
10%	80 ft.
15%	60 ft.
20%	45 ft.
25%	40 ft.
30%	35 ft.
40%	30 ft.

Water bars may need to be spaced closer together depending on soil type and rainfall.

(13) Bridges and overflow culverts should be constructed to minimize changes in natural stream beds during high water.

(14) Culverts on perennial streams should be installed low enough to allow passage of aquatic life during low water.

Maintenance

Maintenance of active and inactive roads shall be sufficient to maintain a stable surface, keep the drainage system operating, and protect the quality of streams. The following are recommended:

(1) Maintenance should include cleaning dips and crossdrains, repairing ditches, marking culverts inlets to aid in location, and clearing debris from culverts.

(2) Keep culverts, flumes, and ditches functional before and during the rainy season to diminish danger of clogging and the possibility of washouts. This can be done by clearing away any sediment or vegetation that could cause a problem. Provide for practical and scheduled preventative maintenance programs for high risk sites that will address the problems associated with high intensity rainfall events.

(3) Conduct road surface maintenance as necessary to minimize erosion of the surface and subgrade.

(4) During operations, keep the road surface crowned or outsloped, and keep the downhill side of the road free from berms except those intentionally constructed for protection of fill.

(5) Avoid using roads during wet periods if such use would likely damage the road drainage features.

(6) Water bars should be inspected after major rain storms and damage or breeches should be promptly corrected.

Harvesting - Temporary Access Roads and Landings

(1) The location of temporary access roads (logging roads) should be planned before operations begin.

(2) Road construction should be kept to a minimum.

(3) Landings should be located to minimize the adverse impact of skidding on the natural drainage pattern.

(4) Logging roads and landings should be located on firm ground.

(5) Landings should be kept as small an area as possible.

(6) When operations are completed, provisions should be made to divert water run-off from the landings and roads.

- This page intentionally blank -

Appendix A
Cultural Impact Assessment

CULTURAL IMPACT ASSESSMENT FOR THE PROPOSED `OHAI TRAIL KAHAKULOA *AHUPUA`A*, WAILUKU DISTRICT, MAUI ISLAND, HAWAI`I (TMK: 3-1-03)

Melanie M. Mann, B.A.,
Tanya Lee-Greig, M.A.,
Douglas Borthwick, B.A.
And
Hallett H. Hammatt, Ph.D.

Prepared for
Na Ala Hele Trails and Access Program

Cultural Surveys Hawai`i, Inc.
February 2003

ACKNOWLEDGMENTS

Cultural Surveys Hawai`i, Inc. would like to thank Richard Ho`opi`i, Senior, Kalei Tsuha and Mark Tsuha for their generosity in sharing their wealth of knowledge of Kahakuloa. We are most grateful for their time and kind words of wisdom. We also wish to acknowledge Bob Hobdy, retired Department of Land and Natural Resources, for his *mana`o*.

ABSTRACT

At the request of Na Ala Hele, Cultural Surveys Hawai`i, Inc. conducted a cultural impact assessment for the proposed `Ohai Trail in the *ahupua`a* of Kahakuloa, District of Wailuku, Maui (TMK: 3-1-03).

Historic research of the project area was carried out to identify any cultural resources or traditional practices associated with the area encompassing the proposed trail corridor and surrounding vicinity. An attempt was made to contact present and former residents of Kahakuloa, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in the vicinity of the `Ohai Trail project area.

Three individuals were identified and interviewed, Mr. Richard Ho`opi`i, Mr. Mark Tsuha and Mrs. Kalei Tsuha. In addition to the three formal interviews conducted, other community members shared valuable information regarding traditional land use, attitudes and practices associated with the `Ohai Trail project area.

Historic research of the Kahakuloa area indicated that Kahakuloa was one of five population centers on the island of Maui, most noted for the cultivation of wetland taro. At the time of the *Māhele*, there were 154 applications for quiet title to land in Kahakuloa, of which only 75 were awarded. Majority of the *kuleana* lands were awarded in Kahakuloa Valley with a few isolated LCAs in the *mauka* regions. Kahakuloa Valley is located approximately three miles east of the proposed Ohai Trail project area.

Previous archaeological study areas in Kahakuloa are dispersed in and around Kahakuloa Valley, as well as a few isolated *mauka* areas. However, there are no documented archaeological sites identified in the immediate vicinity of the `Ohai Trail project area.

Two burial grounds have been documented at Kahakulo Gulch and Honanana Gulch, but no burials have been identified in or near the `Ohai Trail corridor. Given the rocky terrain of the project area and its isolated location, the possibility of inadvertent burials is unlikely.

One traditional cultural practice was identified in the vicinity of the project area. Gathering marine resources is an ongoing tradition for local residents of Kahakuloa. *Kama`āina* are known to frequent the shores off the `Ohai Trail project area to fish for *uhu, enenue, mū, ulua, akule*, and occasionally when conditions are right, *`opihi* and *pūpū* picking is possible. Based on consultations with residents and fishermen in the area, construction of the trail will not restrict public access to gather marine resources.

A community of *`Ohai* (*Sesbania tomentosa*) is present *makai* of the `Ohai Trail project area, although there is no indication of any ongoing gathering of the *`Ohai* flower. The *`Ohai* shrub is very rare and *kama`āina* have mentioned that poor weather conditions

make it difficult for the flowers to grow to full maturity, and that *`ohai* picking for lei making is very rare.

There also appears to be no continued or ongoing hunting practices noted in the vicinity of the `Ohai Trail project area. Furthermore, no traditional Hawaiian trails were identified as traversing the proposed trail corridor, and no cultural properties have been documented or identified in the immediate vicinity of the project area.

Although no specific cultural concerns were identified during the course of the cultural impact assessment, Cultural Surveys Hawai`i, Inc. recommends the following in the event that inadvertent burials are encountered during construction for the `Ohai Trail corridor. State law (Chapter 6E, Hawai`i Revised Statutes) requires the following:

1. Stop all disturbing activity in the immediate area.
2. Leave all remains in place.
3. Immediately notify the State Department of Land and Natural Resources-Historic Preservation Division (DLNR/SHPD) and the county police department.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

I. INTRODUCTION

A. Project Area Background

At the request of the Department of Land and Natural Resources, Division of Forestry and Wildlife, Na Ala Hele Trail and Access Program, Cultural Surveys Hawai`i, Inc. conducted a cultural impact assessment for the proposed `Ohai Trail, Kahakuloa *Ahupua`a*, Wailuku District, Island of Maui (Figures 1 and 2). From a planned western trail head at Kahekili Highway, near the Game Management Area at Po`elua, the trail will extend a mile eastward above Po`elua Bay to Papanalahoa Point. The trail then curves westward along the edge of Alapapa Gulch and circles inland and upslope through native grasses, shrubs, and sedges, returning to Kahekili Highway.

The purpose of the cultural impact assessment is to consider the effects that the proposed trail may have on native Hawaiians as it pertains to their culture and right to practice traditional customs. The Hawai`i State Constitution, Article XII, Section 7 protects "all rights" of native Hawaiians that are "customarily and traditionally exercised for subsistence, cultural and religious purposes." Act 50 (SLH 2000) was passed as an attempt to balance the scale between traditional lifestyles and development and economic growth. Act 50 provides that environmental impact statements: (1) Include the disclosure of the effects of a proposed action on the cultural practices of the community and State; and (2) Amends the definition of "significant effect" to include adverse effects on cultural practices.

The Scope of Work (SOW) was designed to meet the Guidelines For Assessing Cultural Impacts as adopted by the Office of Environmental and Quality Control (OEQC) (1997), as well as, the requirement of any other State and County agencies involved in the review process for the proposed project. The "Guidelines for Assessing Cultural Impacts" issued by the Office of Environmental and Quality Control (OEQC) discuss the types of cultural resources, practices and beliefs that might be assessed. The Guidelines state:

> The type of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs. The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man-made and natural, including submerged cultural resources, which support such cultural practices and beliefs.

Preliminary archaeological and botanical surveys were conducted in November of 1999 for the `Ohai Trail corridor. The archaeological assessment resulted in a finding that "no historic properties will be affected by this undertaking" (SHPD/DLNR LOG. 28906 DOC. 0112CD33). Additionally, the botanical assessment indicated no threatened or endangered native or endemic species within the approximate 25-foot wide trail corridor, the exception being a community of the prostrate form of *`ohai* (*Sesbania tomentosa*) that

occurs along the shoreline cliffs, *makai* of the proposed trail. The current cultural impact assessment is a complimentary component to the archaeological and botanical studies, and provides critical information regarding those traditional and cultural practices that may be affected by the development of the `Ohai trail.

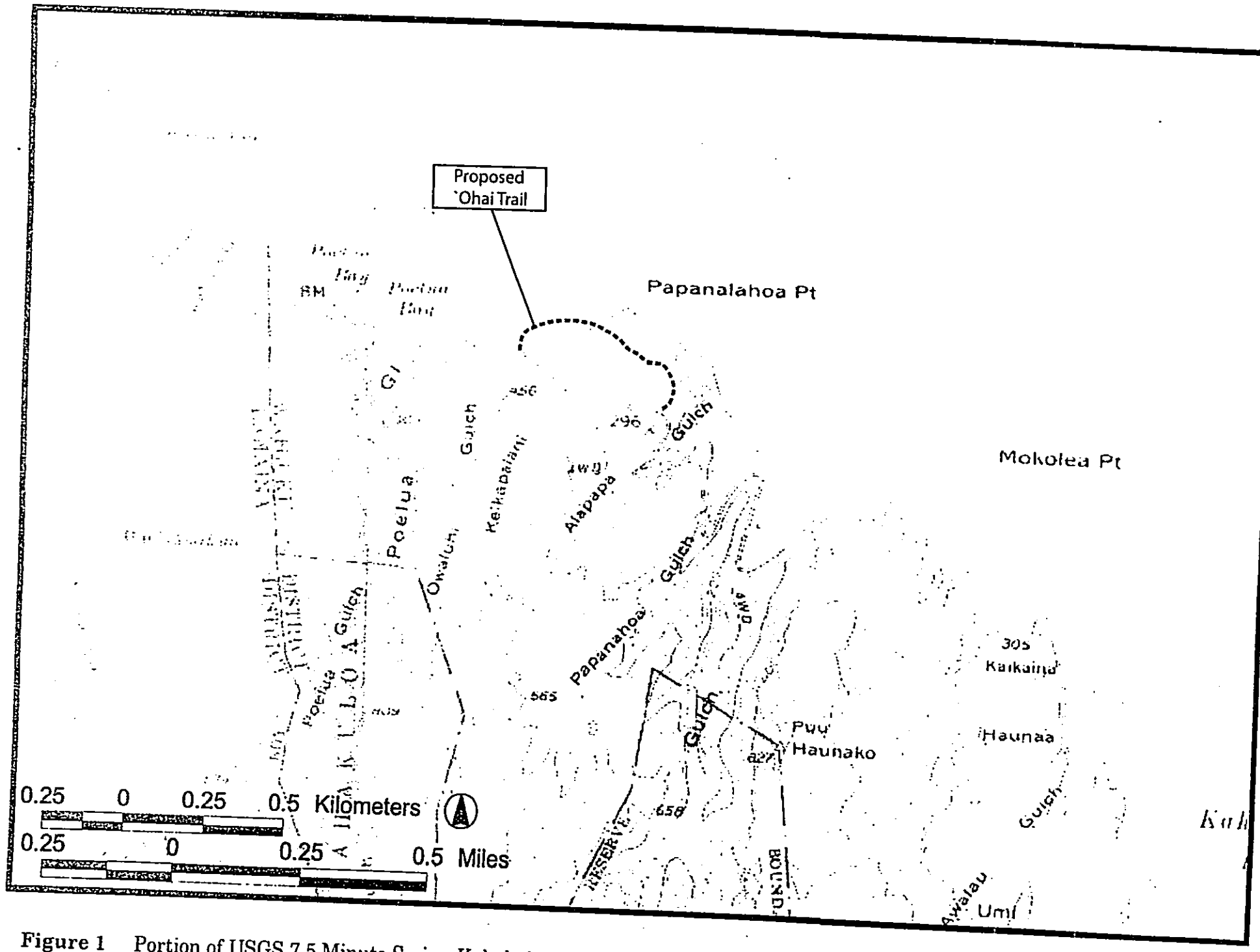


Figure 1 Portion of USGS 7.5 Minute Series, Kahakuloa and Honolua Quadrangles Showing Proposed `Ohai Trail.

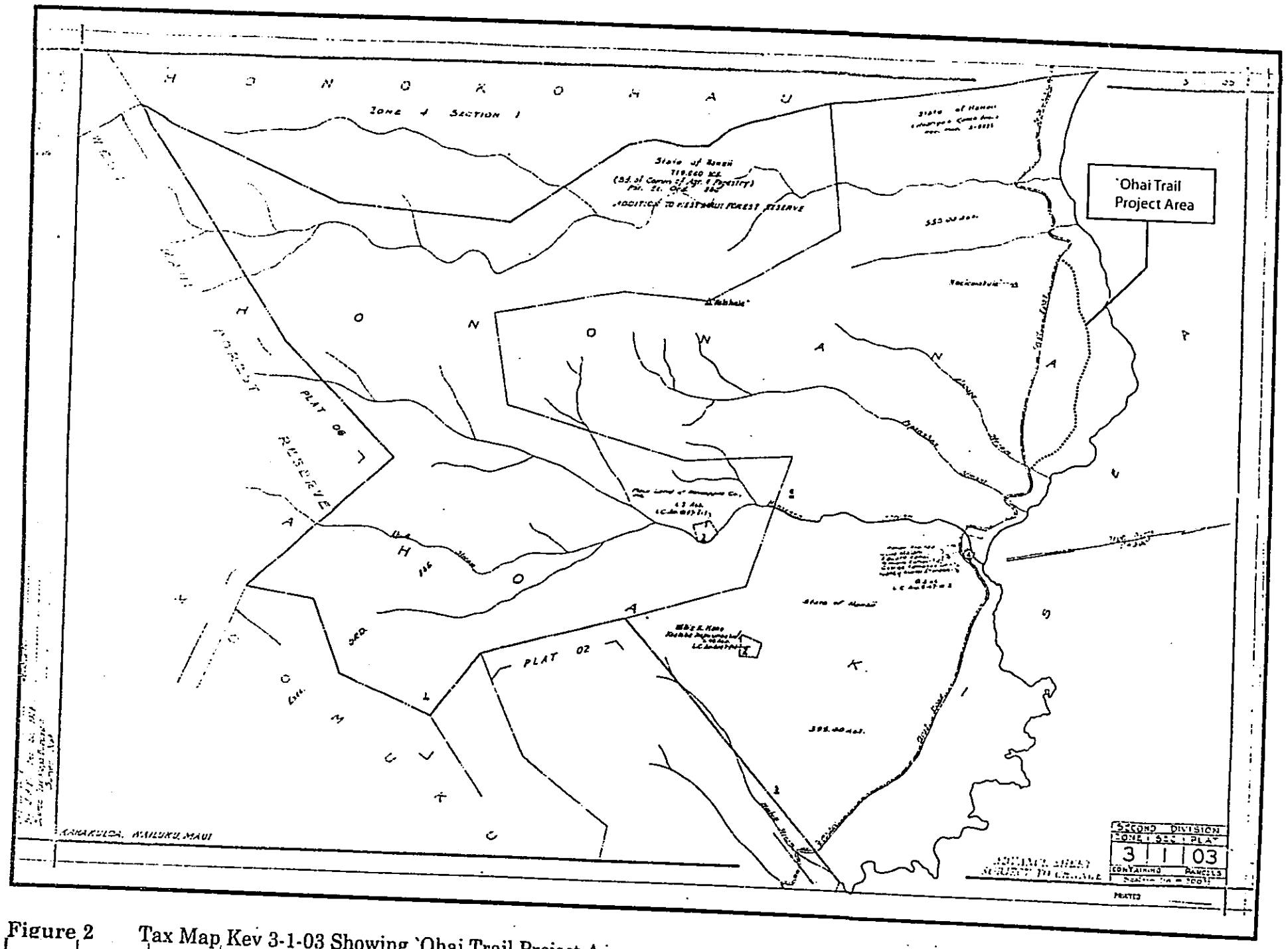


Figure 2 Tax Map Kev 3-1-03 Showing `Ohai Trail Project Area.

B. Scope of Work

In compliance with the Office of Environmental and Quality Control (OEQC) and Act 50, the following Scope of Work (SOW) was designed to satisfy the requirements of a cultural impact assessment as it relates to the identification of traditional Hawaiian customs and rights within the project area.

1) Examine historic documents, Land Commission Awards, and historic maps, with the specific purpose of identifying traditional Hawaiian activities. Such activities would include the gathering of plant, animal and other resources, in addition to agricultural pursuits, as may be indicated in the historic record.

2) Review existing archaeological information pertaining to site distribution, as this may enable us to reconstruct traditional land use activities, as well as identify and describe past and/or present cultural resources, practices, and beliefs associated with the trail.

3) Conduct limited oral interviews with persons knowledgeable about the historic and traditional practices in the project area(s).

4) Preparation of a report on the above items summarizing gathered information as related to traditional practices and land use. The report will assess the impact of the proposed action on the cultural practices and any features identified.

C. Methodology

1. Historic Research

Historic documents, maps and photographs were researched at: the Hawai`i State Archives; Hawai`i State Survey Office; Bernice Pauahi Bishop Museum archives and library; the State Historic Preservation Division (SHPD) Library; and the Cultural Surveys Hawai`i Library.

2. Identification of Knowledgeable Informants

Hawaiian organizations, government agencies, community members and cultural and lineal descendants with ties to the Kahakuloa area were contacted to (1) identify potential knowledgeable individuals with cultural expertise and knowledge of the `Ohai Trail project area and the surrounding vicinity, and (2) to identify cultural concerns and potential impacts relative to the `Ohai Trail project area. An effort was made to locate informants who either grew up in Kahakuloa or who, in the past, used the `Ohai Trail project area for traditional and cultural purposes. In addition, informal talk-story with community members familiar with the project area was ongoing throughout the

consultation period. The organizations and agencies consulted included: the State Historic Preservation Division; Maui/Lana`i Island Burial Council; Office of Hawaiian Affairs; Alu Like, Inc.; Maui Hawaiian Civic Club; Department of Hawaiian Homelands; Maui Community College; Sierra Club; Nature Conservancy; Native Hawaiian Plant Society; and individual departments of the County office.

The following table shows the results of the community consultations which were conducted.

Table 1. Results of Community Consultations

Key:
Y=Yes
N=No
A=Attempted (at least 3 attempts were made to contact individual, with no response)
S=Some knowledge of project area
D=Declined to comment
U=Unable to contact, i.e., no phone or forwarding address, phone number unknown

Name	Affiliation	Contacted	Personal Knowledge (Y/N/S)	Comments
Aiu, Pua	Office of Hawaiian Affairs	Y	N	Made referrals.
Allen, Janet	West Maui Cultural Council	A		
Craddick, David R.	Department of Water Supply–Maui County	A		
Dukelo, Kahele	Maui Community College, Po`okela Program	Y	S	Parents live in Kahakuloa Valley. Made referrals.
Duey, Rose Maire	Alu Like, Inc.	Y	Y	Made referrals.
Evenson, Mary		Y	N	No comment.
Hall, Dana N.	Maui/Lana`i Island Burial Council	Y	Y	Made referrals.
Haan, Bram Den	Valley Isle Road Runners Association	U		No known telephone number.

Name	Affiliation	Contacted	Personal Knowledge (Y/N/S)	Comments
Hau, Skippy	DLNR Division of Aquatic - Resources Maui	Y	Y	Gave comment about trail management. Made referral.
Hobdy, Bob	Department of Forestry and Wildlife	Y	Y	Gave extensive historic background of Kahakuloa. First hand knowledge about the trail area--completed botanical inventory for the environmental assessment.
Hokoana, Lui	Maui Community College, Hui Lei Ola	Y	N	Made referrals.
Ho`opi`i, Richard	Kahakuloa Resident	Y	Y	One of the original families of Kahakuloa. Interviewed January 15, 2002.
Ino, James J.	Natural Resources Conservation Service	A		
Kafka, Peter R.	Sierra Club	U		No known telephone number.
Kapeliela, Kana`i	DLNR, State Historic Preservation Division	A		
Ke`au, Charles		A		
Kirkendall, Dr. Melisa	DLNR, State Historic Preservation Division	Y		No known archaeological sites in areas. Made referrals.
Koga, Jason	DLNR, Land Division	Y	N	No comment.
Lindsey, Ed		Y	S	Made referrals.
Matsui, Patrick	Department of Parks and Recreation	Y	N	Made referrals.
Maxwell, Charles K.	Maui/Lana`i Island Burial Council	Y	Y	Made no comment.

Name	Affiliation	Contacted	Personal Knowledge (Y/N/S)	Comments
McEldowney, Dr. Holly	DLNR, State Historic Preservation Division	Y		Commented that the highest potential for cultural concerns would arise in the Kahakuloa Valley area. She suggested contacting Kahakuloa residents.
Medeiros, Vanessa	Department of Hawaiian Homelands	Y	N	Made referrals.
Naeole, Iokepa	The Nature Conservancy	Y	N	Made referrals.
Nelson, Linda	Native Hawaiian Plant Society	N		No known telephone number.
Pelekikena, Clara DeStefano	Central Maui Hawaiian Civic Club	N		No known telephone number.
Pu, Eddie		N		No known telephone number.
Shattenberg-Raymond, Lisa	Maui Nui Botanical Gardens	Y	S	Made referrals. Commented on the gathering of *`ohai* flowers for lei making.
Shimaoka, Thelma	Office of Hawaiian Affairs	Y	S	Made several referrals.
Tsuha, Kalei and Mark	Kahakuloa Residents	Y	Y	Fishes off the coast of Kahakuloa. Interviewed January 31, 2003.
Wendt, Ed		A		

3. The Interview Process

A substantial effort was made to locate 3-4 knowledgeable informants for the `Ohai Trail cultural impact assessment. Three individuals with extensive knowledge of Kahakuloa were identified. Two formal taped interviews were conducted. The first interview was conducted on January 15, 2003 with Mr. Richard Ho`opi`i, and the second interview was carried out on January 31, 2003 with Mr. Mark Tsuha and Mrs. Kalei Tsuha, who are husband and wife. The interviews lasted an hour to two hours, and both were taped and transcribed. All three participants were then given the opportunity to review the transcriptions and provide any necessary corrections and/or editing remarks to approve the final transcription. An "Authorization for Release" form giving permission for the interviews to be used as part of this assessment was then signed by each of the three

informants. Excerpts from the interviews were used throughout the report, wherever applicable. The full transcription for both interviews is appended to this report.

4. Biographical Sketches of the Informants

Richard Kealoha Ho`opi`i, Senior

Richard Kealoha Ho`opi`i, Senior was born at home on March 15, 1941 to Abigail and Frank Ho`opi`i in Kahakuloa Village. Mr. Ho`opi`i is of Hawaiian-Chinese descent. At the time of the interview, Mr. Ho`opi`i was three months shy of his sixty-second birthday, and a year away from retirement from the County of Maui, Department of Parks and Recreation. Mr. Ho`opi`i is renowned for his falsetto musical talent and is the younger brother of the Hawaiian musical group, the Ho`opi`i Brothers. His musical talent has taken him abroad, where he has shared not only his music, but also the love and compassion he has for the Hawaiian culture. Although his performing and recording days have slowed, Mr. Ho`opi`i still finds great joy in playing Hawaiian music for relatives at baby *lū`au*, birthday parties and anniversaries.

