

**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawaii**

August 12, 2010

180-Day Exp. Date: September 6, 2010

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

REGARDING: Conservation District Use Application (CDUA) HA-3539
for a Single Family Residence (SFR) & Related
Improvements

**APPLICANT/
LANDOWNER:** Joan M. Shafer

LOCATION: Waawaa, Puna, Hawaii
TMK: (3) 1-4-028:001

AREA OF PARCEL Approximately (\approx) 0.392-acre/18,255-ft²

USE: \approx 7,250 ft²

SUBZONE: Resource

DESCRIPTION OF AREA AND CURRENT USE

Waawaa exists in the Puna District on the east side of the island of Hawaii on the flank of Kilauea, an active volcano. The 177-lot Waawaa Subdivision was created in 1958. Waawaa can be characterized as under developed with unimproved gravel roads and scattered houses. About 25% of the subdivision has residences on them.

The property is sited on the makai side of the Government Beach Road. The .392-acre property is vacant and unused. It is bounded by a beach reserve parcel held in common by the subdivision owners on the makai side (northeast), the government Beach Road is mauka (southwest). To the northwest is the State Nanawale Forest Reserve and to the southeast is a privately owned parcel.

The subject parcel noted as TMK: (3) 1-4-028:001 is approximately .392-acres (18,255-ft²) and lies within the Resource subzone of the Conservation District. According to the State Land Use Commission, the Conservation/Agricultural District boundary parallels the shoreline at about 300-feet along this particular coast (**Exhibit 1 & 2**).

According to the application, property elevations measured indicate that the lowest corner on the seaward side is \approx 31-feet above mean sea level. The shoreline (top of pali) is \approx 50-feet from the property. The coast fronting the beach reserve consists of rocky cliffs and pahoehoe shelves. Soil in the area is predominately pahoehoe and a'a lava, with high permeability with limitations (poor agricultural use) due to their stony nature. The project site does not appear to be subject to subsidence, landslides or other forms of mass wasting.

The area receives \approx 110 inches of rain annually with a mean annual temperature of 75 °F. The project area is exposed to moderate trade winds that provide excellent air quality. During periods of Kona winds, portions of the Puna district are impacted by vog, a form of sulfuric air pollution, from nearby Kilauea volcano. Due to the rural nature and minimal human activities, noise in the area is low and from natural sources such as wind and surf.

According to the Atlas of Natural Hazards in the Hawaiian Coastal Zone¹, the Nanawale shoreline under goes periodic morphologic changes due to tectonic and seismic activity associated with Kilauea Volcano. High waves are common along the rugged coastal cliffs making it dangerous for fishermen. The Overall Hazard Assessment for the subject area is moderately high. This coast is in lava flow hazard zone 2 on a scale of 9 to 1 with 1 being the most hazardous. The threat of tsunami and volcanic/seismic hazard is high due to the proximity to great seismic activity associated with Kilauea volcanism. The entire island of Hawaii is rated Zone 4 Seismic Probability Rating, areas at risk from major earthquake damage (**Exhibit 3 & 4**).

This area does not have any public infrastructure such as municipal water or sewer service or electricity. Access to the property is through the Old Government Road that is not paved or regularly maintained. The County of Hawaii Civil Defense Agency recognizes that the area is susceptible to wild land fires due to the periodic drought conditions. The Flood Insurance Rate Maps show that the project site is in Flood Zone X, outside of the 100-year floodplain.

The Waawaa coastline is one of the last areas that support a botanically significant lowland littoral forest in the State and is part of kipuka that may harbor genetically distinct population of species. The project site is located in the northwestern corner of the Waawaa Subdivision near the boundary of the 1840 Kilauea lava flow. The beach reserve parcel is overlaid with primarily naupaka that extends into the parcel. Flora on the site was dominated by naupaka in the makai areas with native hala scattered among introduced plants such as octopus tree and wedelia. The site was inspected for biological resources and also to determine if the endangered Hilo beach grass exists on the property. No listed, threatened or endangered flora was observed on the property (**Exhibit 5 & 6**).