Mr. Ho`opi`i's mother, Abigail Lumlung, was also born and raised in Kahakuloa Village, where her parents were taro growers. Like so many other families in Kahakuloa in the mid 1930s through the early 1950s, the bulk of the Lumlung family moved to O`ahu for better job opportunities. Abigail Lumlung, however, persisted through the hard times of the depression and war, to carry on the traditions and cultures of Kahakuloa Valley. Mr. Ho`opi`i credits his mother as his foundation for his cultural knowledge. Mr. Ho`opi`i's father, Frank Ho`opi`i, was a teacher at Kahakuloa School and a master of the musical arts. Mr. Ho`opi`i attributes his musical talent to his father. Both Mr. Ho`opi`i's parents have passed, but their *mana`o* has prevailed through the voice and activism of Mr. Ho`opi`i.

After retirement, Mr. Ho`opi`i plans to continue restoration work on the Kahakuloa Hawaiian Congregational Protestant Church, where he is the current pastor. He has also expressed his desire to organize community programs for Kahakuloa youth.

Kalei and Mark Tsuha

Born and raised in Lahaina, Maui, Kalei Tsuha currently works for the Kaho`olawe Island Reserve Commission as the Culture and Education Program Coordinator. She grew up learning the family tradition of fishing. Their fishing grounds extended along the coastline that stretches from Lahaina to Kahakuloa. Kalei and her husband Mark have been living in the Kahakuloa Valley for approximately four years.

Mark Tsuha was born on Kaua`i and moved to Maui during his first year of high school. He currently works for the County of Maui. The familiarity that Mark has with Kahakuloa comes from his stepmother, of the Kauha`aha`a family, who was born and raised in the valley. Actively utilizing the marine and terrestrial resources near and around their home, both Kalei and Mark live their lives as traditional as one can in this modern age.

II. PROJECT AREA DESCRIPTION AND NATURAL SETTING

A. Project Area Description

The proposed `Ohai Trail will provide a low impact recreational trail featuring a self-guided interpretive walk for beginner and intermediate hikers in an unused oceanside portion of the Kahakuloa Game Management Area (GMA) (Figures 3 and 4). The trail will be located at Papanalahoa Point in West Maui, about halfway between Honokōhau and Kahakuloa Bays. Access to the `Ohai Trail will be located off the *makai* (north) side of Kahekili Highway, near the Game Management Area at Po`elua, near Alapapa Gulch. From a planned western trail head at Kahekili Highway, near the Game Management Area at Po`elua, the trail will extend one mile eastward above Po`elua Bay to Papanalahoa Point. The trail then curves westward along the edge of Alapapa Gulch and circles inland and upslope through native grasses, shrubs, and sedges, returning to Kahekili Highway.

B. Natural Setting

Weather conditions in the vicinity of the proposed trail are usually clear in the morning hours, until clouds build up and envelope the upper slopes above 2000 feet in the afternoon. Gusty trade winds blow on shore directly. Winter storms occasionally bring heavier winds and rain amounting to 20 to 40 inches annually. During late summer/early fall, the winds can cease completely. There are no perennial streams in the project area.

The topography of the trail is hilly. The average slope is approximately 20 to 35 percent but ranges from 15 to 60 percent. The estimated elevation of the trail is 320 feet above sea level. The soils have a profile similar to silty clay loam, 3 to 7 percent slopes, except that the texture throughout the profile is mainly clay loam. These soils make up 30 to 50 percent of the complex. The remaining area consists of rocky gulches and knolls.

Primary vegetation consists of lantana (*Lantana camara*), guava (*Psidium guajava*), Christmas berry (*Schinus terebinthifolius*) and various grass species interspersed amongst the brush. A few areas are bare, and wind and water erosion are active (Foote *et. al* 1972). The trail itself passes through a severely disturbed, low-diversity, non-native plant community and grassland complex. No threatened or endangered native or endemic plant species were noted along the trail at the completion of the botanical survey (DLNR Na Ala Hele Trails and Access Program 2001: 7). The prostrate form of *Sesbania tomentosa*, known locally as *`Ohai* occurs along the shorline cliffs, away from the trail area. Additionally, a variety of non-native birds and mammals can also be seen along the trail. The only native bird species observed during the Environmental Assessment was the *Pueo* or the endemic Hawaiian Owl (*Asio flammeus sandwichenis*). For a complete list of flora and fauna noted along the trail course see the Environmental Assessment (DLNR Na Ala Hele Trails and Access Program 2001: 8-10).

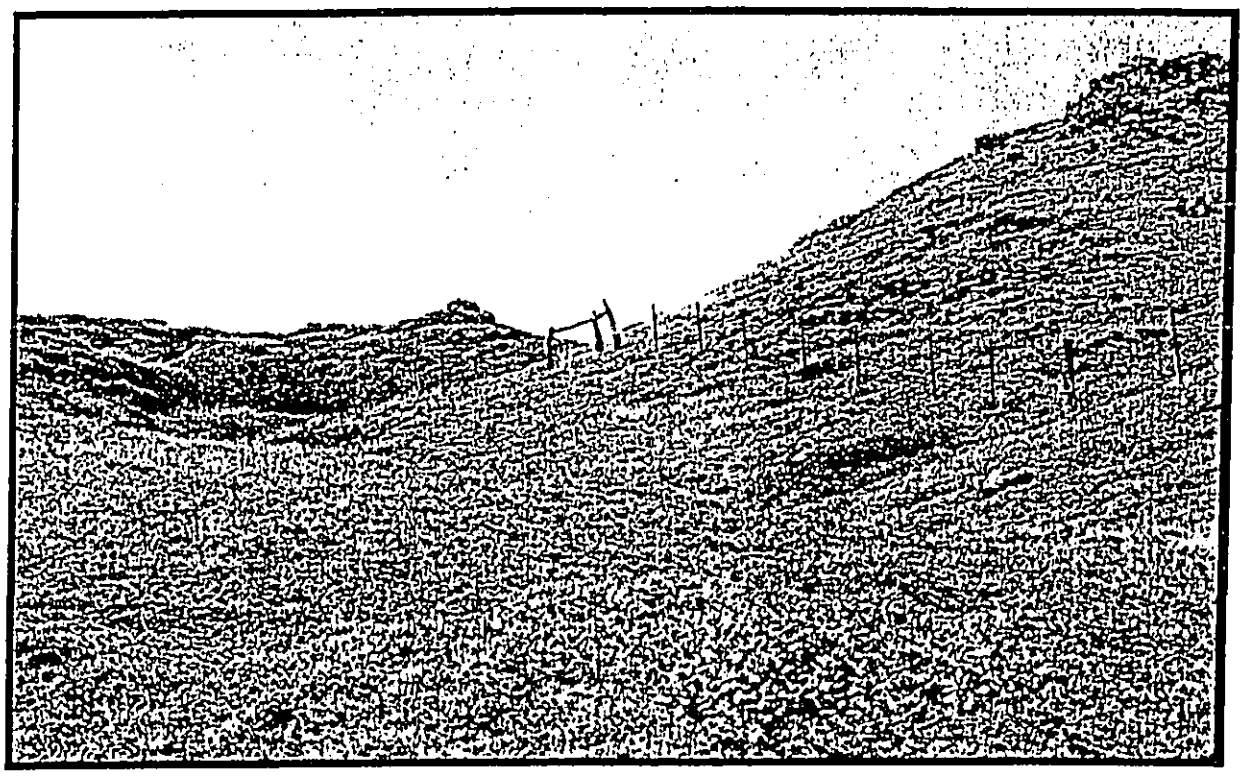


Figure 3 View to Southwest From Within Existing Trail Head.

Figure 4 View to North From Proposed Eastern Trail Head.

III. CULTURAL SETTING

A. Wailuku District and Kahakuloa *Ahupua`a*

The `Ohai Trail project area is located in Kahakuloa, an *ahupua`a* in the ancient Hawaiian district of Kā`anapali. The *ahupua`a* of Kahakuloa was at times termed a *kalana* [or a division of land smaller than a *moku* or district (Pukui and Elbert 1986: 121)], which would have been equivalent to a county today (in Sterling 1998: 3).

Under the reign of Kaka`alaneo, Maui was divided into twelve *moku* or districts (Coulter 1935: 216-17). These *moku* included Honua`ula, Kahikinui, Kaupō, Kīpahulu, Hāna, Ko`olau, Hāmākua Loa, Hāmākua Poko, Ka`anapali, Lahaina, Wailuku, and Kula. With the passage of the Civil Code of 1859, the twelve ancient districts were then consolidated into four. Under the new code, the traditional *moku* of Ka`anapali was combined with Lahaina and the island of Kaho`olawe to make one of the four Maui districts (Coulter 1935: 216-17). The Session Laws of 1909 again reorganized the island of Maui into six districts. The third Maui district, entitled the Wailuku District included:

> All portions of central Maui lying east of a line along the boundary of Honokohau and Kahakuloa to the peak of Eke Hill; thence along the ridge of mountains and down the bottom of Manawainui gulch to the sea; and west of the boundary of Makawao district (Coulter 1935: 219).

Today, the `Ohai Trail project area is located in the modern district of Wailuku, although in traditional Hawaiian times it would have been located in the ancient district of Ka`anapali in the *ahupua`a* of Kahakuloa.

Kahakuloa, although very isolated, was one of five population centers on the island of Maui, most popularized by its intense cultivation of wetland taro in the valley floors (Pukui 1972: 272). The remaining four population centers on Maui included areas on the: southeast and east part of West Maui; the southwest coast of West Maui; the south coast of East Maui; and the northeast flank of Haleakalā.

B. Traditional and Legendary Accounts of Kahakuloa

The literal translation of Kahakuloa means " the tall lord" (Pukui *et al.* 1974: 62), although Handy (1940) recounts the naming of Kahakuloa with a small, fertile, taro patch located approximately one half of a mile inland on the southeast side of the valley bottom. Although the taro patch is no longer in use, it is said to have been the property of the chief (*haku*) of the valley. Due to the isolation of the area, the chief was known as *ka haku loa* the "faraway master" (Handy 1940: 107).

Mr. Richard Ho`opi`i was born and raised in Kahakuloa Valley and recalls that his maternal grandfather, David Kalawai`a, had cared for the chief's taro patch in historic times. The following are excerpts from Mr. Ho`opi`i and his memories and stories he was told about the fertile taro patch:

RH: So I asked, "where is going be in Kahakuloa?" And you see, the name Kahakuloa actually belong in the village, above our home, in the inner part of the village, it [Kahakuloa] was named after a taro patch.

CSH: Right–for one of the chiefs right?

RH: Yes for one of our chiefs, that was our [inaudible] for the chief–Kahikili. And that patch fed–it was a small area–and that patch gave ten bags of taro–ten bags of taro

CSH: Wow, it fed a lot of people.

RH: It fed a lot of people, it was kind of like an old–and knowing how taro grows we used to say, "no way not ten bags". But it was ten bags. Owaluino is the name of the place, and the patch is there– because my grandfather, David Kalawai`a was living right next to that and he took care of that patch, and my mother was raised right over there–right by the patch.

This taro patch also served as a place of refuge (*pu`uhonua*) for the west side of Maui, and all *kapu* breakers who could elude their captors could take refuge, and subsequently evade the wrath of the *kahuna* or other *ali`i* (Handy 1940:107). Mr. Ho`opi`i had also mentioned the taro patch as a *pu`uhonua* as the result of the abundant resources provided by the fertile valley.

RH: In here, in the time of–well you know that Kahikili was the father of Kamehameha, but for Kahikili this was a refuge for the people, like the refuge in Kona. This valley was a refuge area and people would come and be safe, and nobody would touch them.

CSH: I know that the taro patch that you were talking about was also a *pu`uhonua* right?

RH: Because in that area is the beginning of the inner land where they would come and stay, because it was rich–the soil was rich, the water resource was there, everything was there. So that *kalawai* was the main source for the king. *Mauna*–when they say *`ohu`ohu Kahakuloa i ka pua lehua*–the flower, the *pua*, the *kaukini*, that's when you come by the stand over there, that's the *mauna*, the *kaukini* area–at one point used to have plenty, plenty, *lehua* trees in that area.

Kahakuloa is further mentioned in one legendary account about a young boy, Kaili, who lived in the fertile valley of Kahakuloa (Armitage and Judd 1944: 91and 92). The legend tells of the abduction of Kaili by fierce warriors, and his ultimate escape from becoming a human sacrifice by the heroism of his sister, Nailima. According to legend, Nailima had followed her brother's captors to a temple in Lahaina called Ha-lulu-koa-koa. Exhausted from the long run from Kahakuloa to Lahaina, Nailima sank down on a rock and wept. The sound of her weeping attracted the attention of Pueo, the owl-god. After hearing the story of Kaili's brutal capture and impending sacrifice, Pueo told Nailima to have hope and pray to her gods while he went to the temple. Upon his arrival at the temple, Pueo made plans for Kaili's escape. Pueo turned himself invisible and unbound Kaili. Pueo then instructed Kaili to quickly and quietly walk backwards several miles

away from the temple into the country where his sister Nailima was waiting. However, Pueo spotted the temple warriors approaching. Pueo and Kaili hid under the rock that Nailima was sitting on. When the warriors arrived they noticed Kaili's foot prints and quickly followed them. The trail led them back to the temple allowing Kaili and Nailima to escape.

A gentle wind passing beyond the cliffs of Kahakuloa is further mentioned in the recital of the Maui and Moloka`i winds by Kuapakaa:

> ...The iaiki is of Wailuku,
> The oopu is of Waihee,
> The kauaula wind has blown;
> It now murmurs among the cliffs
> Beyond the cliffs of Kahakuloa...
> (In Sterling 1998: 7)

Several traditional epithets for Kahakuloa are also mentioned by Pukui (1983). The first is "*Na pali kinikini o Kahakuloa*" meaning "The multitudinous cliffs of Kahakuloa" (Pukui 1983:249). The second traditional saying for Kahakuloa is, *Ke ala Kīke`eke`e a Māui* meaning "The winding trails of Māui", which respectfully refers to several trails made by the demigod Māui while eluding his captors. As Kamakau explains:

> Maui, son of Kalana, was one of the ancient chiefs of Maui who made roads twenty centuries ago. The roads in his day were straight and the people were accustomed to running along straight roads; so when certain persons ran after Maui to kill him he made the road go zigzag and it was called "the zigzag road of Maui" (*ke alanui kike`eke`e a Maui*). One is at Waikane and Waiahole in Ko`olaupoko on Oahu, and one at Keka`a between Lahaina and kaanapali, and another at Kealakahakaha in Kahakuloa on Maui (Kamakau 1992: 429).

A second trail known as Alaloa or the "King's Trail" also traversed the north end of West Maui. According to Walker,

> Sections of it can be seen from Honolua to Honokahau and Kahakuloa. It is paved with beach rocks and has a width of four to six feet. Disregarding elevations and depressions it takes the shortest route between two points that is possible for foot travel (Walker 1931: 301).

For the most part, the current Kahekili Highway is believed to follow the old "King's Trail", with portions of its existence still evident just north of the `Ohai Trail project area [personal communication with Bob Hobdy, December 18, 2002].

Pu`u Koa`e (literally "tropical birdhill" Pukui *et al.* 1974: 199), located approximately four miles east of the present `Ohai Trail project area and Kahakuloa Bay, is a steep headland for which two legends are associated. The first legend pertains to the great Maui chief, Kahekili. Kahakuloa [village] was a place of great pride for Kahekili whose famed points of the game *lele-kawa*, or diving from a high promontory or cliff into a

sea or river, was at Pu`u Koa`e (Ashdown 1971: 38). Kahekili was known to jump 300-feet from the headland of Pu`u Koa`e into the sea to attain his breakfast. Former government maps called this point, "Kahekili's Leap" (In Sterling 1998: 58). Wind erosion and wave activities, however, have worn the *makai* side of Pu`u Koa`e to an almost vertical precipice as Mr. Ho`opi`i specifies.

RH: Yeah Kahikili–that's why they call it Kahikili`s Leap. And then the village over there is called Pu`u Koa`e because of that white bird that would circle. You know the big white seagull, the white ones–you know they circle around and look for the fish, then you know, ahh plenty *i`a*, and then they prepare the net.

CSH: I was reading some accounts, the cliff is all vertical, yeäh–I can't even imagine jumping off of it. I was driving out here and it was driving me crazy, I don't do so good with heights!

RH: But those days, the water was right up to the mountain. And then take years for erosion and stuff to cut the shoreline, so all the *pōhaku* go down, so now the thing is set back–how the heck you going run and dive off the thing! [laughing] His canoes and artifacts are buried in that cave–it's a big cave. On top there, there is a Catholic Church, and from the back mountain is a hole, a tunnel, right through there, and its buried and it's closed. And from here towards Waihe`e, there is another big cave, they call it Ka`apakai, Ka`apakai Cave. There's a big cave down that side where you can walk from the ocean come in here and come back to the village. So those were the areas that are related to Kahikili.

The second legend is associated with the invasion of Maui by chief Kalaniōpu`u of Hawai`i. By the last half of the 18th century on Maui, frequent battles between warring Hawai`i and Maui Chiefs had occurred, one which has reference to Pu`ukoa`e. As Kamakau describes:

> As he [Kalaniōpu`u] was sailing just off Kahakuloa, a certain man was sitting on the crest of Pu`ukoa`e, and as the war canoes came in sight the man made a gesture of contempt. The distance from the water's edge was some two hundred feet, but Ka-lani-`opu`u prayed to his god saying, "O Ku-ka`ili-moku, give me the life of that scoffer there!" and, putting stone to sling, he struck him on the back at the first shot, thus causing him to take a misstep and fall off the cliff to instant death (Kamakau 1992: 91).

Just southeast of Pu`ukoa`e is Pōhaku o Kāne, or "Kāne's rock", located on the east slope of Kahakuloa Valley. According to Stokes (1916), it is a large, naturally occurring rock at the back of, and overlooking a modern native house. The rock measures approximately 7-feet long and 6-feet wide and high. Nearby residents who named the stone also mentioned that worship was formerly conducted at Pōhaku o Kāne (In Sterling 1998: 58).

A second stone identified by local residents as the "Bell Stone" lies adjacent to Kahekili Highway, approximately halfway between the present `Ohai Trail project area and Kahakuloa Valley. Today, the "Bell Stone" is frequented by visitors who puzzle over the hollow sound that resonates when the very large boulder is struck. Testimony by Mr. Ho`opi`i revealed that the stone had been used in historic times as a repository for the umbilical chord, or *piko*, of Kahakuloa villagers.

CSH: Uncle, you know that Bell Stone up there–I have yet to see it–and I'll go look at it after this–what is that Bell Stone?

RH: It is a [inaudible] to the umbilical chord–the *piko*. Because the villagers here–oh, down from the *ali`i* line, the culture from Kamehameha, the *ali`i* line–the umbilical chord is the source, our *na`au*, deep down in the guts, they say, "get `em down in the guts, the guts feeling," which refers to that because that's where the breath of life is. From there [the umbilical chord] they get knowledge, reason and understanding. That [the umbilical chord] is put aside where the rats and the mongoose going to eat it–then you become a thief, they believe in that. That's is how they chose their *ali`i* and who to become warriors. But it goes down to the new generation of our *kūpuna*, they believe that if you–it's part of your body, it's to be put aside without anybody destroying it–whether an insect or a human being to destroy that. So that *pōhaku* was there–and they drilled a hole, you know how the old time drill, drill hole in it, and then they put the *piko*, the umbilical chord inside there, and then they put lead, they *pa`a* the lead inside there. So certain time, with a big rock like that, it should be strong and solid, but with all the holes and patching that they did, it become echoing. It became hallow, so when somebody go on the side and hit it, you can hear the sound coming through–so we used to call it the Bell Rock [laughing]. *Pōhaku Kani* actually, that is the name of it.

CSH: Is there a single individual associated with that stone?

RH: You know, I don't know that part of the history, but every time I pass there up until this day, there are several other rocks that are across, *makai* side, and they are big ones, and in different forms, and so again I look at history of the family line–like when God asked Moses to lead his people to the promise land, yeah, to Jordon, he couldn't cross, he had to have someone else to take `em across, and so when he was walking and the Lord saw him, it was time for him to go, which is to heaven in a sense, that's how you interpret it, and to never look back–never to look back. But he believed in God so much, he loved his people so much, he said, well let me take a look one more time at his people. And it is like the stone. The rock, the foundation, it is him. So, that's the history that I know, that is the *`i`o* that I have learned from my *kūpuna*, and so with nature it is almost the same thing–that somewhat, sometime, whether it was good or bad, it happened to the family–that's my interpretation–the big rock is the foundation, the father of all those rocks over there–mama must be across and all the *kamali`i* is all around. I always watch when the State or the County, they like bring the bulldozer. Get certain ones that can touch, and then certain ones that you cannot–that's what I believe in. And sometimes the belief becomes how you feel. You can feel the spirit, the body. Every time I go over there I talk to them, "eh *aloha*, *kūpuna*." you know–you talk to

yourself, only God knows. I only know that when the prisoners used to live here before, used to have the prison–

C. Kahakuloa Settlement Patterns and Land Commission Awards

The earliest written record of land use in Kahakuloa is provided in the Land Commission Award testimonies gathered during the *Māhele* of the mid-1800s. As a result of the *Māhele*, land tenure changed from traditional Hawaiian use rights to private land ownership. During the time of the *Māhele*, much of Kahakuloa was retained as Crown Lands by Kamehameha III. Additionally, there were 154 applications for quiet title to lands in Kahakuloa (Waihona `Āina, 2002), of which less than 74 were awarded. No *kuleana* lands were claimed within the corridor of the proposed `Ohai Trail. Habitation in Kahakuloa *ahupua`a* was almost entirely concentrated in the Kahakuloa Valley area (located well east of the `Ohai Trail project area), with a few scattered *mauka* settlements dispersed throughout.

According to Mr. Ho`opi`i, most of the villagers had settled inland because of the water resource. However, with time many of the villagers had moved downstream for better provisions. Mr. Ho`opi`i also mentioned the diversity of families that lived in Kahakuloa Village:

RH: In the village, prior to when I was born, they had about seven hundred and fifty-people. That was every walk of life–the children–most of the villagers were inland because of the water. The water came from the inland, so they would raise their taro patches–and then slowly they came down. There was some sectors–a few living down in this area, to the beach area, because then they would trade. Trade the fish for the taro and all the things they could grow. Eventually, it was easier to be down this section [*makai*], the provisions were better and they made way for the *`āwai* beaches to come down and stuff so they could still nurture–as you came towards the ocean the *`āina* was wider than inland. The inland after the storms and rains and the big waters, it became a danger part, in a sense. But they survived no matter what nature put on them–they survived.

CSH: And most of the families, or all the families, living during your time were Hawaiian– most of them?

RH: Hawaiian and Chinese–a lot of Chinese people. You know Chinese they came from everyplace, and they would dwell in anyplace. They were people of the soil themselves–they were farmers. And then the Filipinos came after. In my time, in my era, that's why the Lumlungs came. The Lumlungs, the Parks, and so many others that came–and they dwelt and were raised by the Hawaiian people. They learned to speak fluent Hawaiian and they had the Hawaiian traits in them–and one thing they brought from their country was the good cooking and how to survive with different recipes or things they would prepare. The Hawaiians, they would just get a pig and *kālua* that bugga and eat that–but Chinese they would prepare different dishes–how to prepare this part of the pork, or this, and this part of the pork–.

Three isolated *kuleana* lands were identified on a 1896 Public Land Map [RM 2409] in the vicinity of the proposed `Ohai Trail project area (Figure 5). Land Commission Award 06147-I, located approximately three miles southeast of the project area, and adjacent to Hononana Stream, indicated one house lot for *apana* one. A second LCA (LCA 06147-W) located west of the proposed `Ohai Trail at the mouth of Honanana Stream, was also awarded. Although it is unclear which *apana* was awarded, the claim included one house lot, a *loi* and a *kula*. The third LCA (LCA 06147-P), situated the closest to the `Ohai Trail project area, indicated one house lot in the *ahupua`a* of Ahoa and a *kalo* in the *`ili* of Maupo.

Subsequent to ranching in the area, Mr. Ho`opi`i suggested that the three lots may have been used as rest stops:

CSH: *What were these [LCAs] out here?*

RH: These actually was, you know the–during the time when they were raising cattle–these were ranch houses–they were rest areas.

CSH: Oh, rest areas for the ranchers.

RH: –for the cowboys. So that if they want to stay overnight they would just pack a bag instead of continuing on.

CSH: And this isolated [LCA] on over here for Oku`u–I read the LCA description and the *apana* one was describing a house over there but when I was reading the descriptions it didn't sound like this location.

RH: Oh.

CSH: So I was wondering–what is this? This one on the river makes sense, but this one in the middle–

RH: These used to be one of the ranch or cowboy houses. So this is the area where–there is a song about the legend–the mom and dad left the house, went to the mountains

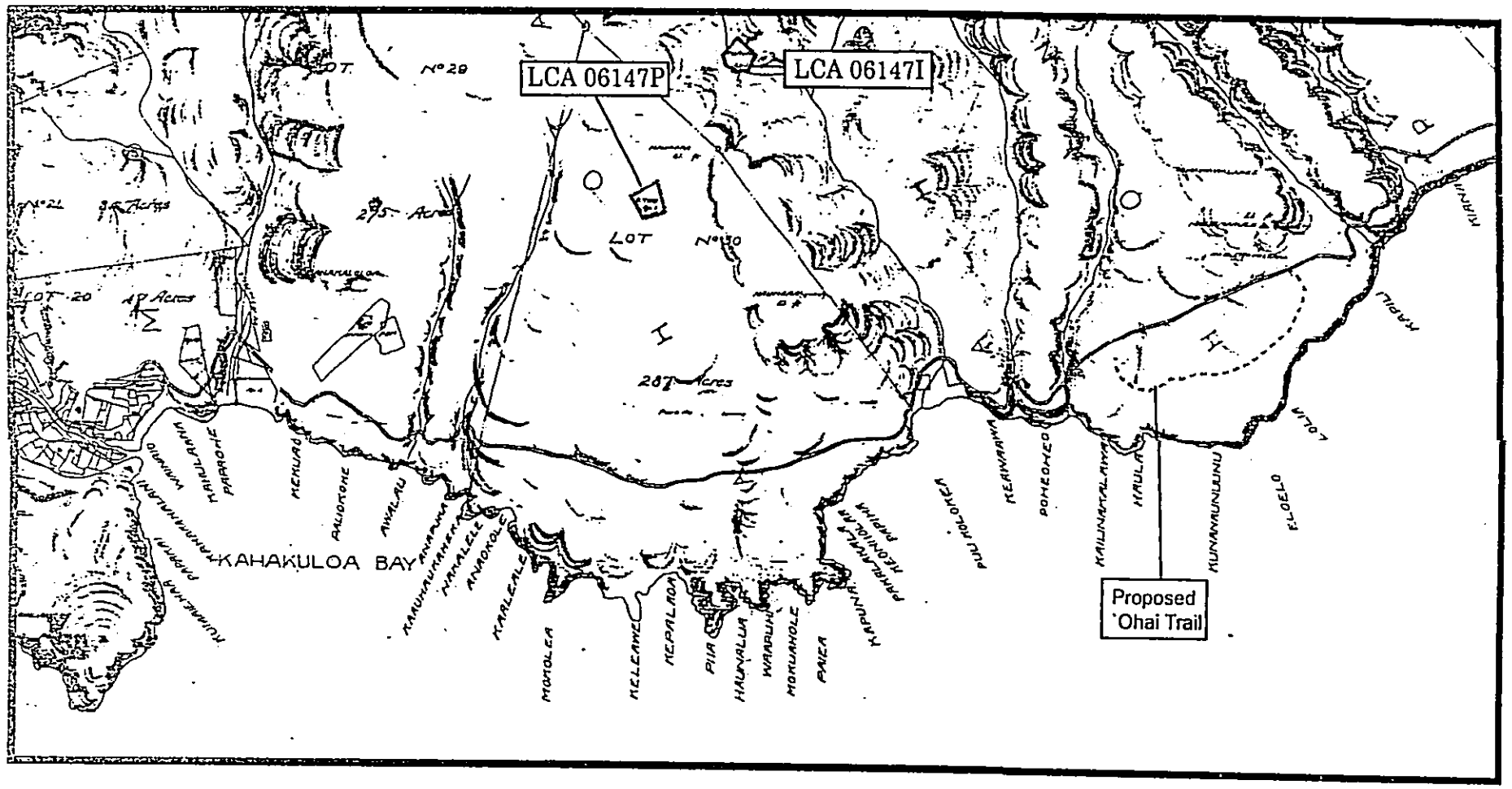


Figure 5 Portion of Public Lands Map No. 9, Kahakuloa Coast, Kahakuloa, Maui, 1896, Chas VEDove Surveyor. Showing Isolated LCAs near the `Ohai Trail Project Area.

> and left the baby there. The *ʻōpuhi* from the ocean came and took the baby–took him down in the cave, in the underneath the land, under the water in the inland. And he called on the *kūpeʻe*, the *ʻopihi*–so that they could restrain the baby. Sons of Hawaiʻi sings that song–*ʻōpae e ʻōpae hoʻi ua hele mai au*...[singing]–that's the place they are talking about.

An early historic map (1873) of the Kahakuloa coast, in the vicinity of the project area indicated no apparent activity or habitation in the project area (Figure 6). Although the terrain *mauka* was fairly bisected, and not suitable for farming with the exception of Kahakuloa Valley, the ocean was still an important resource in this area. The importance of this resource is illustrated by the multitude of place names along the coast of Kahakuloa indicated on an 1896 Public Land Map (refer to Figure 5).

D. Kahakuloa 1900s to Present

By the 1930s, Kahakuloa (more specifically within the valley and near the stream bed) had evolved into one of "the most genuinely native communities existing in the Hawaiian islands," entirely surrounded by grass houses (Handy 1940:106). According to Handy, the community consisted of no more than twenty families, all of whom were of Hawaiian descent and taro farmers. Over a dozen varieties of taro were said to have been growing in Kahakuloa, mostly used for private consumption; although Handy does mention one farmer who grew taro commercially.

In an early 1930s archaeological assessment for Maui Island, Winslow Walker (1931) notes the preservation condition of grass houses in Kahakuloa Valley. The following is a detailed description of one of the better preserved grass houses documented by Walker:

> The best preserved is one standing at the edge of a large taro patch on the west side of the stream and just a few rods south of the main trail through the village. It is thatched all over with Pili grass, but has a wooden capping to the ridge-pole and a wooden door with a door-knob. There is no vent over the door and no windows. Its dimensions are 10 x 14 ft. It was inhabited up to three years ago by Sam Kealoha, now in a sanitarium in Wailuku (Walker 1931: 75).

Walker continues on to describe the interior layout, and the various tools, implements and memoirs that adorn the house.

In 1952, Kahakuloa was designated as Territorial Pasture during a period of drought. A Territorial Prison Camp was also developed in the 1950s as a work project for low-security inmates in the vicinity of Honanana Gulch, located approximately two miles southeast of the proposed project area (Figure 7). Mr. Hoʻopiʻi indicated that the prison

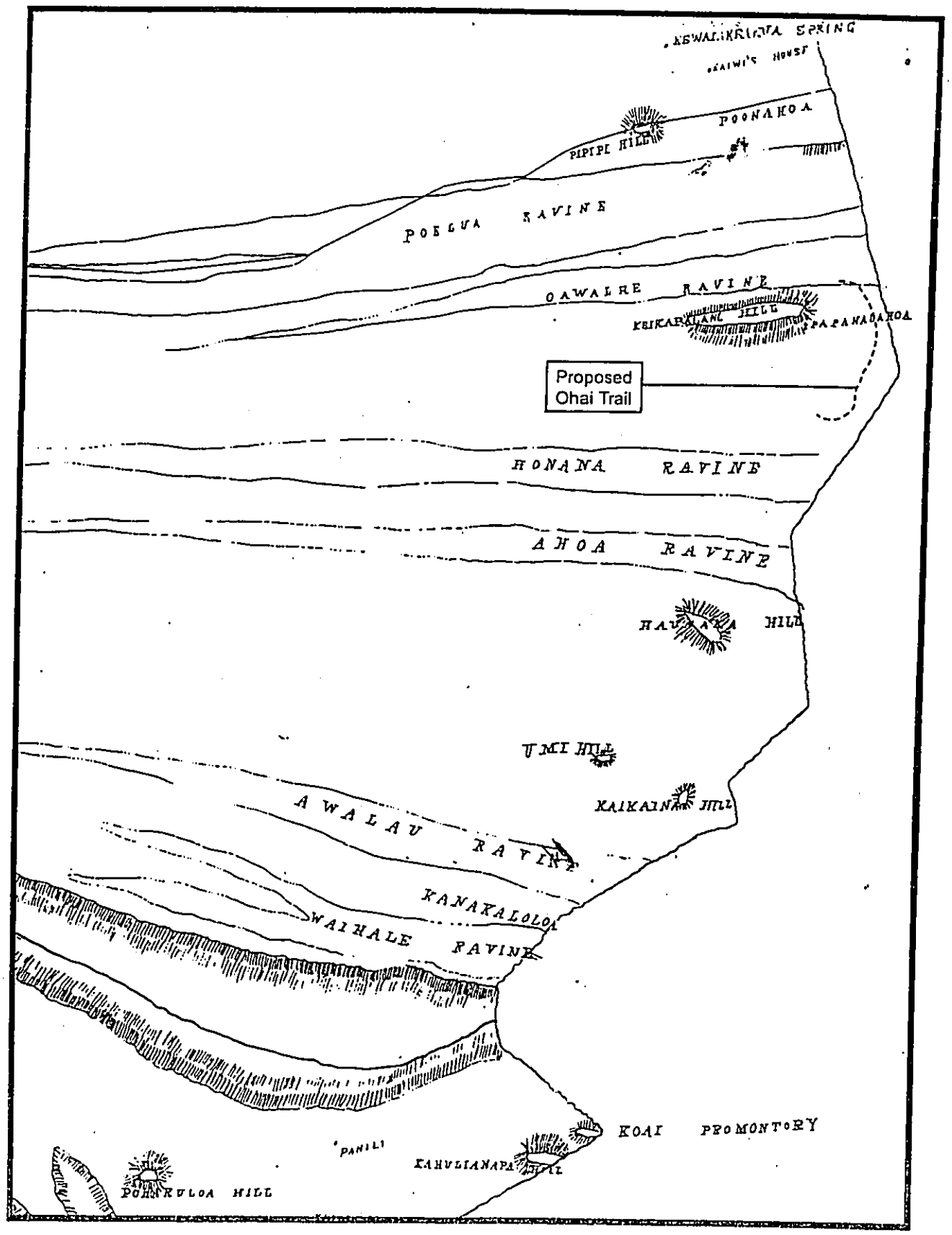


Figure 6 Portion of Map of Kahakuloa, West Maui, 1873, J.M. Alexander Surveyor.

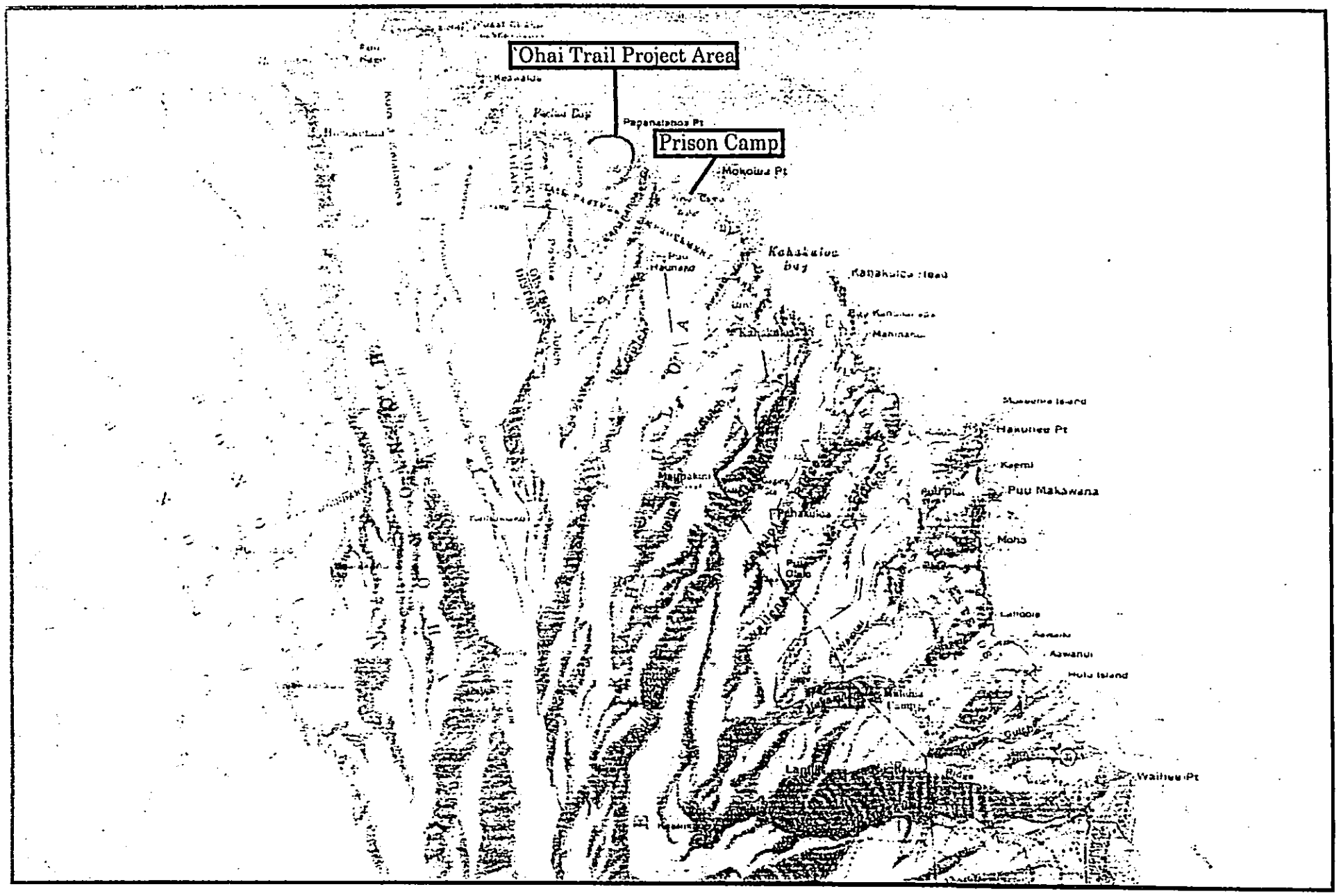


Figure 7 Portion of 1957 USGS Topographic Map of the Island of Maui, Maui County, Hawaii. Showing Location of Prison Camp near Honanana Gulch.

was opened as a work site for widening the highway, but also mentioned that many caves were covered during the construction process. The following is an excerpt from the interview conducted with Mr. Ho`opi`i, with a few of Mr. Ho`opi`i's recollections of the prison camp:

RH: The prison was opened as a work site for widening the road [Kahekili Highway]–right where had the site, it was a very very narrow place and only had blue rock along the whole bank, and that was the most challenging area that they had to ride in, so they had to widen the road. So they had to blow it up–and at the time we were still in school and we didn't know much about it and the *kūpuna* they not going say anything. There were so many grave sites up there that they covered–when they worked on the road. When they graded the place, they covered a lot. Below, underneath there were a lot of caves–they covered a lot of caves. I think in a sense, because no one really knew about them–it was too late to recover them, so cover it and *pau*, not going have a problem with it. So all the artifacts in there are safe. So, if you look at the bank you wouldn't even know. So in the long run there is some understanding that maybe it was meant to be. [Inaudible]. So that was the easiest way that they could make that road.

CSH: And when did the prison open–in the fifties?

RH: In the fifties–in '58 or '57.

CSH: About how many inmates lived over there?

RH: About sixty with all the guards. About sixty, I think. There were a lot of students who would go over there–but come to think about it, I think it was even earlier than that, could be about '55, I think. I remember after school we used to go over there–because they had movies over there, they had movies for the prisoners, they had a boxing ring, they had activities over there, so we used to go over there. And then we would invite them over here to play volleyball. And never have the water resources then, so they came pick up with the tanks, to come fill up water over here and then that time they would bring down all the guys to play volleyball over here. Before the school was over here and the court used to be over there. In those days it felt big because we were so small–now we grow up we think, wow, small place we used to have. Even the classrooms-we think how did we ever survive in there?

The majority of the structures associated with the prison were destroyed between Kahakuloa and Waihe`e [personal communication Bob Hobdy, December 18, 2002] during improvements to Kahekili Highway. There are no remaining structures attesting to the existence of the prison today.

In 1989, a large portion of the Kahakuloa *ahupua`a* became a part of the Kahakuloa Game Management Area. The majority of the cattle herds were removed in 1991 after nearly forty years of grazing. In October 1999, fifty-two *Sesbania tomentosa* (*`Ohai*) plants, officially listed as threatened and endangered (T&E) by the U.S. Fish and Wildlife Service, were discovered in the area. The find doubled the known population of the species along the north shore of West Maui. Since the discovery of the *`Ohai*, several other native plant species have been found.

A description of the Kahakuloa coast made by Inez Ashdown in the earl 1970s portrays the coast as being polluted by modern trash. Ashdown continues to say that Kahakuloa appears to be that of a "grave yard,"

> ...for useless automobiles and other such modern "trash." Tin cans, beer bottles, every sort of trash, litters roads and beaches, even into the forests, in the modern age. Gone is the perfume of the damp forest, and the air is full of dust, exhaust from planes, cars, diesel and gasoline motors, smoke-stacks and everything modern (Ashdown 1971: 40).

For the most part, all the cultural activities of Kahakuloa were centralized within Kahakuloa Valley, with the exception of the *kahakai* for gathering marine resources. Historic accounts of the area have indicated Kahakuloa as one of five population centers on the island of Maui, most favorable for its cultivation of wetland taro. Mr. Ho`opi`i recalls that there were over seven hundred and fifty-people living in Kahakuloa Valley prior to his birth in 1941. Today, Kahakuloa has declined in number to a mere one hundred and thirty-five people. Slowly, however, many of the grandchildren of the original Kahakuloa families are returning to the village. The Kahakuloa area had been isolated for many years, but a few modern homes are being constructed on the outskirts of Kahakuloa Valley along the *mauka* regions.

E. Place Names of Kahakuloa

Place names and *wahi pana* ("legendary place" Pukui and Elbert, 1968: 376) are an integral part of Hawaiian culture. "In Hawaiian culture, if a particular spot is given a name, it is because an event occurred there which has meaning for the people of that time (Mc Guire, 2000: 17)." The *wahi pana* were then passed on through language and the oral tradition, thus preserving the unique significance of the place. Hawaiians named many objects, places, and points of interest which may have gone unnoticed by persons of different cultural backgrounds.

> Hawaiians named taro patches, rocks and trees that represented deities and ancestors, sites of houses and *heiau* (places of worship), canoe landings, fishing stations in the sea, resting places in the forests, and the tiniest spots where miraculous or interesting events are believed to have taken place (Pukui, Elbert & Mookini 1974:x).

The following is a list of place names for Kahakuloa mentioned in this report. This list is by no means considered to be complete. Place names were gathered from traditional literature (*mo`olelo*, chants), historical sources, maps and the *Māhele* records. Almost all the *`ili* names were taken from Land Commission Award records. Unfortunately, many the place names of Kahakuloa have been lost over time.

Place Names of Hawai`i (Pukui *et al.*, 1974) was used as the primary source for all place name translations. Where there were no known translations, a literal translation of the place name was made using the *Hawaiian Dictionary* (Pukui and Elbert, 1986). The intent of the author is to merely present the available information and let the reader come to his/her own conclusions.

An attempt was made to include the proper diacritical marks for all known and generally accepted translations of place names. Making incorrect assumptions about the pronunciation and where to place the diacritical marks in a name can entirely change the meaning of a name (e.g. *pū`ā`ā*: "scattered; to flee in disorder and fright"; *pua`a*: "pig, pork"). Therefore, in cases where the pronunciation of a name was uncertain, diacritical marks were not used, and no attempt was made to translate the name. In some cases, cultural relationships were made based on the literal translation of the root word.

One of the more intriguing aspects of the Hawaiian language is the dualism in names – the literal meaning and the *kaona* or hidden meaning. It should be remembered that the true significance of a place name lies only with the people who use them and know their history.

The following abbreviations are used throughout the Place Names section for ease and efficiency. Please refer to the References section for complete citations.

LCA = Land Commission Award
PE = *Hawaiian Dictionary* by Pukui and Elbert, 1986
PEM = *Place Names of Hawai`i* by Pukui, Elbert and Mookini, 1974

Place Names of Kahakuloa

Ahoanui	
Alapapa	A gulch in Kahakuloa. *Lit.* level path or paved pathway (PEM: 10).
`Awalau	A gulch in Kahakuloa.. *Lit.* young kava plant or many branches (PEM: 15).
Haunaka	
Hoaiki	
Honokōhau	Land division, village, stream, falls, ditch, tunnel, bay, and hill (305 feet high), Honolua qd., West Maui. *Lit.* bay drawing dew (PEM: 49).
Hononana	A bay near Honolua Bay. *Lit.* animated bay (PEM: 50).
Kahakuloa	A land division, quadrangle, point, stream, bay, village, and homesteads. *Lit.* the tall lord (PEM: 62). Name taken from a small and reputedly very fertile taro patch located on the southeast side of the valley bottom. The taro patch was the property of the chief of the valley, who was known as the 'far away master' (*ka haku loa*). The taro patch, which was located beside his home, also served as a place of refuge (*pu`uhonua*) for the western end of Maui (Handy 1940: 106).

Kaikaina	A hill in Kahakuloa. Pronunciation and meaning uncertain (PEM: 68).
Kanehalaoa	
Kapaloa	
Kealakahakaha	
Kekapalani	
Kuakini	
Kukuipuka	
Mahinanui	An islet in Kahakuloa. *Lit.* large moon or large plantation (PEM: 138).
Makaliua	
Makaliua 2	
Mauakini	
Moomuku	
Owaluhi	A gulch in Kahakuloa (PEM: 172).
Papanahoa	A gulch in Kahakuloa. *Lit.* defiant flats.
Papanalahoa	A point at Kahakuloa (PEM: 180).
Po`elua	A gulch and bay in Kahakuloa (Pronunciation and meaning not certain: *po`e-lua* means `*lua* -fighting people', and *pō`elua* means 'two nights') [PEM: 185].
Pōhakuloa	A land section in Kahakuloa. *Lit.* long stone (PEM: 186).
Pu`u Koa`e	Name of a hill in Kahakuloa. *Lit.*, tropicbird hill (PEM: 199). Bluff at which Kahekili was known to jump into the sea for his morning swim (Sterling 1998: 58). Also associated with a legendary attempt by Kalaniōpu`u to overtake Maui (Sterling 1998: 58).
Pu`u o Ka Inaina	
Pu`u `ōla`i	A hill in Kahakuloa. *Lit.* earthquake hill (PEM: 204).
Pu`u `ōlelo	A hill in Kahakuloa. *Lit.* speaking hill (PEM: 204).