Fauna on site that were observed or expected were primarily common exotic birds such as cardinals, doves, sparrows & finches. Mammals in the project area include feral cats and rodents such as mongoose & rats. Migratory sea and shore birds such as Golden

¹ Fletcher, Grossman, Richmond & Gibbs. 2002. Atlas of Natural Hazards in the Hawaiian Coastal Zone. Department of the Interior, USGS.

Plover, Ruddy Turnstone and Wandering Tattler may be observed on the basalt shelf fronting the property.

Several endangered native terrestrial vertebrates may be present in the general area and may fly over, roost, nest, or utilize resources of the property, including the endangered Hawaiian Hawk, the endangered Hawaiian Hoary Bat, the endangered Hawaiian Petrel and the threatened Newell's Shearwater. The marine ecosystem is described as a high-energy coast with limited coral growth with a variety of algae, fish and invertebrates. Marine mammals and reptiles some of them endangered may visit the nearby coastal waters.

The beach reserve parcel provides a setback from the shoreline and an area for residents and the public to walk, fish or gather.

Ocean recreation consists primarily of fishing from the cliffs as the shoreline is rocky and rough. Fishermen and opihi gatherers access the shoreline from a path west of the property. Collection of lauhala may take place in the vicinity, as the hala forest is a resource for weavers. Traditionally, the inhabitants of Puna were noted for the expertise and skill of its lauhala weavers.

There are no known cultural practices that take place on or near the property. During the course of the field survey, an inadvertent discovery of human remains was reported to the State Historic Preservation Division. It is the owner's intent to preserve the remains in place.

PROPOSED USE

According to the application, the proposed residence would consist of a one story single structure occupying a footprint of $\approx 3,488$ ft² with a great room (kitchen dining and living room), master and two bedrooms, covered lanai, study, utility room, 2 bathrooms, and garage. Also proposed is an open-aired garden and pond, driveway, and minimal landscaping comprised primarily of native and Polynesian species common to the area. A water tank, a propane tank, a generator and an enhanced septic system will also be sited as there are no existing utilities that serve the property. The water tank shall be constructed makai of the residence below grade and covered with lawn and landscaping (**Exhibit 7 & 8**).

The structure would be set more than 65-feet inland from the top of the pali, as far inland as feasible, with a finished floor elevation of ≈ 33 -feet above mean sea level. The home shall comply with Chapter 13-5, Hawaii Administrative Rules, Single Family Residential Standards, Exhibit 4. Access will be off of Government Beach Road. The access driveway and parking are proposed to be paved with asphalt cement. Eight hala trees, 3 coconut and five exotic trees are proposed to be removed for home construction. All hala trees shall either be relocated or replaced on site.

Water would be supplied to the home through a water-catchment system. Electricity is proposed to be on-site through the use of roof-mounted photovoltaic panels. Wastewater disposal would be through an enhanced individual wastewater treatment system in conformance with State requirement. Telephone service will be provided by cell phones.

Land clearing and construction activities will take place on about half of the lot (≈ 7250 -ft²) and be restricted to the mauka two-thirds of the property. Construction shall commit to refrain from activities that disturb or remove the vegetation between the months of June and August when Hawaiian Hoary bats may be sensitive to disturbance. Prior to land clearing occurring within the months of March through September, a pre-construction hawk nest search by a qualified ornithologist will be conducted. If Hawaiian hawks are present land clearing will not be allowed until October. All exterior lighting shall be shielded. The applicant has been made aware of the endangered Hilo beach grass near the property in order to identify and avoid trampling in case this grass should emerge elsewhere on or near the property.

The makai area of the parcel (≈ 7420 -ft²) shall be formally recorded as a preservation easement to protect an inadvertent burial. Prior to any construction activities, construction fencing shall delineate this area to protect the area. The site is proposed to be concealed and protected while providing for a safe ground surface. A 6-ft² low (≤ 2 -ft) stacked stone marker on the ground surface directly over the subterranean burial is proposed. Access shall be granted to recognized descendants. All proposed actions regarding this preservation easement and burial shall adhere to Chapter 6E, HRS.