Pu`u Hāunakō	A hill in Kahakuloa (PEM: 196).
Puu Kāhuli`anapa	A hill in Kahakuloa. *Lit.* overturned hill [that] shines (PEM: 197).
Waihali	A gulch in Kahakuloa. *Lit.* fetch water (PEM: 221).
Waiholi	
Wailena	A gulch in Kahakuloa. *Lit.* yellow water (PEM: 224).
Waiokila	
Waiokila 2	
Waipili	A gulch in Kahakuloa. *Lit.* touching water (PEM: 227).
`Umi	Land division in Kahakuloa, probably named for sixteenth-century chief of Hawai`i. *Lit.* to strangle (PEM: 215).

IV. PREVIOUS ARCHAEOLOGICAL RESEARCH

Few archaeological studies have been conducted in the Kahakuloa area. The majority are concentrated around Kahakuloa Valley and Kahakuloa Stream, located well to the east of the proposed `Ohai Trail project area. The earliest archaeological study of Kahakuloa was completed by Winslow Walker (1931) in the early 1930s, in his Maui island archaeological inventory survey. Walker noted six *heiau* in Kahakuloa, all of which he described as poorly preserved and many of which had been destroyed by cane-field cultivation. Based on Walker's location descriptions, it appears that no *heiau* exists within two miles of the `Ohai Trail project area.

In addition to *heiau*, Walker also noted two extensive burial grounds within the *ahupua`a* of Kahakuloa. The first burial ground Walker documented is near Honanana Gulch, located approximately one and one-half of a miles east of the `Ohai Trail project area. Two caves, containing a multitude of remains and artifact fragments, were recorded. Walker further indicated that both caves appeared to have been used into fairly recent (1930) times. A second burial ground at Kahakuloa Gulch, located approximately four miles east of the `Ohai Trail project area, was also identified. According to Walker, there was little opportunity to investigate burial caves at Kahakuloa Gulch, because of the continued activities occurring there at that time (1930s). One cave, located within Kahakuloa Gulch, was cited by Walker as having two board coffins, one resting on top of the other. "Each coffin contained the remains of a man and woman, and the lower pair may very likely have been the parents of the upper pair" (Walker 1931: 295). Historic artifacts, including bottles, nails, and a single pipe, were also found within the cave, suggesting that the burials were not pre-contact in age.

Two recent archaeological investigations (Major *et al.* 1996 and Kolb 1991) have centered around the confirmation of Walker's Site 27. Other studies (Yent 1982, Yent and Ota 1982, Estioko-Griffin 1998, Major *et al.* 1996, and McGerty 2001) have occurred within a two-mile radius of Kahakuloa Valley and Bay, the majority of which are situated within the Kahakuloa Homestead area. Several terraces, enclosures, ditches, and rock mounds have been recorded within or near the valley area (Yent 1982, Yent and Ota 1982, Estioko-Griffin 1998, Major *et al.* 1996, and McGerty 2001).

A single inadvertent burial was documented in a cave near Camp Maluhia, south of Makamaka`ole and seven miles southeast of the `Ohai Trail project area. The remains consisted of a single cranium of a Polynesian adult male (Douglas 1991: 1).

This study failed to find any archaeological studies conducted directly within the `Ohai Trail project area. Table 2 (Figure 8), however, provides an account of previous archaeological studies conducted in the *ahupua`a* of Kahakuloa and indicates the source, the State Site Numbers (if applicable), the location of the study, the type of study conducted, and a brief summary of the author's findings.

Table 2. Previous Archaeological Studies Conducted In Kahakuloa

Source	State Site No.	Location	Nature of Study	Find
Walker (1931)	**Site 21*	Honanana Gulch near the shore	Archaeological Inventory Survey	Heiau at Honanana. A walled *heiau* of pentagonal shape 150 feet long and 85 feet at the widest part. It is now used as a cattle pen but the ancient walls remain for most of the periphery. The walls are 6 feet thick and 8 high, and indications of terraces and platforms can still be made out in the interior. [Walker 1931: 124]
Walker (1931)	**Site 22*	West side of Kahakuloa Valley, *mauka* of school	Archaeological Inventory Survey	Kaneole Heiau. A good sized *heiau* with a right-angle outline. It measures 73 ft. on the west, 44 ft. on the N.W., 76 ft. on the north, 31 ft. on the east, then a break and a corner resuming for 32 ft. more on the east, 53 ft. on the south. The only interior structure that could be made out was a group of rock piles which the natives said were graves of their immediate ancestors. At the west and north corners the walls slope upwards to a height of 20 ft. The south wall is 6 ft. wide. [Walker 1931: 125]
Walker (1931)	**Site 23*	*Mauka* from Kahakuloa village, half a mile, on east side of stream	Archaeological Inventory Survey	Kuewa Heiau. A series of rambling stone walls and platforms which have been altered by property lines until it is impossible to make out the original *heiau* outline. The site is on the property of Naone, adjoining that of the father of the informant, H. Hoewaa. Near it is a trail leading up the cliff to the *heiau* of Pakao. Heaps of stone seen at Kuewa were graves, according to informant. [Walker 1931: 126]
Walker (1931)	**Site 24*	East side of Kahakuloa Stream just south of trail	Archaeological Inventory Survey	Keahialoa(?) Heiau. The old *heiau* site forms the foundation of Mrs. Kauhaahaa's house. Just back of the house is a large rock known as Pohaku-o-Kane, but its connection to the *heiau* could not be determined. [Walker 1931: 127]
Walker (1930)	**Site 25*	On top of ridge at east side of Kahakuloa Valley at edge of pineapple field	Archaeological Inventory Survey	Pakao Heiau. All that is left of this *heiau* is an indefinable pile of rock. But the site was not large. [Walker 1931: 128]

Source	State Site No.	Location	Nature of Study	Find
Walker (1930)	*Site 26 50-50-06-1466	Mouth of Makamaka`ole Gulch, 50 yards from the shore	Archaeological Inventory Survey	Waipiliamoo Heiau. Site largely destroyed and heavily overgrown with lantana. A lauhala tree stands nearby. An old village known as [Laho`ole] stood here and remnants of taro patches and platforms can be seen faintly [This has since been recorded as Site 50-50-06-1466]. The few burial caves seen had been rifled. A shelter for fishermen stand on the shore. It is built of stones and roofed with driftwood and is still used occasionally. [Walker 1931:129]
Walker (1930)	*Site 27		Archaeological Inventory Survey	Kukuipuka Heiau. A *heiau* and place of refuge for W. Maui. It stands on a high hill overlooking the road and has been largely destroyed by the pineapple field. [Walker 1931: 130]
Yent (1982)	50-50-02-1502	Lower Kahakuloa Valley	Reconnaissance Survey	A series of *lo`i* terraces were found during an archeological field inspection of a state owned parcel. In addition to the terraces, a 1-meter high stacked basalt wall was found. The author comments that the wall system may represent a former *kuleana* boundary. More archaeological testing was recommended to determine the age of the *lo`i*.
Yent (1982)		Kahakuloa Stream (near the bay)	Reconnaissance Survey	A historic ditch was documented along the western edge of Kahakuloa stream. Based on oral accounts, the ditch was probably built in the late 1800s or early 1900s.
Yent and Ota (1983)		Kahakuloa Forest Reserve	Reconnaissance Survey	No sites were located. The authors did note, however, that heavy vegetation may have substantially decreased visibility. The ridgetops were noted to have been previously disturbed, and the area appeared to have had *`ōhia* forest before cattle grazing in the 1950s.
Estioko-Griffin (1988)		Lower Kahakuloa Valley	Reconnaissance Survey	A short pipeline easement was surveyed, and the only nearby historical site noted was the Kahakuloa Congregational Church.
Douglas 1991	50-50-02-1466	Camp Maluhia, Wailana	Inadvertent Burial	The cranium of a single individual was found in a cave near Camp Maluhia, Wailana, Maui. Roots and sand were noted within the cranium, suggesting that the original provenience of the cranium was not a cave site. It was determined that the remains originated from a male individual 50-55 years old of Polynesian ancestry.
Walker 1931 in Sterling 1998		The mouth of Makamaka`ole Gulch	Archaeological Inventory Survey	At the mouth of Makamaka`ole Gulch lies the remnants of an old village know as Laho`ole (Site 50-50-06-1466). Taro patches, platforms, burial caves and a heiau, known as Waipiliamo`o, make up the village complex.

Source	State Site No.	Location	Nature of Study	Find
Major *et. al.* (1996)	50-50-02-4110	South of Makamaka`ole Stream	Archaeological Inventory Survey	A square-shaped partial enclosure composed of basalt stones was documented. The form and size of the enclosure suggest that is an abandoned, deteriorated pen associated with cattle ranching. Site is near Walker Site 27.
Major *et. al* 1996	50-50-02-4111	South of North Waiōla`i Gulch	Archaeological Inventory Survey	A rectangular stacked stone terrace facing with rock and soil fill was documented.
Major *et. al* 1996	50-50-02-4112	South of Makamaka`ole Stream	Archaeological Inventory Survey	Three rock mounds were documented near Walker Site 27. Basalt cobbles and boulders of all sizes were incorporated into the mounds, and scars from a backhoe or bulldozer were documented on many of the boulders. According to the authors, all archaeological evidence suggests that the mounds are a by-product of mechanized agricultural clearing in the twentieth century.
Major *et. al* 1996	50-50-02-4113	North Waiōla`i Gulch	Archaeological Inventory Survey	Four surface features including two small terraces, an enclosure alignment, and a drainage channel were documented.
Major *et. al* 1996	50-50-02-4114	Makamaka`ole catchment to Pu`u Ōla`i in Makalina or Wailena Gulch.	Archaeological Inventory Survey	An *`auwai* drawing water from the Makamaka`ole catchment, and ending near Pu`u Ōla`i in Makalina or Wailena Gulch was recorded. The site was interpreted as a historic irrigation ditch for ridge top fields, suggestive of commercial agriculture.
Major *et. al* 1996	50-50-02-4115	South Waiōla`i Gulch	Archaeological Inventory Survey	Three terraces built directly across and adjacent to the streambed were recorded.
Major *et. al* (1996)	50-50-02-4116	South Waiōla`i Gulch	Archaeological Inventory Survey	Three features, all terraces constructed in the middle of two channels of the stream gulch were recorded.
Major *et. al* (1996)	50-50-02-4117	Waiokila Gulch	Archaeological Inventory Survey	A roughly constructed boulder wall, extending up the Wailuku side of the stream drainage, was documented. The exact purpose of this wall is unknown.
Major *et. al* (1996)	50-50-03-2929	Camp Maluhia	Archaeological Inventory Survey	Remnant of an old Government Road that used to circumscribe Maui earlier in the nineteenth century was cited. The only visible remains of the site are rutted dirt tracks 2.0 to 3.0 meters in length.
Major and Klieger (1996)	50-50-02-27 **Walker Site 27*	Waiōla`i Gulch	Archaeological Inventory Survey	Twenty-one surface features were recorded at ten archaeological sites. Subsurface testing occurred in six of the archaeological sites, which uncovered evidence of pre- and post-Contact use of the project area. The sites were concluded to be used for agriculture, ranching, and habitation.

Source	State Site No.	Location	Nature of Study	Find
McGerty and Spear (2001)	50-50-02-5069	Between the Kalaoa Gulch and the Kahekili Highway	Archaeological Inventory Survey	Remnants of a terrace feature were identified within the project area. No further archaeological work was recommended.

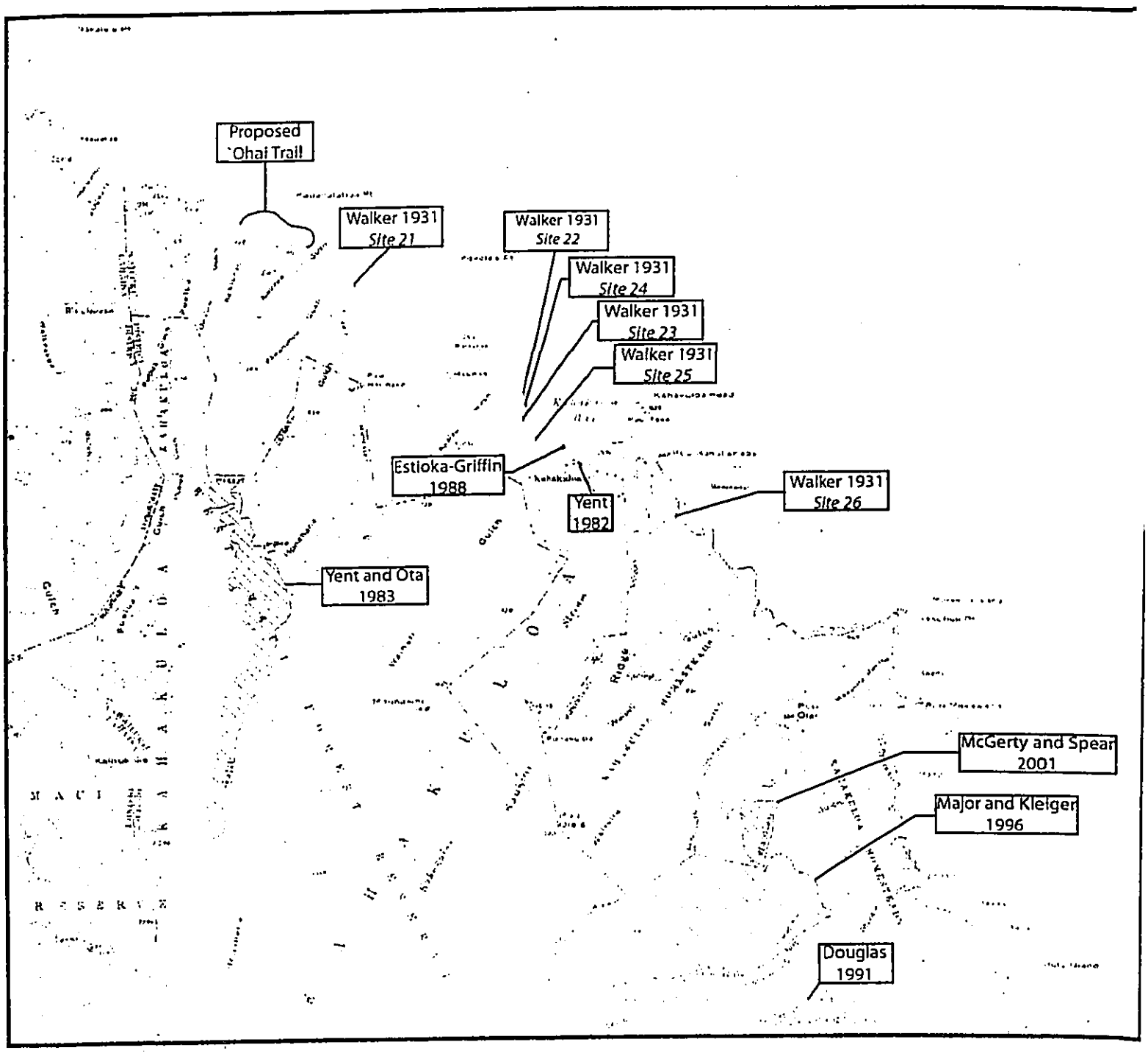


Figure 8 USGS 7.5 Minute Map, Portions of Kahakuloa, Honolua, and Wailuku Quadrangles, Showing Previous Archaeological Studies in the Vicinity of the Proposed `Ohai Trail.

V. CULTURAL RESOURCES/TRADITIONAL PRACTICES

A. Native Gathering Practices for Marine Resources

The coast of Kahakuloa has been known for abundant marine resources in both traditional and modern times. *Kama`āina* frequent the area to fish for *akule, ulua, uhu, enenue,* and *mū*–and very rarely, when the water is calm, *`opihi* and *pūpū* picking is possible. The following are excerpts taken from an interview conducted with Mr. and Mrs. Tsuha, who spear for reef fish off the coast of Kahakuloa:

CSH: Can I ask what kind fish you guys go dive for over there?

KT: Oh–*uhu, enenue, mu* there's *mu* there–uhh.

MT: Pretty much all reef fish is there.

KT: Yeah, mostly reef fish. But I haven't gone beyond.

MT: Get *ulua*–

KT: Yeah, there's *ulua* but I haven't–. We mostly go for the reef stuff. And *pūpū* there's *pūpū* there too, what you call the *pūpū* English? *Pūpū.* (laughing) The stuff that we find.

CSH: Like what we find on Kaho`olawe? I think it is *Thaididae* the spiny like–

KT: Yeah, *aperta* or something like that–. I could be lying but– *pūpū* (laughing.)

CSH: I know which one you talking about.

KT: Yeah the white *pūpū.*

CL: The drupe shell.

KT: Yeah, it's like a drupe–yeah, there's a lot of that–and *`opihi,* but we never gathered *`opihi*–. We weren't *`opihi* gatherers. I'm sure others are.

Mr. And Mrs. Tsuha had also indicated during the interview that although fishing near the proposed `Ohai Trail project area is fruitful, ocean conditions off the coast of the project area can be hazardous at times:

MT: I go–I pick *`opihi* over there–like you say, you gotta go on a nice day.

KT: You got go on nice day, you can't go on a very bad day–or you can't go on a normal day–like today is not a good day [overcast and drizzling]–kind of like a rainy day, you wouldn't go out there. That's like to–everybody knows you die, it's an ocean that eats people. That whole area, that whole Kahakuloa area all the way up beyond Nakalele all the way up to Honokahua...oh Honokohau.

Access to the shore near the `Ohai Trail project area is made via Alapapa Gulch, Kahakuloa Bay, or by way of nearby switchback trails. The switchback trails are generally very steep, and are utilized by both *kama`āina* and tourist. Several shoreline access points exist near the project area, however, these points of access will not be affected by the development of the trail corridor. Therefore, public access to the coast to gather marine resources will not be restricted.

B. Native Gathering Practices for Plant Resources

A community of *`Ohai* (*Sesbania tomentosa*) exists *makai* of the proposed `Ohai Trail project area and is the only endangered species in the vicinity. *`Ohai* is a low growing shrub with white or silvery leaves that is covered with silky wool-like hairs. The *`Ohai* flowers are generally an inch tall, and range in color from salmon to red, and rarely yellow (Krauss 1993: 258).

Many of the *`Ohai* shrubs in the vicinity of the project area are overgrown, and Mr. Ho`opi`i indicated that weather conditions in the area make it difficult for the *`Ohai* flowers to grow to full maturity:

CSH: Get plenty *`Ohai Ali`i* over there?

RH: Not really–well, even if it does, the wind, now–before it was more calm, there was more growth of the forestry that would block the wind coming from the ocean and stuff, and the erosion from the ocean–so the wind catches–once they grow, you have to nurture it, but the wind just knock `em off, so all the young shoots cannot come.

CSH: Oh, all the *keiki* have hard time come up?

RH: They come up, but they have a hard time coming to maturity. They are pretty, though. But as far as–within the project area–I was so glad when they proposed, you know us we so *nīele*–

Although *`Ohai* is known to exist near the project area, no trees were observed in the immediate trail corridor during the botanical survey. *Kama`āina* have indicated that access to the *`Ohai* shrub is very difficult, and there appears to be no indication of any ongoing gathering of *`Ohai* flowers. Based on both the botanical survey, as well as informant testimony, it is believed that there will be no adverse effects to the *`Ohai* shrub, or public access to gather flowers.

C. Native Hunting Practices

There is no direct evidence or documentation of any former or on-going native hunting practices specifically associated with the `Ohai Trail project area.

D. Trails

None of the historic maps of the Kahakuloa area that were examined during the course of the assessment indicated any route through the `Ohai Trail project area identifiable as a traditional Hawaiian trail. The only route indicated on a ca. 1896 survey map of Kahakuloa Coast is the Government Road, located adjacent to the *mauka* side of the `Ohai Trail corridor. However, there has been written documentation of two known traditional Hawaiian trails located some distance from the `Ohai Trail project area, and these are discussed below. Note however, that neither of the two trails traverse through the project area.

In traditional times, Kīhāpi`ilani, *ali`i nui* of Maui, paved a trail with rocks and straightened the roads of both Maui and Molokai. This paved trail, according to Walker (1931) can be seen from Honolua to Honokohau to Kahakuloa. The trail is paved with beach rocks and is four to six feet in width. Disregarding elevation and depressions, Walker indicates that it is the shortest route between two points that is possible for foot travel. Residents refer to the trail as, "The King's Trail" or Alaloa, which is believed to follow the current Kahekili Highway. Remnants of the trail are still evident throughout Maui, and in fact, remnants of the trail can be seen just north of the project area [personal communication with Bob Hobdy December 18, 2003].

A second trail associated with the demigod Maui, who constructed a zigzag like pathway in order to elude capture by enemies nearly twenty centuries ago. According to Kamakau:

> The roads in his [Maui] day were straight and the people were accustomed to running along straight roads; so when a certain persons ran after Maui to kill him he made the road to zigzag and it was called "the zigzag road of Maui" (Kamakau 1961: 429).

E. Burials

This study did not identify any indication of possible burials within the `Ohai Trail project area. Winslow Walker documented two extensive burial grounds in the Kahakuloa area: Honanana Gulch and Kahakuloa Gulch, both located a mile to two miles east of the proposed `Ohai Trail project area. Although these two gulches appear to be the only burial grounds formally documented, Walker does note that scattered graves could be found along the smaller gulches. Alapapa Gulch, located less than a quarter mile east of the `Ohai Trail project area, is perhaps the only potential area for burials close to the project area, but to date no burials have been documented in Alapapa Gulch. Given the location and rocky terrain of the project area, the possibility of inadvertent burials is unlikely.

Mr. Ho`opi`i indicated that he had no knowledge of burials in the immediate vicinity of the proposed `Ohai Trail project, and that all the burials he was aware of were all located in caves in Kahakuloa Village.

F. Cultural Properties

No cultural properties have been noted in the vicinity of the `Ohai Trail project area. A field inspection of the area, as well as consultations with Kahakuloa residents, State archaeologists, and review of historic maps indicated no archaeological sites or cultural properties near the project area.

VI. SUMMARY AND RECOMMENDATIONS

A. Summary

A cultural impact assessment was conducted for the proposed `Ohai Trail in the *ahupua`a* of Kahakuloa. Historic research of the project area was carried out to identify any cultural resources or traditional practices associated with the area encompassing the proposed trail corridor and surrounding vicinity. An attempt was made to contact present and former residents of Kahakuloa, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in the vicinity of the `Ohai Trail project area.

Three individuals were identified and interviewed, Mr. Richard Ho`opi`i, Mr. Mark Tsuha, and Mrs. Kalei Tsuha. Mr. Richard Ho`opi`i was born and raised in Kahakuloa Valley and continues to be an integral part of the Kahakuloa community. He is the current pastor of the Kahakuloa Hawaiian Congregational Protestant Church, a renowned Hawaiian falsetto singer, and an employee for the County of Maui, Parks and Recreation. Mr. Mark Tsuha and Mrs. Kalei Tsuha are husband and wife and currently live in Kahakuloa Village. Mr. Mark Tsuha was born on Kaua`i and moved to Kahakuloa during his freshmen year in high school. His knowledge of the Kahakuloa area comes from his stepmother, of the Kauha`aha`a family, who was born and raised in Kahakuloa Village. Mr. Tsuha works for the County of Maui and continues to utilize the marine and terrestrial resources in and around Kahakuloa. Mrs. Kalei Tsuha grew up learning the family tradition of fishing and recalls that her fishing grounds as a child extended along the coastline from Lahaina to Kahakuloa. Mrs. Tsua currently works for the Kaho`olawe Island Reserve Commission as the Culture and Education Program Coordinator. In addition to the three formal interviews conducted, other community members shared valuable information regarding traditional land use, attitudes and practices associated with the `Ohai Trail project area.

Historic research of the Kahakuloa area indicated that Kahakuloa was one of five population centers on the island of Maui, most noted for the cultivation of wet land taro. At the time of the *Māhele*, there were 154 applications for quiet title to land in Kahakuloa, of which only 75 were awarded. The majority of the *kuleana* lands were awarded in Kahakuloa Valley, located three miles east of the proposed Ohai Trail project area. Three isolated *kuleana* LCA were identified west of the proposed `Ohai trail, which may have been used as rest stops during the cattle ranching era.

Previous archaeological studies in Kahakuloa are dispersed in and around Kahakuloa Valley, as well as isolated areas along Kahakuloa coast. However, there are no documented archaeological sites identified in the immediate vicinity of the `Ohai Trail project area. Two burial grounds have been documented at Kahakulo Gulch and Honanana Gulch, but no burials have been identified in or near the `Ohai Trail corridor. Given the rocky terrain of the project area and its isolated location, the possibility of inadvertent burials is unlikely.

One traditional cultural practice was identified in the vicinity of the project area. Fishing is a tradition to the local residents of Kahakuloa, and *kama`āina* are known to frequent the area to fish for *uhu, enenue, mū, ulua, akule,* and occasionally when conditions are right, *`opihi* and *pūpū* picking is possible. Access to the shoreline off the proposed `Ohai Trail project area is accomplished by way of Alapapa Gulch, Kahakuloa Bay or via switchback trails located off the *makai* shoulder of Kahekili Highway. Based on consultations with residents and fishermen in the area, construction of the trail will not restrict public access to gather marine resources.

A community of *`Ohai* (*Sesbania tomentosa*) is present *makai* of the `Ohai Trail project area, although there is no indication of any ongoing gathering of the *`Ohai* flower. The *`Ohai* shrub is very rare and *kama`āina* have mentioned that poor weather conditions make it difficult for the flowers to grow to full maturity, and that *`ohai* picking for lei making is very rare.

There also appears to be no continued or ongoing hunting practices noted in the vicinity of the `Ohai Trail project area. Furthermore, no traditional Hawaiian trails were identified as traversing the proposed trail corridor and no cultural properties have been documented or identified in the immediate vicinity of the project area.

The `Ohai Trail project will have minimal impact upon native Hawaiian cultural resources, beliefs and practices, provided that public access to the shoreline in the surrounding areas are maintained. The only ongoing cultural practice identified during the course of the assessment was marine resource gathering. Access to areas in the vicinity of the project area, however, are typically made by way of Alapapa Gulch, Kahakuloa Bay, or switchback trails off the *makai* side of Kahekili Highway.

B. Recommendations

Although no specific cultural concerns were identified during the course of the cultural impact assessment, the following recommendation is made in the event that inadvertent burials are encountered during construction for the `Ohai Trail corridor. State law (Chapter 6E, Hawai`i Revised Statutes) requires the following:

1. Stop all disturbing activity in the immediate area.
2. Leave all remains in place.
3. Immediately notify the State Department of Land and Natural Resources-Historic Preservation Division (DLNR/SHPD) and the county police department.

VII. REFERENCES

Armitage, George T. and Henry P. Judd
1944 *Ghost Dog and Other Hawaiian Legends*, Illustrated by Juliette May Fraser, Edited by Helen Lamar Berkey, Advertiser Publishing Comp. Honolulu, HI.

Ashdown, Inez
1971 *Ke Ala o Maui*: The Broad Highway of Maui, Ace Printing Co, Wailuku, Maui, HI.

Coulter, John Wesley
1935 *A Gazetteer of the Territory of Hawai`i.* University of Hawai`i, Honolulu, HI.

Douglas, Michele T.
1991 *Report on a Single Cranium Recovered at Camp Maluhia, Wailana, Maui.*

Estioko-Griffin, Agnes
1988 *Field inspection of a proposed drainage project by DLNR, Kahakuloa, Wailuku, Maui.*

Foote, Donald E., E.L. Hill, S. Nakamura and F. Stephens
1972 *Soil Survey of the Islands of Kaua`i, O`ahu, Maui, Moloka`i and Lana`i, State of Hawaii*, U.S. Dept. of Agriculture, U.S. Government Printing Office, Washington, D.C.

Handy, E.S. Craighill
1940 *The Hawaiian Planter, Volume 1*, Bishop Museum Bulletin No. 161, B.P. Bishop Museum, Honolulu, HI.

Handy, E.S. Craighill and Elizabeth G. Handy
1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*, B.P. Bishop Museum Bulletin 233, B.P. Bishop Museum, Honolulu, HI.

Hawaii State Legislature
2000 *Act 50.* (26 April 2000) Regular Session, HB 2895.

Kamakau, Samuel Manaiakalani
1992 *Ruling Chiefs of Hawaii, Revised Edition*, The Kamehameha Schools Press, Honolulu, HI.

Krauss, Beatrice H.
1993 *Plants in Hawaiian Culture*, University of Hawaii Press, Honolulu, HI.

Major, Maurice and P. Christiaan Klieger
1996 *Ridgetops and Gulch Bottoms, An Archaeological Inventory Survey of Waiōla`i and Waiokila Catchments, Kahakuloa, West Maui, Hawai`i, TMK 3-1-01:03,* with contributions by Stephan Clark, and Susan Lebo, Anthropology Department, Bishop Museum, Honolulu, HI.

McGerty, Leann and Robert L. Spear
2001 *An Archaeological Inventory Survey of a 14 Acre Parcel in Kahakuloa Ahupua`a, Wailuku District, Island of Maui, (TMK:3-1-01:62)*, SCSI, Honolulu, HI.

McGuire, Ka`ohulani
2000 *A Traditional Cultural Practices Assessment for the Proposed Faulkes Telescope on 1.5 Acres of the University of Hawai`i Facility at Haleakāla, Papa`anui Ahupua`a Makawao District, Island of Maui TMK 2-2-07:8).* Cultural Surveys Hawai`i, Inc., Kailua, HI.

Office of Environmental and Quality Control, Hawaii State Department of Health
1997 *Guidelines for Assessing Cultural Impacts Adopted by the Environmental Council, State of Hawaii November 19, 1997.* http://www.state.hi.us/health/oeqc/guidlines/cultural.html. Last accessed February 2003.

Pukui, Mary Kawena
1983 *`Ōlelo No`eau: Hawaiian Proverbs and Poetical Sayings,* Bishop Museum Special Publication No.71, Bishop Museum Press, Honolulu, HI.

Pukui, Mary Kawena and Samuel H. Elbert
1981 *Hawaiian Dictionary*, University of Hawaii Press, Honolulu, HI.

Pukui, Mary K., Samuel H. Elbert and Esther Mookini
1974 *Place Names of Hawaii*, University of Hawaii Press, Honolulu, HI.

Sterling, Elspeth P.
1998 "Sites of Maui," *(Vol. A, Hana)*, MS notes in Dept. Anthropology, Bishop Museum, Honolulu, HI.

Walker, Winslow
1931 *Archaeology of Maui*, Manuscript at B.P. Bishop Museum, Honolulu, HI.

Waihona `Aina Corporation
1996 *Waihona `Aina Database* [Online Database] http://www.waihona.com. Last accessed January 2003.

Yent, Martha
1982 Taro Planting in Kahakuloa Valley, Wailuku, Maui.

Yent, Martha and Jason Ota
1983 *Archaeological Reconnaissance for Planting of Tree Species at Kahakuloa, Wailuku, Maui Cdua Ma-5/12/82-1407.*

APPENDIX: Interviews

Interview with Richard Ho`opi`i, Senior (RH)
January 15, 2003
Conducted at Kahakuloa Village
Interviewed by Melanie Mann (CSH)

CSH: Uncle can you please state your name for me?

RH: Richard Kealoha Ho`opi`i, Senior. Born and raised in Kahakuloa Village situated on the northwestern shores of Maui along Kahekili Highway.

CSH: Where were you born Uncle?

RH: I was born right here in Kahakuloa Village.

CSH: Right in the village?

RH: At home, right at home.

CSH: Right at home?

RH: Yes, yes! My dad was a midwife.

CSH: When were you born?

RH: 1941.

CSH: March of 1941?

RH: March 15, 1941.

CSH: And you said you are sixty-two years old?

RH: I am going to be sixty-two on March 15.

CSH: Oh–you are still very young yet. That's not so *kūpuna* status–sixty-two [laughing].

RH: No. That's still young [laughing]. Well the *kūpuna* status is the age of sixty. The State status of *kūpuna* is fifty-five, but the true *kūpuna* status is sixty years.

CSH: So your father you said was a–

RH: My father was a school teacher here at Kahakuloa School and it was taken over by the Kahakuloa Protestant Church. He was good in music, piano–he used to play piano– *`ukulele*, he was a good voice teacher, and perhaps we've inherited that part known as the Ho`opi`i Brothers. My mother is Abigail Lumlung Ho`opi`i Kenolio. She was also born and raised in this village, and she was *hānai* by David Kalawa`ia. From the day she was born, David Kalawa`ia took her and raised her in the village. My mom passed on twelve years ago. At the age of thirteen, she was going to the

kahakai picking *`opihi*, *kona kahawai*, the *`ōpae*–those were the resources helping the family and the struggles they had. The village is known for agricultural land, which was taro growing and the rest of the things that follow. Of course, every taro bank has *ti* leaf and banana, and in the corner we had potatoes, vegetable growing and stuff. It was enough to continue life as far as the *mea`ai*. The *kahakai* with the fish, the *`opihi*, and everything else you can get from that. The *kahawai* was the *`ō`opu* nāpili, *`ōpae*–you know those days when they used to go catch *nāpili*, the small version of the baby *`ō`opu*. We used to poke the needle through the thread, through the eye, and hang it on the clothesline–that was their dry fish. So, they just made use–they never have ice box and stuff, so a lot of the things they had to put in buckets or the old crock. They used to put the *poi* in the crock so that it would last–it would last for a long time because the crock is always cold, so if something cold can last a long time, if it's warm then the *poi* going get sour and sour and sour. Sour *poi* is good, but not two week sour *poi*. So, those lifestyles–work hard in the taro patch. Those days they would sell a bag of taro, about one hundred to one hundred ten pounds a bag of taro, for three dollars fifty-cents, and then came five dollars, then came seven fifty, and now an eight pound bag of taro is sold in the market for twenty-five dollars a bag–eight pounds. So now it's worth while for the *kamali`i* to work in the taro patch to raise money–to make money to get their education and to do what they want to do. The only thing is, you don't have any *kamali`i* who want to work in the taro patch anymore.

CSH: It's hard work that's why!

RH: It is hard work [laughing]. However, this time we are facing we have machines that go in, instead of using the pick and shovel. You have the tiller to till the soil and to plant right a way, you have fertilizers to sprout the taro fast–but it's not as good as regular growth. So, there are many different sources that still can be done here and we, thank God, have the water rights here–that's the most important thing here. The water must flow, they can't shut the river down–we don't ever want them to shut it down. It flows from the mountain–from *mauka* to *makai*, and it gives the *moi*, the *āholehole*, all the freshwater goes back to the ocean. The *`ō`opu* comes down to refurbish and it goes back up. That's the change of the life being there. And the water served us as drinking water, cooking, and irrigating–and everything else. From *mauka* it is diverted to the homes, right back into the river and just recycles itself by all the *honohono* grass, all the rubbish from the banks of the river, the *pōhaku*, the sand, it cleans itself off before it gets to the ocean. And the seasons would change–rough and then clear, the *kai* would be angry and then come up and refurbish the whole *āina* and then go back down. Then the river will flow, come down bring all the rubbish and everything else that's in the inner land, and then come down and refurbish itself. Those days never have cooking facilities, never have electricity until 19–electricity came to Kahakuloa in 1959. And then everyone was glued to the T.V. [laughing], but then life was changing then. Used to have the crank telephone–we used to call them the "cowboy telephones", you had one for the receiver part and the crank on the top on the box [laughing]. Neighbor calls, you call your neighbor, it would be one long ring, two short, or three short–used to be good fun [laughing].

CSH: And who were your grandparents and what did they do?

RH: My grandparents on the Lumlung side lived in the village, in the inner lands–on my mother's side. They were also taro growers, and in the later twenties and thirties they moved to O`ahu, up until 1946 the entire Lumlung family moved and mother just carried on in here, which is on the Lumlung side. My mother stayed here her whole life. My mother was born in November 4, 1913.

CSH: So your mother, what is her ethnicity?

RH: She is Chinese-Hawaiian.

CSH: And your father's side?

RH: They are pure Hawaiians.

CSH: And what did your father's parents do for a living? And they were from Kahakuloa as well?

RH: No, my father moved here from Kaupō to–well the story was, he came from Kaupō and he stayed in Olowalu, Lahaina, and well I guess working in that area they would travel this way and he–well, his first wife was Phoebe Ho`opi`i, Phoebe Apuna I mean–the Apuna family, I'm sorry. Pheobe Apuna, she's a Apuna girl that married Frank Ho`opi`i.

CSH: Oh, your father's name is Frank Ho`opi`i?

RH: Yes. He has an uncle William Ho`opi`i who was a school teacher also, taught at Pā`ia School, and then went over to Kona, and there he started a Ho`opi`i clan there. They are all in Kona and Hilo, now.

CSH: Who, as far as your cultural knowledge and heritage, who do you give credit to the most? Who was the *kūpuna* who gave you your *mana`o*?

RH: Well first, I have to be thankful to my dad for marrying my mom, and I was *hānau* in 1941, and he passed on in 1945. I am thankful for that part of life and the bloodline instilled in him that was given to us in the musical world–and perhaps the ways of life in the village. My mom was the one who nurtured us and instilled in us the wisdom and knowledge of how to care one another, how to respect the *`āina*, how to grow things in the soil, how to *kanu*, how to go to the *kahakai* for the *mea`ai* and the *kahawai*.

CSH: When you were growing up did your *kūpuna* also live with you?

RH: My mom–when I was growing up there was actually, we didn't grow up with any one of our *kūpuna*. The Lumlung–my mother's side, the Lumlung family moved to O`ahu, my father came here by himself, and we hardly knew his side of the family. So we grew up with the *kūpuna* of the village in a sense–aside from my mom, we

just picked up those knowledge from them and just try to carry on what they have given us. I explained earlier about the care and cleaning of the *`āina*–whether it is your land by deed or not, I consider the *`āina* as we are the caretakers of the *`āina*, and whether it is legal or not you would feel whoever the deed owner of the land wouldn't mind, if they are not there, to care for it. To care means to clean, to keep it nurtured,in plants that can *mea`ai*–banana is easy to grow here, potatoes, and other vegetables–to keep the place nice. So those are the traits that I've learned from them–this is what I do. My children continue to talk under their breadth, "why daddy got to go and do this, why he's doing this, why he going down there to clean?" Only because for everybody's safety. A lot of the times growing up, there was a lot of trees in here. The trees would block one home from seeing towards that area–it was a blockage. You couldn't see directly–you wasn't looking or staring at the neighbors, but as time came, there was people that were coming to and from that we don't know, at least someone is aware to see what is happening away from your home or in the area they shouldn't be, and if there was people there, you would know the family who are there and you would know who is not, and stuff like that. And there is a lot of times that places that are open up only for the caring for the neighbors areas when they are not home. What do they call that–we are just going to keep an eye out, everyone looks out for each other. Just have them aware that somebody came or you saw a car, because if there is something wrong or something is missing from one house to the other, and you don't say you saw someone coming, it tends to blame one neighbor to the next–and then we have misunderstandings. And sometimes it could be misplacement of the things you didn't put back where you got it in your own house and you think, "oh I put it there, but it's not there." So many times you can get so much misunderstanding with a small community like this, you have to be so careful about how you express or insult one another. You try not to, and in the end you would explain you saw, but I didn't do it–but it's the way it happens. It's not that important, but when a life has been taken or when a life has been hurt it is important–when someone else has touched something that is private shouldn't. [Inaudible] It is so important to know that life is so important, that life is so precious, life is only as long as you make life to become. It's only happy if you make it happy yourself, and if you don't make the changes in your life, it becomes sad and frustrated, and you become a lonely person a lot of the time–and you don't need to because everyone wants to belong to one another. Everyone wants to belong, knowing that they belong to somebody and that there is somebody out there that cares for you, you are never alone. Open your heart and open yourself to others, and ask when you need to and give back to what has been given to you, in a sense. If I lend somebody twenty dollars, I don't expect the twenty dollars to come back–because I needed it then I don't need it now. I don't need it tomorrow, I survive today. If I'm working and I'm tired and you come up to me and give me a helping hand, a physical hand–you see physical and monetary are two separate things that can work hand-in-hand if you know how to use it. And the giving physically is worth more than giving monetary–and that's so important, and that's all I look for. The physical part because there is love, there is sharing, and there is a big *mahalo*–you took that one hour away from me, where now I can restrain myself to recuperate and be happy that it is done, it is worth more than the monetary.

CSH: You have just one daughter and one son?

RH: No, I have four sons and two daughters.

CSH: Those two are the youngest?

RH: Yes, those are the youngest. The girl is the youngest, she just made twenty. Twenty, twenty-three, twenty-eight, twenty-nine, thirty and thirty-two. And we have eight grandchildren also.

CSH: And you are retired now or are you still working?

RH: I will be putting in my retirement papers on March 15 at the age of sixty-two–I just want to collect my early retirement and then retire and come home, and I can do more things in the village–restore our church and get our kids to come to the community center, and I want to do a program, a cultural program, *`ukulele*, singing, spiritual things and worldly ways that we can conduct ourselves so that our children can grow up and know about the rest of the world out there.

CSH: And you work for?

RH: I work for the County Parks and Recreations.

CSH: And how many years did you give to the county?

RH: March will be twenty-six and a half years.

CSH: You work long time and you deserve it–and then you will have your chance to restore your community to make improvements for everyone's life.

RH: Working for the Lord is most important–working for him first.

CSH: Your life has come full circle.

RH: Yes! Yes! And he provides for everything–the physical part, the mental part, and everything else. Part of my continuation is praising the Lord and serving him with all my might, and the talent he has given to continue to sing and to compensate to people, to travel different parts of the world to share our culture–this is my life.

CSH: And how often do you perform?

RH: I don't have a steady–we used to be in the hotel chain for twenty-two years.

CSH: Twenty-two years? And at what hotel?

RH: All different–Kā`anapali, Waimea and stuff. But it's a thing you miss playing for people's birthdays, grandma's anniversary, or baby parties, aunties, uncles, and just being there for people who want and appreciate you. And you can't because by the

time you are there, it is too late–every *lū`au* begins at five or six and you are at the hotel until seven, or eight, or nine o'clock–by the time you get back, everyone jack up already.

CSH: *Pau* already–everybody want to go *moemoe.* Talking more about the village, when you were growing up, how many families were actually living in the village?

RH: In the village, prior to when I was born, they had about seven hundred and fifty-people. That was every walk of life–the children–most of the villagers were inland because of the water. The water came from the inland, so they would raise their taro patches–and then slowly they came down. There was some sectors–a few living down in this area, to the beach area, because then they would trade. Trade the fish for the taro and all the things they could grow. Eventually, it was easier to be down this section [*makai*], the provisions were better and they made way for the *`āwai* beaches to come down and stuff so they could still nurture–as you came towards the ocean the *`āina* was wider than inland. The inland after the storms and rains and the big waters, it became a danger part, in a sense. But they survived no matter what nature put on them–they survived.

CSH: And most of the families, or all the families, living during your time were Hawaiian– most of them?

RH: Hawaiian and Chinese–a lot of Chinese people. You know Chinese they came from everyplace, and they would dwell in anyplace. They were people of the soil themselves–they were farmers. And then the Filipinos came after. In my time, in my era, that's why the Lumlungs came. The Lumlungs, the Parks, and so many others that came–and they dwelt and were raised by the Hawaiian people. They learned to speak fluent Hawaiian and they had the Hawaiian traits in them–and one thing they brought from their country was the good cooking and how to survive with different recipes or things they would prepare. The Hawaiians, they would just get a pig and *kālua* that bugga and eat that–but Chinese they would prepare different dishes–how to prepare this part of the pork, or this, and this part of the pork–.

CSH: As far as being specific to the proposed trail area, do you know of any cultural anything that was occurring at that point. You know, you mentioned that the *`iwi* were all located in the village caves, but do you know of any documented any–

RH: No, in this specific area [project area] there is no *`iwi* that I know of, those were one of the famous beaches in Po`elua area that we used to go–and we used to walk the trail. We used the trail to go down to the beach. After we go to the beach, we would come up the trail, but nobody uses it anymore because nowadays none of the kids want to go that kind of steep hills. But there were walking or horse trails. But as far as archaeological things, there are no burial sites–

CSH: Is there anyone live over there? Actually, let me turn the recorder off and I will show you a historic map.

[Pause]

RH: Our church was founded in 1879. In 1981 I redid the roof and put those free bricks on them and we restored and painted it. And I have to get to the roof–nobody want come paint the roof because if they step on it they might crack the tile, and it is too expensive. So we are still trying to get a boom truck to go around instead of stepping on it. I'm working with these guys on a grant to renovate–the floors are falling. The building is strong, but we can't do anything until the floor is straightened out.

CSH: Let's see [unrolling historic map]! This one is a pretty good map, it shows the whole coastline of Kahakuloa and the valley. So where would the project area be at? Right over here?

RH: Yeah, right, right. Wow. This is the entire map of the village.

CSH: Uncle get one better one, but I'm going try and see if I can get `em for you? You like one like this?

RH: Yeah!

CSH: Good, I go get one for you. You know the one I was looking a–get all the numbers and the *apana* and the names of all inside here [the village].

RH: And the rest is traveling up Waihe`e coming up that way and Honokōhau. Wow–I've never seen one like this. I only seen things in small parts–in small sections. And I know, there are names that they try to change–you know it's sad when they make books and stuff they don't give correct names. They go put over here Āhoa [pointing to map], by the Bell Rock, that is actually Āhoa, but they get Lawaina Pools. So people ask, "you know where Lawaina Pools is?" And I tell them,– "there is no Lawaina Pools." I tell them, "tell me something off the top of your heads, a Hawaiian village wouldn't you think they would have a Hawaiian name?" Just common sense would tell you that, right? There is no such thing as Lawaina Pools here–but I know where they are talking about. I tell them the name of the place is Āhoa–used to have a canoe shed down there, the fishermen used to park and put their canoes in there after they go fishing and stuff, and that's why it is named that. It is Āhoa! And that has several ponds and stuff that they [tourist] like to go swimming and stuff. And I say, I sure would like to know who is Lawaina [laughing]–they get the nerve come over here and put their name on top [laughing].

CSH: I think over here is the project area.

RH: Yup.

CSH: The map doesn't even have the point, Papanalahoa Point. Even the spelling of Papanalahoa has changed on so many different maps.

RH: Yeah [laughing].

CSH: I suspect that these are also–

RH: Those are actually–

CSH: What were these out here?

RH: These actually was, you know the–during the time when they were raising cattle–these were ranch houses–they were rest areas.

CSH: Oh, rest areas for the ranchers.

RH: –for the cowboys. So that if they want to stay overnight they would just pack a bag instead of continuing on.

CSH: And this isolated [LCA] on over here for Oku`u–I read the LCA description and the *apana* one was describing a house over there but when I was reading the descriptions it didn't sound like this location.

RH: Oh.

CSH: So I was wondering–what is this? This one on the river makes sense, but this one in the middle–

RH: These used to be one of the ranch or cowboy houses. So this is the area where–there is a song about the legend–the mom and dad left the house, went to the mountains and left the baby there. The *`ōpuhi* from the ocean came and took the baby–took him down in the cave, in the underneath the land, under the water in the inland. And he called on the *kūpe`e*, the *`opihi*–so that they could restrain the baby. Sons of Hawai`i sings that song–*`ōpae e `ōpae ho`i ua hele mai au*...[singing]–that's the place they are talking about.