Grading for the driveway and house lot will include best management practices to minimize the potential for sedimentation, erosion and pollution of coastal waters. All earthwork and grading shall be in conformance with County of Hawaii and State regulations. Sound associated with the construction of the improvements will be intermittent and shall be limited to daylight hours. The applicant has proposed a number of conditions and mitigative actions in the EA to minimize the potential impacts of construction and the completed residence to protect and improve the natural and cultural resources on the property.

The proposed action would insert a home between the road and the ocean that could be partially visible from the road. Landscaping the area between the road and the house with hala will partially shield the home from view. According to the Environmental Assessment, the applicant is aware of the potential volcanic, seismic and shoreline hazards of the site in addition to the remote location.

The residence and associated improvements do not appear to adversely affect recreation, as access along the coast will not be affected. According to the applicant, the project site does not appear to support any known traditional resource uses nor are there any traditional Hawaiian customary practices known to be associated with the property. In the event that archaeological resource or human remains are encountered during development activities within the applicant's property, work in the immediate area of the discovery shall be halted and SHPD shall be contacted.

Alternative

With no action, the lot would remain unused. Trash, bulky item dumping could occur. Inappropriate entry to cultural resources could occur. No other alternatives were proposed.

SUMMARY OF COMMENTS

This application was referred to the following agencies for their review and comment: the **Federal Fish & Wildlife Service**; the **State**: Department of Health; Office of Hawaiian Affairs; Office of Environmental Quality Control; Department of Land and Natural Resources Divisions of: Conservation and Resource Enforcement, Forestry and Wildlife, Hawaii District Land Office, Historic Preservation; and the **County of Hawaii**: Department of Planning, the Kanaka Council and Malama O Puna. In addition, this application was also sent to the nearest public library, the Pahoia State Library, to make this information readily available to those who may wish to review it.

Responses were received and have been summarized from the following agencies:

FISH & WILDLIFE SERVICES

This response is in accordance with Section 7 of the Endangered Species Act of 1973 (ESA) as amended. The endangered Hilo beach grass, the endangered Hawaiian hawk and endangered Hawaiian hoary bat are known to occur in the vicinity of the project area; and the endangered Hawaiian petrel and Newell's shearwater could fly over the area on their way to high elevation nest sites.

As noted in the CDUA, Hilo beach grass was observed 100-feet from the subject property on State lands. As no critical habitat has been designated for this species, and no individuals were observed, we do not anticipate impacts to Hilo beach grass from the proposed project. Avoidance and minimization measures described in the CDUA and EA for the Hawaiian hawk, Hawaiian hoary bat, Hawaiian petrel and Newell's shearwater sufficiently avoid or minimize potential impacts from the proposed action.

Applicant's response

Thank you for your comment in which you stated that based on information provided there would appear to be no impacts to listed species or adverse modification of critical habitat.

STATE OF HAWAII

DEPARTMENT OF HEALTH (DOH)

Safe Drinking Water Branch

Residential rainwater catchments are not regulated as public drinking water supplies and there is no government agency oversight of these systems in Hawaii. Homeowners and users are responsible for their maintenance, proper usage and for monitoring their own water quality. While the Department of Health does not recommend drinking or cooking with water from residential rainwater catchment systems, we realize that for various reasons, many individuals choose to do so.

While the Acceptance notice specifies that "water will be via catchment," we could not find a similar statement anywhere in the draft EA.

Applicant's response

We acknowledge your statement that there are no DOH regulations of rainwater catchments.

The EA has been modified to include the fact that the home, like most of the 10,000 + homes in Puna will utilize rainwater catchment.

Wastewater Branch

The proposed SFR and improvements construction may be regulated under HAR, Chapters 11-54 Water Quality Standards (WQS), Chapter 11-55 Water Pollution Control and Chapter 11-62 Individual Wastewater Systems. We recommend that the applicant read our standard comments on our website.

- Anti degradation policy, designated uses and water quality criteria within §11-54, HAR must be met.
- There is no discussion on the design and drainage system of the proposed pond. A National Pollutant Discharge Elimination System (NPDES) permit may be required if effluent discharges either directly or indirectly into State waters is anticipated. Additional information is needed for further evaluation.
- Site-specific Best Management Practices (BMPs) and an applicable monitoring and assessment plan should be established and implemented.

Applicant's response

DOH standard comments have been reviewed as part of preparing the EA. The applicant and her contractors are being made aware of the laws and regulations related to anti degradation of water quality.

The pond is a very simple, small shallow landscape feature. It is not anticipated that the pond will need to be drained.

The applicant shall follow all requirements of the County of Hawaii and DLNR in relation to grading and construction for the home. The construction of the home is not anticipated to have any adverse effect on the Pacific Ocean. There does not appear to be any aspects of the construction of the home that would require an NPDES permit.

OFFICE OF HAWAIIAN AFFAIRS

The applicant has proposed to preserve an identified burial on the property in place within a recorded preservation easement. It is our understanding that individuals with known familial connections to these lands have been consulted on this proposal and the DLNR-Historic Preservation Division has approved this proposal with short and long term protective measures. While we are appreciative of the applicants efforts to redesign

construction plans to allow the burial to be preserved in place, we are concerned that the site was "inadvertently discovered" within a lava tube with an open entrance after an archaeological field inspection was conducted on the property and found no historic properties present. We seek assurances that efforts were made to reassess the results of this archaeological field inspection to ensure no additional historic properties are present on the property.

We applaud the applicant's efforts to relocate hala trees to another of the property, as lauhala is a valuable traditional resource of Puna that is still utilized daily. OHA recommends that native plant species of Puna be incorporated into the landscape design for the property.

The subject property is inland of a beach reserve parcel that provides lateral shoreline access in this area. According to the CDUA, shoreline access will not be adversely impacted by construction of the SFR. OHA strongly advocates that individuals and groups with known connections to the projects area be consulted to ensure that any related issues and/or concerns can be afforded appropriate consideration prior to any approved construction activities beginning.

Applicant's response

In answer to your specific comments:

1. *Reassessment of inventory survey.* Your concern is understandable and the archaeologist involved carefully reevaluated the entire property to determine if any other difficult to detect resources were present. It appears that the burial was the only historic or cultural property on the small lot.
2. *Native species.* An on site meeting with Malama O Puna President Rene Siracusa was held to discuss the best suited native/Polynesia flora for the site. As a result, the landscape plan will be modified prior to submission of the final house plans as part of the CDUP process. The plans will be modified to include more of an emphasis on native species, particularly those that are most suitable for the climate and geology of this particular location.
3. *Consultation with individuals and groups with known connections.* We have made an effort throughout the EA early consultation, burial treatment plan development and draft EA/CDUA distribution to identify individuals and groups with connections to the area. The home itself will have no adverse impact on access and the homeowner has been informed of the extreme importance of preserving shoreline access for purposes of recreation and particularly native Hawaiian cultural practices.

DEPARTMENT OF LAND AND NATURAL RESOURCES

Conservation and Resource Enforcement

No comments

Forestry and Wildlife

No comments

Hawaii District Land Office

No comments

Office of Conservation and Coastal Lands

The Board of Land and Natural resources recently approved a CDUA in Waawaa and required that a proposed SFR be reduced to 2,000-ft² "under roof" in an attempt to mitigate the impacts on the littoral forest of the area. We wish to inform the applicant of this, as a reduction to the proposed SFR may be forthcoming.

Applicant's response

Although we respect the Board's decision, we do not believe that a reduction in the size of the proposed Shafer house would measurably reduce adverse effects to the native littoral forest nor to any other values of the Conservation District. In the case of the previous CDUA in Waawaa, there may have been a specific concentration of hala that the Board was seeking to protect; this same concentration is not found on the Shafer property. In fact, there are just a few scattered hala currently found on the property. As noted in the application, the owner plans to replace those hala impacted by the house construction and plant additional native species on the property. Because of the limits to the size and configuration of the lot, together with the other site constraints, a reduction in the size of the home would have no measurable impact on the protection of the few hala that are presently found on the property.