CSH: That's the place they are talking about–Āhoa? Oh! But how's this map not too shabby yeah?

RH: Yeah. We better put it away before the wind gets it.

CSH: Now I know how special this community is in that valley I feel even more bad.

RH: Now you can converse with Uncle Walter. Uncle always wanted to–he always tells me "I like come," and I always tell him please come. And they did–they surprised me for my sixtieth birthday.

CSH: Oh they came over here?

RH: Yeah him and Aunty Anne came–and my wife was planning it and I didn't even know. We had a church service and everything, and they were planning something down here, they had a *pā`ina* down here. And then I was telling my wife, "what they having down there?" She said, "oh, they're having a luncheon down there." I told her "okay, okay–did you collect the twenty-five dollars," she said, "yes I did, it's

all taken care of." Not knowing that it was for me. Anyway so–after the church we came down, well we didn't finish church and they came in and said, "oh we were just passing by and ah–and you guys were in church so we just came" and I said, "oh welcome!" They were going to bring the surprise here, but then other people came. And I said, something is going on! And then they couldn't–and then my wife came and said, "oh I just wanted to let you know that this is a very special day for you and we wanted to celebrate it with you." And Aunty Anne brought leis and everybody started–and I said, "oh my goodness!" I said, "wait, wait wait, *pule* first, and close the service." And then we came down here, and the whole place was filled and all the musicians came. This [the community center] was not yet, but it extended all the way–

CSH: And my aunty was over here too?

RH: Yeah!

CSH: She's so good you know her. She's the president of the Realty Board now. She's big time her! But she's doing real good–let's see–Zillah just had a baby and she has three now. I think the last time I saw you was at Evan's first birthday party. She just had another daughter. Aunty is doing real good–she's constantly on the go. When I can catch her–I love to cook and Aunty Anne can cook. That lady is Wonder Woman! I tell her, "aunty, I like be just like you."

RH: I don't know how she does it, yeah.

CSH: She hardly sleeps you know! She don't think about it she just do `em. She is like my *kūpuna*, you know. I've learned a lot of wisdom from her and she does a very good job of holding our family traditions together. Chinese we do *bai san* in honor of those who passed and she does a very good job keeping that tradition alive, and preparing all the foods necessary for that occasion. So I approached her Christmas Day and I told her, "you know aunty, this year I want to learn so that when you pass on you know and feel comfortable that the tradition has been carried on." You know her son Kalei yeah, that's her right hand man! I reassured her that I would help Kalei. He cannot do everything himself, he need's help. So I told her we going keep the traditions alive for her–and then she felt sad she say, "I not going pass on anytime soon you know!" I told her no, no–that's why you are still young yet–

RH: And get the *`ia* from them, yeah–while they are alive you show them that you can. And they feel more comfortable.

CSH: It's not only that, it's like you know when you only get recipe and you following `em–you know, part of cooking is knowing where to buy the ingredients. You go Chinatown and you get the wrong roast pork–*pau* already the dish taste different.

RH: Yeah, very true. And while you are there and you are adding those spices, it comes from you! It comes from you! No matter what they put–two ounces, this three ounces that!

CSH: I know my aunty, she make with no recipes! She put one shot whisky, one shot sherry, two cup Jack Daniels. She no put that kind stuff down–you got to stand next to her and watch and ask. But she is a good lady–her and my uncle, they are right on!

RH: Those two work really well together! We had, when we were recording up in the studios of Mountain Apple Company, we had dinner–and that's the time all the family was there. So we stayed overnight because we had to do something else uptown and then go back up the mountain–it was really nice, we really enjoyed it. But we can stay up almost all night talking story, there's always never ending conversations, very interesting too. I was so happy. Uncle Walter, we go back a long way–when his parents (when his mom and dad were living) from Wai`anae, we played for their forty-fifth anniversary or fiftieth anniversary and they called us, the Ho`opi`i Brothers, so we went down. I never seen a well coordinated celebration as that–and grandma and grandpa, especially grandma kept everything that she gave to her grandchildren–all the little dolls, all the–she kept the whole room with all the gifts so clean, she just nurtured everything, and the house would just extend, extend, extend. She really reminded me of my wife's grandmother. The whole house would just extend, extend, extend [inaudible]. You would feel so comfortable there. The *luau* would start about lunch and went throughout the night, and it took about two or three hours to get everyone to clean up everything. And then the next batch of people would come, and then we would clean up again. Everyone worked hard, everything was hot, and everything was clean. And it continued right through [inaudible]. We would just go up and sing again and keep everybody so happy.

[pause]

CSH: Uncle, you know that Bell Stone up there–I have yet to see it–and I'll go look at it after this–what is that Bell Stone?

RH: It is a [inaudible] to the umbilical chord–the *piko*. Because the villagers here–oh, down from the *ali`i* line, the culture from Kamehameha, the *ali`i* line–the umbilical chord is the source, our *na`au*, deep down in the guts, they way, "get `em down in the guts, the guts feeling," which refers to that because that's where the breath of life is. From there [the umbilical chord] they get knowledge, reason and understanding. That [the umbilical chord] is put aside where the rats and the mongoose going to eat it–then you become a thief, they believe in that. That's is how they chose their *ali`i* and who to become warriors. But it goes down to the new generation of our *kūpuna*, they believe that if you–it's part of your body, it's to be put aside without anybody destroying it–whether an insect or a human being to destroy that. So that *pōhaku* was there–and they drilled a hole, you know how the old time drill, drill hole in it, and then they put the *piko*, the umbilical chord inside there, and then they put lead, they *pa`a* the lead inside there. So certain time, with a big rock like that, it should be strong and solid, but with all the holes and patching that they did, it become echoing. It became hallow, so when somebody go on the side and hit it, you can hear the sound coming through–so we used to call it the Bell Rock [laughing]. *Pōhaku Kani* actually, that is the name of it.

CSH: Is there a single individual associated with that stone?

RH: You know, I don't know that part of the history, but every time I pass there up until this day, there are several other rocks that are across, *makai* side, and they are big ones, and in different forms, and so again I look at history of the family line–like when God asked Moses to lead his people to the promise land, yeah, to Jordon, he couldn't cross, he had to have someone else to take `em across, and so when he was walking and the Lord saw him, it was time for him to go, which is to heaven in a sense, that's how you interpret it, and to never look back–never to look back. But he believed in God so much, he loved his people so much, he said, well let me take a look one more time at his people. And it is like the stone. The rock, the foundation, it is him. So, that's the history that I know, that is the *`i`o* that I have learned from my *kūpuna*, and so with nature it is almost the same thing–that somewhat, sometime, whether it was good or bad, it happened to the family–that's my interpretation–the big rock is the foundation, the father of all those rocks over there–mama must be across and all the *kamali`i* is all around. I always watch when the State or the County, they like bring the bulldozer. Get certain ones that can touch, and then certain ones that you cannot–that's what I believe in. And sometimes the belief becomes how you feel. You can feel the spirit, the body. Every time I go over there I talk to them, "eh *aloha, kūpuna*." you know–you talk to yourself, only God knows. I only know that when the prisoners used to live here before, used to have the prison–

CSH: Oh the prison–

RH: –in the fifties, Honana.

CSH: –about two miles from here?

RH: They call `em Honānā–it's actually Honanana. They call it Honānā, it's the wrong pronunciation. And they [the prisoners] were responsible for making the road [Kahekili Highway] wider. But whenever they go up to the rock [Bell Stone/*Pōhaku Kani*], just touch the rock [sound of a knock], *make* the machine.

CSH: Oh the tractor?

RH: They try for move 'em with the tractor, but every time the thing stop–they like move the thing because it's right over there.

CSH: Construction workers they tell me, they true believers you know. When the thing starts talking to you, they believe, no touch `em again [laughing].

RH: So they start `em up, they put `em behind, the thing come back it start, they go up–my brother Walter and John Nu`uwai, they say, "What you folks doing? What's the matter with you guys? You not supposed to touch this *pōhaku*,." and they go say, "Oh yeah, now we know!" [laughing]. So they was–I'm working on these points of Kamehameha statue, you know the Kamehameha signs–

CSH: Oh yeah, the historic places.

RH: Get one on top there on Pu`u Koa`e, you know the big mountain up there–

CSH: Oh yeah, wasn't it Kahekili who used to jump off of there?

RH: Yeah Kahekili–that's why they call it Kahekili`s Leap. And then the village over there is called Pu`u Koa`e because of that white bird that would circle. You know the big white seagull, the white ones–you know they circle around and look for the fish, then you know, ahh plenty *i`a*, and then they prepare the net.

CSH: I was reading some accounts, the cliff is all vertical, yeah–I can't even imagine jumping off of it. I was driving out here and it was driving me crazy, I don't do so good with heights!

RH: But those days, the water was right up to the mountain. And then take years for erosion and stuff to cut the shoreline, so all the *pōhaku* go down, so now the thing is set back–how the heck you going run and dive off the thing! [laughing] His canoes and artifacts are buried in that cave–it's a big cave. On top there, there is a Catholic Church, and from the back mountain is a hole, a tunnel, right through there, and its buried and it's closed. And from here towards Waihe`e, there is another big cave, they call it Ka`apakai, Ka`apakai Cave. There's a big cave down that side where you can walk from the ocean come in here and come back to the village. So those were the areas that are related to Kahikili.

CSH: So you are trying to get a historic place site for–

RH: No, over there get one already, but growing up I remember that sign, and then there was another one pointing to Kahakuloa Village, the other was for Pu`u Koa`e, and the other one was for *Pōhaku Kani*. Those were the three that were always here, when we were going to school–there was always the sign there. And so, I talked with one of our *kahu*, Anapalea, at Waihe`e Church, they just restored theirs and got it from the Hawai`i Visitor's Bureau–and so that's one of the work that I want to do.

CSH: Oh to restore your church. What is the name of your church?

RH: Kahakuloa Hawaiian Congregational Protestant Church. And we want one for our church–so there will be two on the top, one over here, and one at the bell rock. And this road, actually this road around, used to go out to the ledge and come back in, it was called Kealahula. Kealahula is making a circle, yeah, just like you're dancing the *hula*, you making a figure-eight around.

CSH: Your parents hear accounts or stories about Pu`u Koa`e, or over here, or the Bell Stone–you know kid time you remember *tūtū* went tell me one time and then five years later you tell `em to your friends, and then somewhere along the line the story get little bit change, come more exotic.

RH: No–not in the project area. That's why I drew up my conclusions about that rock, but actually it is the village umbilical chord, all buried in there. Mine is in there–and I still have my kids ones at home and it's safe and the insects never get to `em.

CSH: But as far as the project area, you mentioned that when you were younger you used to go over there to swim, are there any fishermen that go there now?

RH: Hardly, if there are any fishermen they come from the ocean, they come shoreline. Hardly have. Only certain people will go for *`opihi*, this is an *`opihi* picking area, and we used to get down there by the trail. I never witnessed that–when I saw–I used to wonder why there was such an extinction–then I used to ask the State for this preservation of endangered species, and then I took a look at and I said, "oh yeah". Because to us every plant that is unusual is very important to us, you know, we don't want to destroy it. But if you don't know the botanical things, the names and stuff, I wouldn't know, I don't know–. And a lot of times we call the particular things our own name, the village names! And when they come over here and we go, "what the heck is that?" and we say, "nah, we no more that plant over here." But then they go, no it's just like this, and then we go, "oh, you talking about the *pakalana*, oh yeah, we get that." [laughing]. It makes a difference–it's like knowing the persons name when they growing up by their nickname and they asking for this particular person–that person and you are talking about the same person with two different names.

CSH: Uncle Sam was talking about the manapua, he was in Oregon. He go up to the Chinese landy, "I like that one–that manapua over there." And she went, "Ha–what is what–?" She's telling him it's Char Siu Bao, and he's telling her no it's manapua! And then she yelling, "NO! That's Char Siu Bao!"

RH: It's like the botanical name, the Hawaiian name, two different.

CSH: And then get the scientific–and you go no, what? Are there any native plants over there?

RH: Only the *`ohai ali`i*, and that's about it that I know of.

CSH: Get plenty *`ohai ali`i* over there?

RH: Not really–well, even if it does, the wind, now–before it was more calm, there was more growth of the forestry that would block the wind coming from the ocean and stuff, and the erosion from the ocean–so the wind catches–once they grow, you have to nurture it, but the wind just knock `em off, so all the young shoots cannot come.

CSH: Oh, all the *keiki* have hard time come up?

RH: They come up, but they have a hard time coming to maturity. They are pretty, though. But as far as–within the project area–I was so glad when they proposed, you know us we so *nīele*–

CSH: Oh so you knew about this then? Oh so you know the exact location of the project area?

RH: So I asked, "where is going be in Kahakuloa?" And you see, the name Kahakuloa actually belong in the village, above our home, in the inner part of the village, it [Kahakuloa] was named after a taro patch.

CSH: Right–for one of the chiefs right?

RH: Yes for one of our chiefs, that was our [inaudible] for the chief–Kahekili. And that patch fed–it was a small area–and that patch gave ten bags of taro–ten bags of taro

CSH: Wow it fed a lot of people.

RH: It fed a lot of people, it was kind of like an old–and knowing how taro grows we used to say, "no way not ten bags". But it was ten bags. Owaluino is the name of the place, and the patch is there– because my grandfather, David Kalawai`a was living right next to that and he took care of that patch, and my mother was raised right over there–right by the patch.

CSH: Kahakuloa, what is your interpretation of the name? What is your interpretation of Kahakuloa?

RH: Kahaku is the king of the heavens, yeah, of our Lord Jesus Christ. Loa is the people of the lower lands. So the song then that was recorded here was `Ohu`ohu Kahakuloa–the flowing gifts of the Lord Jesus Christ to the people of the lower lands.

CSH: What are the name of the winds in the Kahakuloa area? Do you know the names of the winds and the rains?

RH: I know the rain–one of the signs of when there is a *kupo o ka `aina-* when the people of the village when they are very sick, it will come from where you drove down, Pu`u Koa`e, coming down that way, the wind will blow down and this light rain called the *kilikilihune* would come, come down from one area, just running down towards the ocean, just passing the face of Pu`u Koa`e. And if it's one side it's sick, but it's okay, and sick and death when the thing covers, it covers over the mountain, it covers–the *kilikili* would come and then a small mist of clouds, would cover the mountain and you would look up there and you would think, *hāule* eh, in other words *make*, yeah. And it wouldn't be long until somebody call and say, "oh–so and so died, uncle died." So, those are the specific signs that I've learned from my mother that she learned from her mother and her grandparents. But as far as the *makani*, I never learned that.

CSH: I will research that for you.

RH: The cycle of this place would be–from mount `Eke, where our main source of our water comes, it comes and it blows from mount `Eke which comes from Okolehome

come down, blows across this way, come down this way, and it circles out there, comes back and blows up–up on this ridge Kealahula, Waihali the next one, goes up this gulch, come up like this, and it blows straight down afterwards. And then we have the Moloka`i Winds, we call it Moloka`i winds because it comes from this side and we have the Kona storm, like we had this past day, yesterday. Kona would blow from Mount Alae, it would come straight over, everywhere else it would be rough, but its clear over here. Other than that, I don't know–I have yet to know.

CSH: I am very interested in Kahakuloa now! I was doing some preliminary research about the area and I was so fascinated with this place.

RH: In here, in the time of–well you know that Kahekili was the father of Kamehameha, but for Kahekili this was a refuge for the people, like the refuge in Kona. This valley was a refuge area and people would come and be safe, and nobody would touch them.

CSH: I know that the taro patch that you were talking about was also a *pu`uhonua* right?

RH: Because in that area is the beginning of the inner land where they would come and stay, because it was rich–the soil was rich, the water resource was there, everything was there. So that *kalawai* was the main source for the king. *Mauna*–when they say *`ohu`ohu Kahakuloa i ka pua lehua*–the flower, the *pua*, the *kaukini*, that's when you come by the stand over there, that's the *mauna*, the *kaukini* area–at one point used to have plenty, plenty, *lehua* trees in that area.

CSH: Oh what happened? Erosion–

RH: Well erosion and wind and cattle. And a lot of *pānini* in that gulch, too. There at Waihali Valley, *pānini* used to grow, in different spots, but those areas are rich in *pānini*–the white and the red. We used to eat them like crazy. That's a song–Kanu Lehua. [Inaudible]–and the birds would come and eat all the sweetness. When Danny Kapoi recorded it, he changed a few words–because you come from the village and that's how you learned it from your *kūpuna* that's how you're going to tape–because they are the elders. Sometimes their meaning and somebody else meaning is two different things–[inaudible]. The motion of the kauna has changed, which changes the meaning of the song–they change the song, and then you only learn from that, and when people ask–you know like the Nā Hoku Hanohano Awards they have the pronunciation award. To me, there is so much conflict with that because of what they learned in school, from what they gathered from other information and now they put that into the judging part of that particular song–so, sometimes us as Hawaiians [inaudible] know what we are singing about, and who we are singing about, and whom we are referring to, sometimes it changes–and when you have to stay with what they want it to be, it is wrong. Now if you look at them, if they are in their sixties and eighties, but there were *kūpuna* that gave that song out hundreds and hundreds of years ago, and the song was there already. So, I always refer back–what I've learned from my *kūpuna*, what my *kūpuna* has told me, and if you want me to sing for that *halau*, is how I am going to sing it–my way! [Inaudible]. It will only tell me that something is wrong, and it will show. And

sometimes it makes a difference, because when you do that this group becomes more complete, because it is approved by nature.

CSH: Out of respect, too, yeah!

RH: No can! It's same like when you go to Waimea, Kamuela and stuff–. One of the recordings we did, and we just redid it with Kalei Nakasone is–"*kaula nei kua`a a me ka`u `ala* [singing]"–tells of Ikua Purdy that won that first rodeo derby.

CSH: Right, right–he went to Montanta and won first place.

RH: –and Ka`au`o won second place. And anyway, like every island has a different pronunciation for things, because it's from there–Waimea is over there, but some people say Vaimea–stressing the "V"–Vaimea–I tell him, "oh braddah how come you pronouncing it this way," and he says, "*because that's how I learned it from my kūpuna.*" But the books says this, and I say, who wrote the book? No say one Hawaiian person wrote the book, right? Was one *haole* guy. And then I tell them what would you like to teach your kids–as your *kūpuna* says, as the book says, or as you say–which one is the right one? Because if you don't use the "Vaimea", because the expression is there, you don't get the–you know the students who come out of Mānoa and the ones who grow up in the village you hear them talk, it is totally different.

CSH: Some people say–it's hard on the ear!

RH: Yeah, hard on the ear.

CSH: They say, "Oh!!!!" The *tūtū* woman they don't want to talk to people coming out of the university. They don't want to talk to people coming out from U.H.

RH: And one thing with the *kūpuna* when you converse with them and you sing for them–you watch for their reactions–when you see the little feet going, oh you in with them! When they start standing up–ha, then they going give you everything you want, because you're picking up them–that's in them, that is what they learned and what they are taught! And they think–ha, these boys are okay! But me, I just try to satisfy the *kūpuna.*

CSH: Earlier you mentioned one *kūpuna* elder who still lived in the village, seventy–

RH: Oh, seventy-four? Yeah, she is my mother-in-law from Moloka`i–she married into the Ka`anohi.

CSH: What is her name?

RH: Harriot Ka`anohi. Ka`anohi is a big family you know–plenty Ka`anohi in Kailua. Actually the line in this village are the Ka`anohi, Ho`iwa`a, Ka`iwi, Ho`opi`i, Kana, Lumlungs, Kekona–they all from this village, and then they all moved to Honolulu. And then later on, the grandchildren come home.

CSH: How many people live in the village now?

RH: Right now–one hundred and thirty-five.

CSH: And before when you were growing up had seven hundred something–

RH: Well when I was growing up it was almost to five hundred or four hundred something people. But the figures I have from my mom, it shows almost seven-hundred fifty people prior to that. What happens is that families pick up and go, and all their grandchildren and everybody goes–and that many people are taken out. Not very much of them actually died, they just moved away. But in those days, during the time of the war in the forties and before that was hard times, and they started hiring people at the docks–Pearl Harbor–so these people moved for the work, where the work was, so that's why most of the time they moved away. The die hards they say, "no way, I going stay over here, I'm going to survive. I don't need whatever money. I get my *mea`ai* over here. I am going to survive and I am going to live here forever."

CSH: Did your father serve in the military as well?

RH: Yes in the Army.

CSH: And then he came back and became a school teacher.

RH: He was a school teacher and he died after that–and my brother, my older brother John, he was in the Army, so when my father died he came home and was discharged, and he was the one that came home and took over my dad's job–just like that as a teacher. Because everything that my dad did, it was also written down. Every subject he taught he had notes on how to do, and why it was done–written directions. I didn't know that until my brother talked to me about it, and there is no record of that anymore–because we were too young, we were the second Ho`opi`i like, my other brothers were the first Ho`opi`i the Apuna that he married, yeah.

CSH: You only have one sibling? Your one brother John?

RH: John Ho`opi`i–no, no, no. My father's first marriage was to Phoebe Apuna and they had eleven children. So that actually is my step-brothers and step-sisters. And then when he married my mom and then had two. And then he died and she lived another six years and married to the Kenolio and had six more.

CSH: And the Kenolio is from Kahakuloa as well?

RH: No from Kīhei.

CSH: And she [your mother] lived here her whole life.

RH: All her life she lived here.

CSH: Wow when you guys get family reunions you guys really get family reunion!

RH: Only the family enough–cannot invite nobody else [laughing]. So it was a big family. I always respected–because we came from the same source. To me the father is the foundation of the family and no matter what they were, all my brothers and sisters–they were never my half-brother and my half-sister. And the laws of mankind designate, but in nature they are our own–I believe in that. So my brother Walter is always referring to use as step-brothers, step-sisters–so in the beginning when I was about twelve or thirteen I used to hear the same thing over and over again, and they would be drinking and partying and stuff, so I used to tell him, "you know if you're going to consider me as your half brother then don't consider me at all–either you take all of me rather than take half because what half are you going to take? My bottom half or my top half?" You see, it doesn't make any sense anymore. I grew up knowing that you were my father's, and your father is my father, and you are my brother, not my half brother. So he stopped. He said "that damn kid, he really knows what he's talking about." He used to say, "I think this boy is just like our father–if they like say something they just going say `em, they not scared." And he would say he's right what he is saying. [Inaudible].

[pause]

CSH: So, because you said you were familiar with the trail do you have any concerns?

RH: Not really. As long as they keep it to the theme of it, what is–I know it's providing for trail walks–as long as they keep it for that and only that, the trail walk. Because with that I know that there will be a lot of people coming through the village. A lot of the time there are tour guides and some who will travel on their own, but those vans that come. I think somewhere down the line and with that traffic–as long as we keep an eye on not improving the village road and stuff–because eventually they will want to pave, they paved two lanes already on the top there already–as long as it stops there it will be okay. Because we have a fruit stand, we have a banana bread stand because a lot of people are coming to and from, people would stop for a drink or two and have something to snack on, but with these people coming on the trail they will bring their own sandwiches and stuff, but another couple of miles they may become thirsty.

CSH: Oh and maybe it will become profit for the Kahakuloa people.

RH: But as long as they keep it to that, and that aspect of the trail walk and keep it as a tourist attraction area, I think it will be okay. But other than that, as of right now, I don't foresee for the next five years anything that will be a problem.

CSH: And you said there are no archeological sites except for the bell rock.

RH: Yeah, because my mom would know because that was one of the famous beaches. She used to run and walk all over the place over there–and she would have know the specific things and places.