COUNTY OF HAWAII

Department of Planning

The parcel is located within the Special Management Area (SMA) and as such is subject to SMA review and permitting requirements. On March 16, 2010 a determination of exemption with conditions was made with regard to SMA permitting requirements.

Malama O Puna

The coastal lots are fully in the SMA and the lots that are fully or mostly in the conservation district are contiguous and make up about a fifth of the coastal properties. This mostly undeveloped coastline is part of one of the last native coastal forests of its extent left on the islands.

Property buyers should never assume they can do anything they like in the conservation district or that they will be able to get the permission to do so. Is the purpose of the conservation district just to make the property owner jump through a series of hoops or is the purposed to protect land and/or the property owner? The prospective owner is aware

at time of purchase that the land is in the conservation district. Although the rules may permit a single family home on these lots, due to the small lot size there should really be limits imposed on the size of the home and associated improvements.

The plans leave invasive Schefflera/Brassaia/Octopus trees and Wedilia while removing Hala for the driveway and part of the structure. The plant list for the garden includes non-natives as well as native that do not belong on the east side of the island.

No matter how conscientious a builder is it is inevitable that construction equipment, building materials and debris will impact a much wider area. I have visited the lot and there is very little room left over for actual conservation-especially after excluding the burial site.

One has to wonder why one property owner is fined \$20,000.00 for cutting hala trees in the same conservation district and is required to manage the area so that the forest comes back again, and another is permitted to clear land and build a large house in the conservation district, preventing the hala forest from ever coming back again in that area.

The value of intact hala forest along this rugged coast cannot be understated. It is not only one of the last remnants of native forest like this left, and therefore critical for endangered species and for cultural reasons, it is vitally important to the agricultural land mauka as a barrier to salt spray. The long, salt tolerant leaves of the hala obviously protect the agricultural lands mauka. Areas where hala was removed in the past including this lot, is coming back. The construction of a home in the conservation district will ensure that the hala forest does not recover.

Regarding the EA, we contest the following:

Section 3.4, it is stated, "cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures," were not addressed. To say "no special mitigation measures should be required to counteract the small adverse cumulative effect" is missing the whole reason that this is one of the last coastal hala forests of this size left in the state.

Section 3.6.1 The General Plan, Flood Control and Drainage Standards

Though it is true that there are homes in the tsunami evacuation zone, which goes up to Government Beach Road in this area, there is not a house that is this close to the ocean. The waves in some winter storms crash on top of these low cliffs, throwing large boulders inland, and thick salt spray damages the foliage well in to the mauka side of the road particularly where the hala have been taken out along the coast. As the CDUA points out, there is not a history of flooding in the area, though tsunamis have hit the east coast of the island in 1868, 1946, and 1960. That the buyer is aware of these dangers is not the only consideration; it is the taxpayers, not the property owner, who will pay for federal disaster funding if disaster should strike. These effects are cumulative.

From the CDUA, in describing how the existing physical and environmental aspects of the land such as natural beauty and open space characteristics will be preserved or improved upon-"the physical beauty of the lot will be enhanced by the home construction

and landscaping and open space will be preserved." How could one possibly say that a residence that covers so much of the lot, so close to the road and is so obvious from the coast would enhance the physical beauty of the conservation district or preserve open space? This reasoning may be used for a lot that consist of many acres where the owner would only be using a small portion of the lot and would be encouraging the native forest on the rest of the lot.

From my site visit, as well as the photos that were included in the application, the surrounding area is wild and rugged and largely covered with naupaka and hala with a view towards the ocean. Contrary to the insinuation that the scenic view (ocean?) is blocked by trees and therefore a house would not block the view of the ocean to a greater extent, is the obvious fact that the hala trees are part of this scenic view of the rugged Puna coast.

To reiterate our position: No development should be allowed along the coastline especially in the conservation district, in the SMA and most especially on lots of less than 5-acres, so that population density does not create the kind of coastal crowding and ecosystem destruction and degradation that are found elsewhere in the world and in the states.

Applicant's response

- 1) *Purpose of the Conservation District.* A single family home is an identified land use that could be applied for. It is a misconception that the purpose of the conservation district is to leave land completely untouched. With proper design and mitigation through landscaping with native species, there is no reason a home cannot preserve the values of the land that merited its inclusion in the conservation district.
- 2) *Native vs. alien species and direct and cumulative impacts on vegetation.* All land clearing will remain within carefully defined limits. Although some hala trees will be removed, those that can be, will be replanted elsewhere and a large number of new hala trees will be planted. Many invasive trees will be replaced with native plants that you pointed out on our field trip as the final house plans as part of the CDUA process. It will be modified to include even more of an emphasis on native species, particularly those that are most suitable for the climate and geology of this particular location. The cumulative impacts of removing invasive, widening native species diversity and producing a net increase in the number of native individuals will be a positive impact on the biota of the area.
- 3) *Halas protection of fruit orchards from salt spray.* There are no fruit orchards behind the lot but if there were, they would benefit from the net increase in hala trees planned as part of the proposal.
- 4) *Tsunami and storm waves.* There are many houses in similar areas of Puna situated as close or closer to the shoreline often at lower elevations than the one proposed which appears to be safely out of the area of impact from the type of tsunamis or hurricanes that have been experienced in human history. We do not see any risk to taxpayers or a cumulative effect.
- 5) *Scenic views.* We fail to see your point. The view towards the sea is generally blocked by native and non-native trees to the extent that the lot is more fully planted with native trees, the view will become more blocked, but will also have greater

ecosystem conservation value. These same plantings will also tend to obscure and soften views of the home that will be subtle in design. When a home is tastefully designed and appropriately landscaped, the home may enhance, not detract from the scenic views of the area.

- 6) *No development on the coastline.* This is an unreasonable prohibition that has no nexus to an interest in public health, safety or public trust resources when a given development observes appropriate CD regulations, does not obstruct public access, protects all existing cultural resources and provides for a net improvement in the flora.

ANALYSIS

After reviewing the application, by correspondence dated March 23, 2010, the Department has found that:

1. The proposed use is an identified land use in the Resource subzone of the Conservation District, pursuant to §13-5-24, Hawaii Administrative Rules (HAR), R-8, SINGLE FAMILY RESIDENCE, (D-1), " A single family residence that conforms to design standards as outlined in this chapter." Please be advised, however, that this finding does not constitute approval of the proposal;
2. Pursuant to §13-5-40 of the HAR, a Public Hearing will not be required;
3. In conformance with Chapter 343, Hawaii Revised Statutes (HRS), as amended, and Chapter 11-200, HAR, a finding of no significant impact to the environment (FONSI) is anticipated for the proposed project.

It has been determined that satisfaction of the Special Management Area has been met with documentation dated March 16, 2010, from the County of Hawaii that states: "development" does not include "Construction of a single-family residence that is not part of a larger development." This determination of exemption from the SMA definition of development is subject to compliance with eleven conditions (**Exhibit 9**).

In addition, a FONSI to the environment was published in the June 23, 2010 Environmental Notice.

CONSERVATION CRITERIA

The following discussion evaluates the merits of the proposed land use by applying the criteria established in §13-5-30, HAR.

1. *The proposed land use is consistent with the purpose of the Conservation District.*

The objective of the Conservation District is to conserve, protect and preserve the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare.

Staff questions if the proposed use is consistent with the purpose of the Conservation District as the proposal is sited on the fringe of one of the few surviving lowland littoral forest that remains in the State.

However staff notes, that the landowner shall be replacing and increasing the existing number of hala and other native species and shall preserve in place an inadvertent burial.

2. *The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur.*

The objective of the Resource subzone is to develop with proper management, areas to ensure sustained use of the natural resources of those areas. A Single Family Residence is an identified land use that could be applied for within the Resource subzone. The proposed dwelling shall be built to comply with all Federal, State and County regulations and shall be constructed in accordance with Chapter 13-5, Exhibit 4 Single Family Residential Standards.

3. *The proposed land use complies with provisions and guidelines contained in Chapter 205, HRS, entitled "Coastal Zone Management," where applicable.*

The proposal has been granted a Special Management Area Exemption by the County of Hawaii as a single family dwelling and related improvements are exempt from the definition of development.