CSH: Yeah–and nothing that you can recall in that area?

RH: Yeah, nothing I heard about in the area when I was growing up. There might have been prior to 1700 or 1800s that we don't know of, though.

CSH: And that prison, what was that prison opened for?

RH: The prison was opened as a work site for widening the road [Kahikili Highway]–right where had the site, it was a very very narrow place and only had blue rock along the whole bank, and that was the most challenging area that they had to ride in, so they had to widen the road. So they had to blow it up–and at the time we were still in school and we didn't know much about it and the *kūpuna* they not going say anything. There were so many grave sites up there that they covered–when they worked on the road. When they graded the place, they covered a lot. Below, underneath there were a lot of caves–they covered a lot of caves. I think in a sense, because no one really knew about them–it was too late to recover them, so cover it and *pau*, not going have a problem with it. So all the artifacts in there are safe. So, if you look at the bank you wouldn't even know. So in the long run there is some understanding that maybe it was meant to be. [Inaudible]. So that was the easiest way that they could make that road.

CSH: And when did the prison open–in the fifties?

RH: In the fifties–in '58 or '57.

CSH: About how many inmates lived over there?

RH: About sixty with all the guards. About sixty, I think. There were a lot of students who would go over there–but come to think about it, I think it was even earlier than that, could be about '55, I think. I remember after school we used to go over there–because they had movies over there, they had movies for the prisoners, they had a boxing ring, they had activities over there, so we used to go over there. And then we would invite them over here to play volleyball. And never have the water resources then, so they came pick up with the tanks, to come fill up water over here and then that time they would bring down all the guys to play volleyball over here. Before the school was over here and the court used to be over there. In those days it felt big because we were so small–now we grow up we think, wow, small place we used to have. Even the classrooms-we think how did we ever survive in there?

CSH: Speaking of schooling, you went all the way through highschool?

RH: All the way through highschool.

CSH: And what highschool did you go to?

RH: I went two years Lahainaluna Highschool as a boarder, and then I went to finish up at Baldwin Highschool. My brothers had just come back from the Marines and it was a hardship then for my mom to settle. I was the baby of the family, the last

born Ho`opi`i and then they were going to go back to get their highschool diploma and go to Maui Technical School, before it became Maui Community College–so I said well, I didn't want to, but I was forced to by my brothers. I didn't regret, but my heart was always on school. After I got out of here–prior to that, you know, I wanted to go to a boarding school.

CSH: So you joined the service then?

RH: I actually didn't join the service. My Junior year I joined the National Guard and stayed in there and my obligations was to take the six months training. Every single year you take the six month training and then you can go directly into the service. I was supposed to ship out to Germany, I called home to my mom and I told her I wanted to go four years in the service, and all the same sad story again, "oh boy come home"–well I look at that and say perhaps it would have been a different life for me, yeah. And maybe it wasn't meant for me. It was time for me to go home, she needed someone to give her *`i`o* to. And I didn't regret it at all, now that I look back–would I have been married to this girl I have now or would I have married a military wife? And you know being in the service, I had to stay in the service for twenty years at least. I loved the lifestyle, it was a challenge for me, and I said with all that I see today, I'm glad that I got what I have now! Not rich in monetary, but rich in knowledge, and physically–but the knowledge is so important to give back. So, as I look at that I don't have any regrets from what I have learned and from what I have become. Never thought I would–I always wanted to become a teacher, because my dad is a teacher. And it never–well, the growing up was hard and my mom was single then, we couldn't afford to send to me to further my education. During my highschool, Sophomore, I got back and worked, and as a senior I was singing and stuff, and they hired me at the nightclub weekends–thirty-five dollars a night they used to give me. That was big bucks. That was plenty of money. So I supported my way through school, paid all my tuition and stuff, and when my brother got married he gave me the house he was renting and I took over the house. During my Junior year, I was renting the house all the way through my Senior year. I had my own house–a three bedroom house, upstairs and downstairs–thirty-five dollars a month, five dollars for my telephone and eighteen dollars for my electricity. And every Saturday I used to sing, sometime I would make twenty or thirty dollars and that was how I used to support myself–through my music. So, it was fun, and again luckily it carried on till today and I can still survive in that. Music is a very important part of my life–I respect all artists, I respect all the *kūmu*, the teachers, and just remember the ways of my *kūpuna*–how they want that song to be sung, or imagine that *kūpuna* and just happy and smiling, and the motions and it pours–sometimes it just comes natural, the performance–and with that the audience will notice that it is so much different from what they've ever seen other people perform. Showmenship is one thing, professionalism is another, and when you can sit and *wala`au* about the love of the *kūpuna*, the love of the people, and be thankful for them, for their walk of life, yeah, and sing songs that pertain to that and they would just be a part of you and you just do it together–and that's what I do. And learning from those experiences it has carried me through, and those are the traits that I try to teach the next guys, the next person and stuff and that's what we do–don't try to be someone you are not and

don't put yourself–if you cannot sing the high note, don't do it, of course try, but if you can't then find your own style and do what you do best. But only you can do what you do and nobody else and so –but they say, "no, but I like sing like you." I say, "you cannot be like me, God made only me this way, but he gave you this, and what you have is partly what I wish I had." But I tell them to stay with what they got and improve it, and use it to the max and don't put it away. And then they say okay, and then a couple of years they tell me, "you know uncle, now I realize then, now I realize." Now that is important, now they can teach somebody else–tell somebody else now. There is so much talent, so much talent.

CSH: My brother is so into the Hawaiian culture. He graduated from St. Louis and was taught under *Kūmu* John Lake, and he really took a liking to my brother–and it was just about the time my parents got divorced, so it gave him an opportunity to grab something good in his life. You can stray one way–you can get in trouble or you can do something positive, and *kūmu* really helped him at that time in his life–through the dancing and things like that. He still dances today and he wants to try to make his own *hālau*, and he volunteers his time teaching girls how to dance at all the different highschools. And he grew up singing with the Honolulu Boys Choir–that was one of the extracurricular activities that my mother made him do, which I wish I had done, but I was one of those people who really didn't want to sing–I am really tone deaf, so it is very difficult for me, but my brother no matter how flat he sounds, you know, he has no shame, he going give `em with all his heart. And for that, I have so much respect for him in that manner–he has his own style. He can be singing and can be flat as heck, but you can feel the *mana* and he's just doing his own–and I tell him that's okay, that's his own style, just work on it. He will come full circle one day. He now works with Frank Hewitt–he works at the Waimānalo Health Center doing *ho`oponopono*, and he is very much into that. My brother is getting his Masters in Social Work and he's trying to incorporate the values of *ho`oponopono* into ways of western Social Work–how can you bring the Hawaiian values back to help people who have gone astray.

RH: I think the *ho`oponopono* part of Social Work is so important. It gets right to you–it doesn't, you don't need to read up on it–you just feel it, and you just hear it, and you just come out with it. It's easier to exert all your headaches and all your feelings–to bring it all up. I find the *haole* side way to be hard because you have to dig into it and very few of us are readers in our culture–most of us are feelers–we can feel the *`i`o*, we can feel the *mana*, even sometimes you cannot express in words, but touch, the physical touch is a part of that. Sometimes you find people who are all frustrated and stuff, but you just talk to `em and it's just like you can–they can feel you [inaudible].

CSH: And my brother has a very special connection with people–it takes a very unique person to do Social Work. You have to be able to connect with every one of your cases, but at the same time you cannot bring that burden home with you–or you going get burned out fast. But my brother has a special way of connecting with people, feeling their burden, helping them, and then leaving it there and focusing on his own life, which is so difficult. He is only thirty-one and so I respect him so much for that, he works so hard in every case.

RH: That's good he deserve's it.

CSH: But I thank you very much Uncle for sharing your *mana`o* with me.

RH: Well thank you. I appreciate you coming, more so because I have ties with your family you grew up with and where you are from, and the friendships I have developed with them over the years–and our friendship is still bonded today now that I know more. Was your brother there that night? Didn't he dance?

CSH: Yes, that's the one! Kawena!

RH: Kawena! Yeah, yeah! He is very appreciative. When he first saw me said, "oh uncle, you one of my idols!"

CSH: That's my brother–that's his big thing, "you my IDOL!"

RH: He told me that. We did a song and he danced and he sang and played *`ukulele.*

CSH: Yeah, that's my brother.

RH: He has the right *kūmu* under him–you see these *kūmu* also came from hardship, so they know how to treat and give advice. So now it's about giving to the next generation. Truely a person like that has a very special touch–how to comfort and how to make them stand a ground. All my thoughts when we go overseas–sometimes there are people that you just meet sitting at the airport for two hours and you will be talking and pretty soon you feel like you've known each other for a long time and those people say, "Thank you, where were you all my life? How come I didn't meet you earlier? What you say is so true and I can feel it in my heart and what you have said will allow me to conquer anything." And whatever happens after that comes, but whatever doesn't you know you did the very best and gave it with all the values you have been given. My knowledge never came from me, my thoughts came from the Lord. Whatever you call that entity that is greater than you and I, the creator of all things that's the Lord–you can call him Jesus, call him God or whatever you call him. God only gave us seven churches and that's all he needed–one per day, seven days a week. Man makes its own studies and derive at their own and sometimes churches are so troublesome that they would lead to other followers. But when they let the physical foundation that God has given, and every sacred ground is God's floor, so if you follow the traits and that foundation maybe that's okay–because sometimes you have to become a leader–but two leaders cannot lead one army–so long as you make God that foundation, but if you do not you will be punished. Some have the luxury of all the churches and all this things and all they say–Money, money, money, gee that's all I get, I cannot give anymore money. But some people dedicate their life, but tidings are a part of the law of Jesus Christ. He says give me ten percent, but ten percent is what he asks for and the rest you can keep. Because my ten percent will go to the needs of others who really need it then and there–those are the provisions. When that ten percent becomes a million dollars–where the heck that million dollars went, they question that–that's not yours, once you have given that ten percent, that ten percent is no longer

yours–don't even think about it, that is God's one and whoever misleads that will be punished by God. You can make these comments and stuff–that's human nature, but it doesn't matter. Some people are serious–they jot everything down and they review everything when they get home. They become so confused when they leave–more confused than when they got there. But give my *aloha* to all the family and continue the good work you are doing. Sometimes you get hard time in answers and questions–sometimes people will answer, but open the way for yourself. Make your foundation strong–when talking to any Hawaiian you have to be careful. You have to make yourself *pono* with ke Akua, *pono* with the *`āina*–it's such a blessing–that is your foundation, no matter what you do or where you go. If they don't answer, sometimes you have to change the questions around, come back around. But stay strong!

CSH: Uncle–Mahalo!

____End Interview_____

- This page intentionally blank -

Appendix B

Comments Received During Public Comment Period and Responses

Written comments were received from the following agencies and organizations during the public comment period:

- United States Department of Agriculture, Natural Resources Conservation Service
- State of Hawaii, Department of Land and Natural Resources, Division of Aquatic Resources
- State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division
- State of Hawaii, Department of Land and Natural Resources, Land Division
- State of Hawaii, Department of Transportation
- State of Hawaii, Office of Environmental Quality Control
- State of Hawaii, Office of Hawaiian Affairs
- County of Maui Department of Parks and Recreation
- Native Hawaiian Plant Society

NRCS Natural Resources Conservation Service

USDA United States Department of Agriculture

Our People...Our Islands...In Harmony

210 Imi Kala Street
Suite 209
Wailuku, HI 96793
Ph: 244-3100 ext.3

December 20, 2001

Ms. Torrie Haurez
Na Ala Hele, Trails and Access Program
54 South High Street, Room 101
Wailuku, HI 96793

Dear Ms. Haurez,

SUBJECT: Ohai Trail; TMK: 2-3-00-006

We have no comment as of this time.

Sincerely,

James J. Ino
Soil Conservationist

DIVISION OF AQUATIC RESOURCES - MAUI
DEPARTMENT OF LAND & NATURAL RESOURCES
130 MAHALANI STREET
Wailuku, Hawaii 96793
Phone # (808) 243-5834
February 12, 2002

To: Ms. Torrie Haurez, Trails and Access Specialist

From: Skippy Hau, Aquatic Biologist

Subject: Kahakapao Loop Trail (TMK 2-2-4-016-002)
and Ohai Trail (TMK 2-3-1-003-006)

I reviewed the environmental assessment reports and had no comments.

The proposed plans to improve the trails and protection of native plants will help protect the watershed and reduce runoff. There were no streams in close proximity to these areas.

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

GILBERT S. COLOMA-AGARAN, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWELO
LINNEL NISHIOKA

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

HAWAI'I HISTORIC PRESERVATION DIVISION REVIEW

Log #: 28906
Doc #: 0112CD33

Applicant/Agency:	Torrie Haurez
Address:	Na Ala Hele, Trails and Access System Division of Forestry & Wildlife Department of Land and Natural Resources 54 South High Street, Room 101 Wailuku, Hawaii 96793
SUBJECT:	National Historic Preservation Act Section 106 Review Pursuant to the Hawaii Revised Statutes, Chapter 343 and the Administrative Rules, Title 11, Chapter 200 Pertaining the Draft Environmental Assessment for the Proposed Ohai Trail Construction
Ahupua`a:	Kahakuloa
District, Island:	Wailuku, Maui
TMK:	(2) 3-1-03:006

1. We believe there are no historic properties present, because:
____ a) intensive cultivation has altered the land.
____ b) residential development/urbanization has altered the land.
____ c) previous grubbing/grading has altered the land.
____ d) an acceptable archaeological assessment or inventory survey found no historic properties
_U_ e) other: Based on the submitted Draft Environmental Assessment, we understand the direct impacts of the proposed undertaking are minimal, as they will follow an existing trail. However, in the event historic remains (human skeletal remains, etc.) are inadvertently encountered during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional damage, and the State Historic Preservation Office needs to be contacted immediately at 243-5169, on Maui, or at 692-8023, on O`ahu.

_U_ Thus, we believe that "no historic properties will be affected" by this undertaking.

2. This project has already gone through the historic preservation review process, and mitigation has been completed ___.

Don Hibbard, Administrator
State Historic Preservation Division

Date: 1/12/02

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
54 South High Street, Room 101
Wailuku, Hawaii 96793-2198

AQUACULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATI
CONSERVATION AND
RESOURCES ENFORCEMEN
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMEN

MEMORANDUM

DATE: January 18, 2002

TO: Robert Hobdy, District Manager, DOFAW

ATTEN: Torrie Haurez, Na Ala Hele

FROM: Jason K. Koga, District Land Agent J. Koga

SUBJECT: Kahakapao Loop Trail and Ohai Trail Draft Environmental Assessments

The Maui District Land Office has the following comments in regards to the subject matter:

1. The Kahakapao Loop Trail appears to be within the Resources Subzone of the Conservation District. A Conservation District Use Application may be required.

2. The Ohai Trail appears to be within the General Subzone of the Conservation District. A Conservation District Use Application may be required.

3. The cover memorandum for the Ohai Trail references the Lahaina District. The Wailuku District should be referenced instead.

Thank you for allowing us to review and comment on the subject matter.

c: Maui Board Member
Central Files
District Files

NA ALA HELE
Hawaii Trail & Access System

MEMORANDUM

DATE: January 25, 2002

TO: Robert Hobdy, District Manager, DOFAW

ATTEN; Jason K. Koga, District Land Agent

FROM: Torrie Haurez, Na Ala Hele, Trails and Access Specialist

SUBJECT: Kahakapao Loop Trail and Ohai Trail Draft Environmental Assessments

Thank you for your comments on the Kahakapao Loop Trail and Ohia Trail Draft Environmental Assessments.

You will find a copy of the memorandum by Gilbert S. Coloma-Agaran, Chairperson, BLNR enclosed. This memorandum addresses the need for DLNR divisions to perform Conservation District Use Applications which states, "...For work on existing DLNR Conservation lands, the Divisions would not be required to obtain a new CDUA..."

Thank you for pointing out the error regarding the Lahaina District instead of the Makawao District on the Ohai cover memorandum.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

Enclosure

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
P.O. BOX 621
HONOLULU, HAWAII 96809

AQUACULTURE DEVEL
PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN
CONSERVATION AND
RESOURCES ENFC
CONVEYANCES
FORESTRY AND WILDL
HISTORIC PRESERVAT
LAND DIVISION
STATE PARKS
WATER RESOURCE MA

Ref.:PB:SL

MEMORANDUM:

TO: Divisions

FROM: Gilbert S. Coloma-Agaran, Chairperson

SUBJECT: Procedures for Review of Department of Land and Natural Resources Initiated Projects on Conservation District Lands

This memorandum is being written to clarify the Department's position regarding division-wide compliance with Chapter 183C, Hawaii Revised Statutes (HRS).

In May 1992, former DLNR Director, Bill Paty, issued a memorandum to the Divisions and Offices of the DLNR to clarify procedures for review of Department-initiated projects on Conservation District Lands (attached).

That memorandum essentially transferred regulatory powers from the former Office of Conservation and Environmental Affairs (OCEA) (the zoning authority for all Conservation lands) to each DLNR division. The basic logic was that the Department was mandated to carry out particular functions and that processing CDUAs through OCEA was duplicative and counterproductive. This effort was not fully implemented and the Planning Branch of the Land Division (formally OCEA) continues to process applications for some Department-initiated projects.

Chapter 183C, HRS was established to regulate the use of all conservation lands in the State, government or private. Title 13-5, Hawaii Administrative Rules gives the Department the specific regulatory authority to do this.

The law does not specify or designate a particular office to act as the sole regulatory authority.

All Divisions must adhere to the processes and guidelines of Chapter 183C, HRS and Chapter 343, HRS (Hawaii's environmental law). However, we believe that this can be accomplished more efficiently by deferring these functions to the respective Divisions for projects which they are mandated to do. This will allow Divisions to operate more efficiently and will not compromise the public's due process rights to participate in the permit and decision-making process. Each Division would comply with Chapters 183C, Chapter 343, HRS, and Title 13-5, HAR, and would be responsible for developing its own procedures for compliance. Land Division, Planning Branch would provide comments on the action(s), when asked.

For work on existing DLNR Conservation lands, the Divisions would not be required to obtain a new CDUA (Reference Section 13-5-22, HAR), but would be required to comply with other applicable State requirements, such as 343, HRS. Chapter 13-5, HAR provides for "allowable" uses within existing non-conforming facilities and also for facilities that have been approved under an existing CDUP. Sections 13-5-22 (P-9 & 10) and 13-5-23 (L-7), HAR address and provide for these uses.

For new parks, forest reserves, harbors or significant expansion of existing facilities, the Land Division Planning Branch would continue to process all CDUAs. Any action by a DLNR Division to obtain an authorization for the establishment of a new facility on pubic land should be administered by a third party, such as the Land Division, Planning Branch. As such, when there is a plan to establish a new park, forest reserve or harbor on public land, it would be done through a CDUA/Executive Order processed through the Land Division Planning Branch.

Actions to establish Forest or Watershed Partnership projects or trails, involving non-public lands but sponsored by DOFAW, may be administered by DOFAW provided that all applicable requirements under Chapters 183C and 343, HRS and Title 13-5, HAR are met.

As noted in the May 1992 memorandum, it is incumbent upon every affected division to set up a system for the preparation of environmental review documents and the

solicitation of comments by other divisions, government agencies and appropriate citizen groups, much in the same way the Planning Branch does. In addition, each division would be required to address criteria in 13-5-30(c), HAR, in their process.

The Land Division, Planning Branch is always available for training, advice, or instruction on the permitting process.

CO:DLH:dc

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

May 29, 1992

MEMORANDUM

TO: Divisions and Offices

FROM: William W. Paty, Chairperson

SUBJECT: Procedures for Review of Department-Initiated Projects on Conservation District Lands

---

The Department of Land and Natural Resources ("DLNR") is responsible for implementing various government programs which impact conservation district lands. Presently, government programs are processed via a two-track system:

1) the line division responsible for implementing a government program processes a particular project through the environmental review procedure and consults with the other divisions and affected governmental agencies before submitting the project for review and approval to BLNR; and

2) OCEA also processes the particular project by consulting with the other divisions and affected governmental agencies and submits the project for review and approval to the BLNR as a permitted use under our conservation district rules.

This procedure has created duplication of efforts between the line divisions and OCEA and has inhibited the implementation of government programs by DLNR. Further, with the loss of the Planning Office in DLNR, there is no need to centralize certain planning and environmental review processes in OCEA but rather place these functions with the line division responsible for implementing the government program. Due to increasing demands on our staff and the need to coordinate processing of DLNR programs affecting conservation lands within DLNR, the following procedure shall be instituted.

When dealing with DLNR programs, the line divisions shall be responsible for the entire processing of a particular project from submittal to the BLNR for review and approval. DLNR programs are those government programs the department is charged to implement. This procedure shall not apply to projects for the use of State/conservation lands initiated by private parties or other State or governmental agencies. Further, this procedure shall not apply in those instances where DLNR is acting in its proprietary capacity (i.e. leasing of State lands to private parties).

...not included in discussion with Dana Hanna

The line division shall be responsible for undertaking the environmental review process under chapter 343, Hawaii Revised Statutes, and the consultation with the divisions, other governmental agencies, and appropriate citizen groups before submitting the project to BLNR for review and approval. This includes the resolution of conflicts and the mitigation of adverse impacts discovered as a result of the environmental review and consultation process prior to BLNR review.

OCEA shall no longer be responsible for processing the government project under a conservation district use application but shall serve as a commenting division to the line division regarding conservation district matters. The DLNR project shall be processed as a government/permitted use under the conservation district administrative rules by the line division which shall be responsible for submitting conservation district considerations to BLNR for their review and approval including the determination of the DLNR project's permitted/government use status.

After completion of the chapter 343 process and after consultation with the divisions, governmental agencies and appropriate citizen groups, the line divisions shall present the DLNR project for review and approval to the BLNR. This procedure will eliminate the duplication of environmental review posed by the EIS and CDUA processes. Further, the responsibility for planning and coordination of the DLNR project will lie with the line division responsible for the project which will insure better accountability and streamline the review process.

It is incumbent upon every affected division to set up a system for the preparation of environmental review documents and the solicitation of comments by the divisions, governmental agencies, and appropriate citizen groups. I have asked OCEA to provide a training session for all divisions to assure that we are not losing any of the coordination and consultation services this office provides. Further, I have asked OEQC to also provide a training session on how to prepare environmental review documents.

BENJAMIN J. CAYETANO
GOVERNOR

BRIAN K. MI
DIRE—D

DEPUTY D IC
Jean N. M. UI
JADINE Y. UR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
MAUI DISTRICT
650 PALAPALA DRIVE
KAHULUI, HAWAII 96732

IN REPLY REF
HWY-M2 5

December 11, 2001

MEMORANDUM

TO: **Torrie Haurez**
Na Ala Hele - Hawaii Trail & Access System

FROM: **Paul M. Chung**
State Highways

SUBJECT: **Draft Environmental Assessment for Ohai Trail**
Kahakuloa, Maui, Hawaii

Thank you for the opportunity to review and comment on the Draft Environmental Assessment. Based upon our review, this project will not have any significant impacts to our facilities, therefore, we have no objection to the project.

If there are any questions or concerns, please call me at 873-3535.

/pmc

BENJAMIN J. CAYETANO
GOVERNOR

GENEVIEVE SALM
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186

January 22, 2002

Mr. Gilbert Coloma-Agaran, Chair
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Coloma-Agaran:

Subject: Draft Environmental Assessment for the Ohai Trail, Maui

Thank you for the opportunity to review the subject document.

1. Please provide a site plan map that shows the proposed trail, informal parking areas and exclosures.

2. Please describe if DLNR plans to build any formal parking lots in the future. Are the existing informal parking areas adequate for bus parking?