In regards to the policies of Chapter 205A, HRS, the proposal is not consistent with protecting valuable coastal ecosystems nor with reducing coastal hazards to life and property due to the siting of a home on a relatively pristine coastal location. This proposal also sets precedence in regards to development of the other conservation district lots between this parcel 001 and the recently approved CDUP on parcel 009, managing development and the recreational value of the shorefront may be diminished. The proposal will introduce residential uses that may negatively impact a relatively pristine area.

However, staff notes that the applicant shall be replacing and increasing the native flora on the lot. The house site is set back from the shoreline and shall not restrict any shoreline uses or lateral pedestrian use of the shoreline area. Historic sites and cultural uses have been assessed.

4. *The proposed land use will not cause substantial adverse impacts to existing natural resources within the surrounding area, community, or region.*

As the proposal is relatively small and the applicant has proposed mitigation to offset adverse impacts, staff believes adverse impacts to the existing natural resources within the surrounding area that is a littoral forest has been reduced.

5. *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding area, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

In this vicinity, the majority of residences are on the mauka side of the Government Road. The area is isolated with poor emergency response time. There are constraints on the level of service to the area as the road is not regularly maintained and there is no infrastructure for utilities such as water and electricity.

However, the applicant shall conform to the design standard of Chapter 13-5, HAR single-family residential standards, coastal setbacks and has proposed appropriate landscaping. The applicant is aware of the potential volcanic, seismic and shoreline hazards of the site in addition to the remote location.

6. *The existing physical and environmental aspect of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, which ever is applicable.*

The physical and environmental aspects of the site are a rough, rugged, wave-pounding shoreline that gets the brunt of the trade winds and may be susceptible to seismic activity. During Kona wind days, the area may be engulfed in vog. The physical and environmental aspects of the land will persevere but it may be at the expense of the residence and its occupants.

However, an on site resident will allow for the management of the property to prevent illegal dumping, improve the native landscape and to preserve the noted burial in place that offers more protection than currently exists.

7. *Subdivision of the land will not be utilized to increase the intensity of land uses in the Conservation District.*

No subdivision of land is proposed for this project.

8. *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

Should the proposed land use be approved, it would place individuals in a secluded area on an eastern facing rugged coastline susceptible to the elements and seismic and volcanic activity. Staff notes the landowners are aware of the inherent dangers of living in close proximity to the sea and Kilauea.

DISCUSSION

On February 11, 2010 the Board of Land and Natural Resources approved Conservation District Use Permit HA-3520 for a single-family residence on a nearby parcel. This was the first residential use approved in the Conservation District in this vicinity. Staff recommended that the residence not be approved due to the sensitive and unique nature of the coastal ecosystem. However a compromise was reached in which the Board

approved the residence but reduced its size significantly to a maximum of 2,000-ft² under roof.

Staff continues to have concerns regarding residential use of the area:

1. Staff believes that the project as proposed may degrade the existing natural resources of the kipuka littoral forest ecosystem of the Puna coast and the species that inhabit the area; and
2. Staff continues to believe that this area is not currently suitable for residential development as the locality is devoid of infrastructure and is within a moderately high coastal hazard area that may experience periodic morphologic changes due to tectonic and seismic activity associated with Kilauea Volcano.

Staff notes the applicant shall be applying and does mitigate the removal of hala on the property. In fact the landowner shall replace and actually increases the number of hala and other native species on the lot. Further, on site inhabitants will allow for the management of the property to prevent illegal dumping, improve the native landscape and to preserve the noted burial in place that offers more protection than currently exists. Staff notes the landowners are aware of the inherent dangers of living in close proximity to the sea and Kilauea.

However, this proposal like the previously approved CDUP contributes to the creep of human settlements and encroaches upon a rugged coast decreasing the wild nature of a relatively undeveloped area. A residence with a smaller footprint could lessen that impact, reduce potential land speculation and mitigate land use density in the area. Staff recommends that this residence also be held to the same standard, as earlier defined by the Board, that the residence be reduced to a maximum of 2,000-ft² under roof.