3. Please consult with community groups and adjacent landowners about the proposed plans.

4. Please assess the cultural impacts of this project. What are the impacts of this project on access to the nearby fishing grounds?

5. Please list the mitigation measures that DLNR will take to minimize fires in this dry area. What mitigation measures are planned for minimizing the spread of alien pest species?

6. Please provide your reasons for the finding of no significant impact in accordance with the criteria listed in section 11-200-12 of the EIS Rules (See attached example.)

7. Please provide a list of all the permits that would be required for this project.

Should you have any questions, please call Jeyan Thirugnanam at 586-4185.

Sincerely,

Genevieve Salmonson
Director

From: Mokulele Highway/Puunene Bypass final EA (1997)

DETERMINATION, FINDINGS AND REASONS FOR SUPPORTING DETERMINATION

SIGNIFICANCE CRITERIA: According to the Department of Health Rules (I 1-200-12), an applicant or agency m determine whether an action may have a significant impact on the environment, including all phases of the project, t expected consequences both primary and secondary, its cumulative impact with other projects, and its short and lo..g term effects. In making the determination, the Rules establish "Significance Criteria" to be used as a basis for identifying whether significant environmental impact will occur. According to the Rules, an action shall be determ ı to have a significant impact on the environment if it meets any one of the following criteria:

(1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resources;

The proposed project will not impact scenic views of the ocean or any ridge lines in the area. The visual character the area will change from the current agricultural land to an improved 4-lane highway which is compatible with t e surrounding land use plans and programs being implemented for the region. The highway corridor is comprised of "Prime" agricultural land which is an important resource. Development of drainage systems will follow established design standards to ensure the safe conveyance and discharge of storm runoff. In addition, the subject property i located outside of the Count's Special Management Area (SMA).

As previously noted, no significant archaeological or historical sites are known to exist within the corridor. Shou l any archaeologically significant artifacts, bones, or other indicators of previous onsite activity be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements the Department of Land and Natural Resources.

(2) Curtails the range of beneficial uses of the environment;

Although the subject property is suitable for agricultural uses, the land area adjoining the Mokulele Highway is naturally suited for transportation purposes due to its location proximate to an existing highway system. To return site to a natural environmental condition is not practical from both an environmental and economic perspective.

(3) Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapt 344, HRS; and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed development is consistent with the Environmental Policies established in Chapter 344, HRS, and the National Environmental Policy Act.

(4) Substantially affects the economic or social welfare of the community or state;

The proposed project will provide a significant contribution to Maui's future population by providing residents w..h the opportunity to "live and work in hannony" in a high quality living environment. The proposed project is designe to support surrounding land use patterns, will not negatively or significantly alter existing residential areas, nor v ll unplanned population growth or its distribution be stimulated. The project's development is responding to projec..c population growth rather than contributing to new population growth by stimulating in-migration.

(5) Substantially affects public health

Impacts to public health may be affected by air, noise, and water quality impacts, however, these will be insignifi n not detectable, especially when weighed against the positive economic, social, and quality of life implications associa with the project. Overall, air, noise, and traffic impacts will be significantly positive in terms of public health as compared to the "no action" alternative.

(6) Involves substantial secondary impacts, such as population changes or effects on public facilities

...ting and planned large-scale housing development projects within Wailuku-Kahului and Kihei will contribute t

improvements will become necessary as the overall population of Maui grows and settlement patterns shift. However, the proposed project will not in itself generate new population growth, but provide needed infrastructure the area's present and future population.

In addition, new employment opportunities will generate new sources of direct and indirect revenue for individuals and the County of Maui by providing both temporary and long-term employment opportunities during the construction period. Indirect employment in a wide range of service related industries will also be created from construction during project development.

(7) **Involves a substantial degradation of environmental quality;**

The proposed development will utilize existing vacant agricultural land. With development of the proposed project, the addition of urban landscaping will significantly mitigate the visual impact of the development as viewed from outside the site while the overall design will complement background vistas.

Makai views from the subject property are available, however, they are not significant nor generally, available to the public in the property's present restricted condition.

(8) **Is individually limited but cumulatively has considerable effect on the environment, or involves a commitment for larger actions;**

By planning now to address the future needs of the community and the State, improvement of the transportation system is consistent with the long term plans for Maui. No views will be obstructed or be visually incompatible with the surrounding area.

(9) **Substantially affects a rare, threatened or endangered species or its habitat;**

No endangered plant or animal species are located within the highway corridor.

(10) **Detrimentally affects air or water quality or ambient noise levels;**

Any possible impact to near-shore ecosystems resulting from surface runoff, will be mitigated by the establishment of on-site retention basins during the construction phases of development. After development, retention areas within the highway right-of-way will serve the same function to encourage recharge of the groundwater.

(11) **Affects or is likely to suffer damage by being located in an environmentally sensitive area, such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal waters.**

Development of the property is compatible with the above criteria since there are not environmentally sensitive areas associated with the project and the physical character of the corridor has been previously disturbed by agricultural uses. As such, the property no longer reflects a "natural environment". Shoreline, valleys, or ridges will not be impacted by the development.

(12) **Substantially affects scenic vistas and view planes identified in county or state plans or studies;**

Due to topographical characteristics of the property, views of the area to be developed are generally not significant although they are visible. The majority of the proposed project will not be visible, except from higher elevations by the general public or from persons traveling along the highway.

(13) **Requires substantial energy consumption.**

The location of the proposed project is between Maui's major growth areas. This relationship will reduce travel times and energy consumption after project build out through efficiencies gained by the increased capacity of the highway.

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

Ms. Genevieve Salmonson
Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, HI 96813

Re: Draft Environmental Assessment for the Ohai Trail, Maui

Dear Ms. Salmonson:

Thank you and your staff for taking the time to review the Draft Environmental Assessment for the proposed Ohai Trail on Maui, published in the December 2001 OEQC Bulletin.

In response to your comments:

1) *Please provide a site plan map that shows the proposed trail, informal parking areas and exclosures.*

A site plan map is attached and included in the Final Environmental Assessment as Exhibit 3 that shows the proposed trailhead area and planned parking area. The existing exclosures are marked on the attached map and included as Exhibit 1 of the Final Environmental Assessment.

2) *Please describe if DLNR plans to build any formal parking lots in the future. Are the existing informal parking areas adequate for bus parking?*

Informal parking for approximately five passenger cars along the broad road shoulder is currently available. The existing informal parking areas would not provide sufficient parking for large buses; however, it would support passenger vans. Na Ala Hele staff do not currently anticipate large buses coming to the trailhead. In the future, paving to provide for additional parking will be developed in cooperation and further discussion with the Department of Transportation – Highways Division. This would most likely entail paving adjacent to the roadway rather than a formal parking lot.

3) *Please consult with community groups and adjacent landowners about the proposed plans.*

During preparation of the cultural impact assessment, an attempt was made to contact present and former residents of Kahakuloa, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in

the vicinity of the Ohai Trail project area. Three individuals were identified and formally interviewed, and other community members shared valuable information. Aside from the State of Hawaii, the primary landowner in the area is Maui Land and Pineapple, who has been consulted. Finally, the proposed trail has been discussed at several Na Ala Hele Advisory Council meetings.

4) *Please assess the cultural aspects of this project. What are the impacts of this project on access to the nearby fishing grounds?*

A Cultural Impact Assessment was prepared for the project by Cultural Surveys Hawai'i, Inc. and the full report is now included as Appendix A of the Final EA. Historic research of the project area was carried out to identify any cultural resources or traditional practices associated with the area encompassing the proposed trail corridor and surrounding vicinity. An attempt was made to contact present and former residents of Kahakuloa, as well as various organizations regarding cultural knowledge, land use history, cultural sites and traditional Hawaiian or other cultural practices in the vicinity of the Ohai Trail project area. Three individuals were identified and formally interviewed, and other community members shared valuable information.

Historic research of the Kahakuloa area indicated that Kahakuloa was one of five population centers on the island of Maui, most noted for the cultivation of wetland taro. At the time of the Mahele, there were 154 applications for quiet title to land in Kahakuloa, of which only 75 were awarded. Majority of the kuleana lands were awarded in Kahakuloa Valley with a few isolated LCAs in the mauka regions. Kahakuloa Valley is located approximately three miles east of the proposed Ohai Trail project area.

Previous archaeological study areas in Kahakuloa are dispersed in and around Kahakuloa Valley, as well as a few isolated mauka areas. However, there are no documented archaeological sites identified in the immediate vicinity of the Ohai Trail area.

Two burial grounds have been documented at Kahakuloa Gulch and Honanana Gulch, but no burials have been identified in or near the Ohai Trail corridor. Given the rocky terrain of the project area and its isolated location, the possibility of inadvertent burials is unlikely.

One traditional cultural practice was identified in the vicinity of the project area. Gathering marine resources is an ongoing tradition for local residents of Kahakuloa. Kama'aina are known to frequent the shores off the Ohai Trail project area to fish for uhu, enenue, mu'ulua, akule, and occasionally when conditions are right, opihi and pupu picking is possible. Based on consultation with residents and fishermen in the area, construction of the trail will not restrict public access to gather marine resources.

Although a community of Ohai (*Sesbania tomentosa)* is present makai of the Ohai Trail project area, there is no indication of any ongoing gathering of the Ohai flower. As noted earlier, the Ohai shrub is rare and kama'aina mentioned that poor weather conditions make it difficult for the flowers to grow to full maturity and that ohai picking for lei making is very rare.

There also appears to be no continued or ongoing hunting practices noted in the vicinity of the Ohai Trail project area. Furthermore, no traditional Hawaiian trails were identified as traversing the proposed trail corridor, and no cultural properties have been documented or identified in the immediate vicinity of the project area.

Chapter 6E, Hawaii Revised Statutes law will be followed in developing and managing the trail. If any historical sites, burials, artifacts or other structures are found on or within sight of the trail, all appropriate parties, including the State Historic Preservation Division, will be notified immediately, and trail construction will halt. If necessary, appropriate management and mitigation measures will be taken immediately.

5) *Please list the mitigation measures that DLNR will take to minimize fires in this dry area. What mitigation measures are planned for minimizing the spread of alien pest species?*

DOFAW recognizes that the threat of fire may increase with more frequent visitor use to this area. Signage and regular maintenance of the trail and routine inspections will initially be implemented to minimize the risk of fire. If these measures are not sufficient, Na Ala Hele staff will work with other DOFAW staff to implement additional fire prevention measures.

To minimize the spread of alien species, trail volunteers will be instructed about invasive weed species and methods to prevent the introduction and spread of invasive plants during and after construction.

6) *Please provide your reasons for the finding of no significant impact.*

The anticipated Finding of No Significant Impact is based on the evaluation of the project in relation to the following criteria identified in the Hawai'i Administrative Rules § 11 -200-12.

1. *Involves an irrevocable commitment to loss or destruction of any natural or cultural resource.*

The proposed trail will not impact the visual character of the area. The trail is compatible with the surrounding land use plans and programs being implemented for the region. The trail is located within the Kahakuloa Game Management Area, which is public land, and will increase general accessibility to the area for the public.

The Ohai Trail is anticipated to enhance public appreciation for rare native plants, through interpretive signage and possible exposure to Ohai (*Sesbania tomentosa*). No archaeological or historical sites are known to exist within the trail corridor. Should any archaeologically or culturally significant artifacts, bones, or other indicators of previous onsite activity be uncovered during the construction phases of development, their treatment will be conducted in strict compliance with the requirements of the Department of Land and Natural Resources, State Historic Preservation Division.

2. *Curtails the range of beneficial uses of the environment.*

The trail will expand the range of beneficial uses within the environment by increasing recreational opportunities in the Kahakuloa area. Appropriate public access to and use of the area will be increased.

3. *Conflicts with the state's long term environmental policies or goals and guidelines as expressed in Chapter 344, Hawai'i Revised Statutes.*

The proposed development is consistent with the Environmental policies established in Chapter 344, HRS, and the National Environmental Policy Act.

4. *Substantially affects the economic or social welfare of the community or state.*

The proposed project is not expected to substantially affect the economic or social welfare of the community or State. The proposed project is designed to support surrounding land use patterns, will not negatively or significantly alter existing residential areas, and will not stimulate unplanned population growth or distribution. Funds for implementation are coming from normal government operational budgets and volunteer labor. Social impacts are expected to be positive, as the project's development is in response to public requests for increased hiking opportunities. Use of the trail by commercial operators may result in some economic benefit to the State and to the community as a whole.

5. *Substantially affects public health.*

The proposed project will provide a contribution to Maui's future population by providing residents with the opportunity to improve their general health and well-being by exercising and enjoying the natural beauty of the Kahakuloa area. The activities associated with hiking trails work to dramatically increase one's health.

6. *Involves substantial secondary impacts, such as population changes or effects on public facilities.*

The proposed project in itself will not generate new population growth, but will provide needed recreational values to the area's present and future population. No public facilities will be impacted.

7. *Involves a substantial degradation of environmental quality.*

The proposed trail will utilize existing undeveloped State lands within the Kahakuloa Game Management Area that are not open for hunting. The overall design of the project will complement the general use of the area. The trail itself and the associated trailhead improvements (scenic overlook, guardrails, and picnic table) will have a small footprint and are not expected to result in a substantial degradation of environmental quality. Any endangered species found in the project area will be protected from harm during and after construction.

8. *Is individually limited, but cumulatively has considerable effect upon the environment or involves a commitment for larger actions.*

Construction and use of the planned trail is not anticipated to have a cumulative impact on the environment, nor is it a commitment for larger actions. Increasing the number of recreational opportunities and improving the Na Ala Hele trails system is compatible with the long-term goals of the State.

9. *Substantially affects a rare, threatened or endangered species or its habitat.*

There are no rare, threatened or endangered species within the trail corridor. There is a cluster of Ohai plants (*Sesbania tomentosa*) in the vicinity of the trail. An exclosure fence has already been constructed to protect this plant population from feral animals and from humans. As proposed, construction of the Ohai Trail is not anticipated to substantially affect rare, threatened or endangered species or their habitat.

10. *Detrimentally affects air or water quality or ambient noise levels.*

Due the terrain in the project area and the nature of the trail and associated improvements, there is not anticipated to be any impact to near- shore ecosystems resulting from surface runoff. All construction activities will incorporate DOFAW's Best Management Practices for Maintaining Water Quality. Some noise will be generated during trail construction; however, this activity will take place only during daylight hours, far from any residential area, and is anticipated to be minimal. Impacts will be significantly positive in terms of public health and enjoyment as compared to the "no action" alternative.

11. Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

Development of the trail is compatible with the above criteria since the project area is not in a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water or coastal waters. Moreover, development of the trail is not likely to harm environmentally sensitive areas, because the project area was designated as Territorial Pasture and used for grazing for nearly 40 years.

12. Substantially affects scenic vistas or view planes identified in county or state plans or studies.

Due to the rolling topography of the area and existing vegetation, the majority of the trail will not be visible from the roadway. No views will be obstructed or be visually incompatible with the surrounding area. Construction of the trail will open up new scenic vistas of the ocean and of the West Maui Mountains for the public along the trail.

13. Requires substantial energy consumption.

Construction of the proposed trail will not require substantial energy construction. Na Ala Hele is a volunteer program, and the general public is anticipated to provide the manual labor. After completion of construction, there will be minimal demand for energy use, limited to periodic maintenance efforts.

7) Please provide a list of all permits that would be required for this project.

Construction of the project requires approval by the Board of Land and Natural Resources. No other permits are anticipated.

The Final Environmental Assessment has been revised to reflect the above information. If you have any future questions or concerns about this project, please feel free to contact me at (808) 873-3508.

Sincerely,

Torrie Haurez

Torrie Haurez
Maui Na Ala Hele, Trails and Access Specialist

Encl

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD02-465

January 25, 2002

Ms. Torrie Haurez
Na Ala Hele Trails and Access Program--Maui District Office
54 South High Street, Room 101
Wailuku, HI 96793

Subject: Draft Environmental Assessment for Construction and Public Use of the Ohai Trail, Kahakuloa, Maui

Dear Ms. Haurez:

Thank you for the opportunity to comment on the above referenced project.

The Office of Hawaiian Affairs requests that the final EA adequately address cultural resources. The draft EA does not have a cultural impact statement, as required by Act 50, SLH 2000. While the draft EA states that traditional Hawaiian gathering has occurred in the Makawao Forest Reserve, the document fails to assess the project's impact on these practices, or to propose mitigation measures. The preparer of the cultural impact statement should consult with Native Hawaiian individuals and organizations to determine the impact of the trail on cultural practices. The final EA should include a discussion of the methods used to identify and select persons with knowledge of cultural practices and the results of consultation with them.

If you have questions, please contact Sharla Manley, policy analyst at 594-1944 or email her at sharlam@oha.org.

Sincerely,

Colin C. Kippen Jr.

Colin C. Kippen, Jr.
Deputy Administrator

cc: Board of Trustees
Clyde W. Namu'o, Administrator
Maui CAC

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

GILBERT S. COI
CHAIRPERSOI
BOARD OF LAND AND NATUR

DEPUTY DIR
ERIC T. H R

AQUACULTURE D E
PROGRAM
AQUATIC RESOUI
BOATING AND OCEAN
CONSERVATION AND
ENVIRONMENTAL
CONSERVATION
RESOURCES
CONVEYANCES
FORESTRY AND WILD
HISTORIC PRESERVAT
LAND MANAGEMENT
STATE PARKS
WATER AND LAND

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 31, 2002

Colin C. Kippen, Jr.
Deputy Administrator
State of Hawaii
Office of Hawaiian Affairs
711 Kapi'olani Boulevard, Suite 500
Honolulu, Hawaii 96813

Subject: Reference HRD02-465, Draft Environmental Assessment for Construction and Public Use of the Ohai Trail, Kahakuloa, Maui

Representative Mr. Kippen, Jr.,

Thank you for taking the time to read and respond to the Ohai Trail DRAFT Environmental Assessment (EA). This is the first EA I have written and am learning very quickly the complexities of the procedure. I appreciate your careful review and your offer of assistance by Ms. Manley concerning my questions. I will be contacting her for information regarding the creation of the cultural assessment and the proper procedures to fulfill the requirements of Act 50, SLH 2000.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez

Torrie Haurez
Na Ala Hele, Trails and Access Specialist

JAMES "KIMO" APANA
Mayor

FLOYD S. MIYA
[

GLENN T. CC
Deputy [

(808) 27
Fax (808) 27

DEPARTMENT OF PARKS & RECREATION

1580-C Kaahumanu Avenue, Wailuku, Hawaii 96793

February 7, 2002

Ms. Torrie Haurez
Na Ala Hele, Trails and Access Program
54 South High Street, Room 101
Wailuku, Hawaii 96793

Dear Ms. Haurez:

SUBJECT: OHAI TRAIL, MAUI, HAWAII
TMK: 2-3-1-003-006

Thank you for the opportunity to review the Draft Environmental Assessment for the Ohai Trail project. We are in support of the proposed project.

If there are any questions, please contact me or Mr. Patrick Matsui, Chief of Parks Planning and Development, at 270-7387.

Sincerely,

FLOYD S. MIYAZONO
Director

c: Patrick Matsui, Chief of Planning and Development

NATIVE HAWAIIAN PLANT SOCIETY
PO BOX 5021
KAHULUI, HI 96733-5021

January 31, 2002

Ms. Torrie Haurez
Na Ala Hele, Trails and Access Program
54 South High Street, Rm 101
Wailuku, HI 96793

Dear Ms. Haurez,

The Native Hawaiian Plant Society Board of Directors and members have discussed the Draft Environmental Assessments (DEA's) prepared for the proposed Ohai Trail and the Kahakapao Loop Trail. Here are our comments.

Ohai Trail: We are very happy to see the development of a new hiking area, especially with the chance to observe endangered native plants along the trail. The Ohai exclosure near the trail is very important to us. We appreciate that you have taken the time to give additional protection to this very rare native plant. We are happy to be involved with the exclosure, having pledged to weed the exclosure once a year and to be open to discussing other projects in the area.

As the trail will hopefully attract many visitors, we urge you to include information in your signage about the native plant communities found along the trail. In addition, a trail guide such as that made for the Waihee Ridg trail would be very useful. We also urge you to make ample safe parking one end of the trail and instruct the public to return along the trail rather than on the highway.

Kahakapao Loop Trail: Here, we are happy to see public access to this large upland forest for non-hunters. We agree that the area will provide opportunities for nature study, photography and hiking. We urge that yo trail care program provide for identification and monitoring (leading to

eradication) of weeds and invasive alien species. We understand that hikers can bring in weeds inadvertently and urge you to make sure that new weeds do not become established along the trail. Further, we urge that the area be managed for native species restoration where appropriate. We realize that much of the area is plantation forest, but areas with a native plant community should be managed to restore it. We especially urge that the trail give wide clearance to any really rare plant species as this could prevent accidental trampling or vandalism. We hope that your signage will educate hikers about the plants and history of the area. We expect that they will instruct hikers to stay on the trail. Here, too, we would like to see a trail guide. On access, please clarify where the public will access the trail. The walk up Kahakapao Road from the gate is at least one-half mile on a steep, dangerous road. Because of the steepness, automobiles would have a difficult time avoiding walkers. We urge that this access not be used.

Finally, we urge you to make adequate parking for all types of users. This trail may not have commercial users but it will be popular with the public.

We are delighted that Na Ala Hele is providing two new hiking opportunities on Maui.

Sincerely,

Linda Nelson

Linda Nelson, President
Native Hawaiian Plant Society

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

TIMOTHY E. JOHNS
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY DIRECTOR
JANET E. KAWELO

AQUACULTURE DEVELOPMENT PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND ENVIRONMENTAL AFFAIRS
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
54 SOUTH HIGH ST., ROOM 101
WAILUKU, HAWAII 96793-2198

January 31, 2002

Ms. Linda Nelson, President
Native Hawaiian Plant Society
P. O. Box 5021
Kahului, Hawaii 96733-5021

Ms. Nelson,

Thank you for taking the time to read and respond to the Ohai and Kahakapao Loop Trail DRAFT Environmental Assessments. The following is a response to your comments made as a result of the public review period.

Ohai Trail: Signage developed for the Ohai Trail will be done with an emphasis towards education/interpretation of native coastal strand vegetation. We look forward to working closely with the Native Hawaiian Plant Society in developing these signs and discussing the possibility of an interpretive brochure.

At this time, there are no plans to increase the ample parking sites located at the trailheads. Hikers will be encouraged to return to their vehicles along the trail.

Kahakapao Loop Trail: The Department of Land and Natural Resources, Division of Forestry and Wildlife is currently studying this area of the Makawao Forest Reserve to increase the public parking area. The areas currently being utilized would still be optional along with the expanded parking area inside the Reserve boundary. Work on this project is proceeding according to plan and will alleviate future parking congestion.

The sign on the Kahakapao Road gate states, "This gate may be locked at any time." Those who do not heed the warning stand the chance of having their vehicle locked inside. It is recommended that all vehicles park outside of the gate to avoid this possibility. Although there is very little traffic past the gate, foot traffic should stay well off the road to avoid mishaps with cars.

We invite the Native Hawaiian Plant Society to draft a proposal for an interpretive brochure for this trail. Safety, spread of non-native plants and hiker etiquette are important topics that can be expounded upon in a brochure along with information about the remnant native plant species. Signage for this area may include warning signs about;

hunters in the area, all pets must be leashed, do not litter, and other hazard of the area. There are no really rare plant species in the immediate vicinity of the proposed trail.

If you have any further questions or comments, please contact Torrie Haurez of the Division of Forestry and Wildlife at 873-3508.

Sincerely,

Torrie Haurez

Torrie Haurez
Na Ala Hele, Trails and Access Specialist