RECOMMENDATION:

Staff recommends that the Board of Land and Natural Resources approve this application for a Single Family Residence and related improvements located at Waawaa, Puna, Island of Hawaii, TMK: (3) 1-4-028:001 subject to the following conditions:

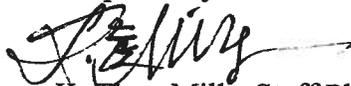
1. The applicant shall comply with all applicable statutes, ordinances, rules, regulations, and conditions of the Federal, State and County governments;
2. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim or demand for property damage, personal injury or death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors and agents under this permit or relating to or connected with the granting of this permit;
3. The applicant/landowner shall submit preliminary plans to illustrate up to a maximum of 2,000-ft² under roof for the residence for approval prior to submission of final construction plans;

4. The applicant shall comply with all applicable Department of Health administrative rules;
5. The Single Family Dwelling shall not be used for rental or any other commercial purposes unless approved by the Board;
6. The applicant shall provide documentation (i.e. book and page or document number) that the permit approval has been placed in recordable form as a part of the deed instrument, prior to submission for approval of subsequent construction plans;
7. Before proceeding with any work authorized by the Board, the applicant shall submit four copies of the construction plans and specifications to the chairperson or his authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the applicant. Plan approval by the Chairperson does not constitute approval required from other agencies;
8. Any work done or construction to be done on the land shall be initiated within one year of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and, unless otherwise authorized, shall be completed within three years of the approval of such use. The applicant shall notify the department in writing when construction activity is initiated and when it is completed;
9. The applicant shall notify the Office of Conservation and Coastal Lands (OCCL) in writing prior to the initiation and upon completion of the project;
10. All representations relative to mitigation set forth in the accepted environmental assessment or impact statement for the proposed use are incorporated as conditions of the permit;
11. The applicant understands and agrees that this permit does not convey any vested right(s) or exclusive privilege;
12. In issuing this permit, the Department and Board have relied on the information and data that the applicant has provided in connection with this permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
13. When provided or required, portable water supply and sanitation facilities shall have the approval of the Department of Health and the Board of Water Supply;
14. Provisions for access, parking, drainage, fire protection, safety, signs, lighting, and changes on the landscape shall be provided;

15. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take the measures to minimize or eliminate the interference, nuisance, harm, or hazard;
16. Obstruction of public roads, trails, and pathways shall be minimized. If obstruction is unavoidable, the applicant shall provide roads, trails, or pathways acceptable to the department;
17. Except in case of public highways, access roads shall be limited to a maximum of two lanes;
18. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;
19. Cleared areas shall be revegetated within thirty days unless otherwise provided for in a plan on file with and approved by the department;
20. Use of the area shall conform to the program of appropriate soil and water conservation district or plan approved by and on file with the Department, where applicable;
21. The applicant shall obtain all applicable permits from Hawaii County prior to construction. The applicant shall obtain a County of Hawaii Building and Grading Permit;
22. The applicant shall plan to minimize the amount of dust generating materials and activities. Material transfer points and on-site vehicular traffic routes shall be centralized. Dusty equipment shall be located in areas of least impact. Dust control measures shall be provided during weekends, after hours and prior to daily start-up of project activities. Dust from debris being hauled away from the project site shall be controlled. Landscaping and dust control of cleared areas will be initiated promptly;
23. Artificial light from exterior lighting fixtures, including but not necessarily limited to floodlights, uplights, or spotlights used for decorative or aesthetic purposes shall be prohibited if the light directly illuminates or is directed to project across property boundaries toward the shoreline and ocean waters, except as may be permitted pursuant to §205A-71, HRS. No outdoor lighting shall be directed towards the sea;
24. Construction activities shall be conducted in accordance with an approved Preservation Plan by the State Historic Preservation Division;
25. Should historic remains such as artifacts, burials or concentration of charcoal be encountered during construction activities, work shall cease immediately in the vicinity of the find, and the find shall be protected from further damage. The contractor shall immediately contact SHPD (692-8015), which will assess the

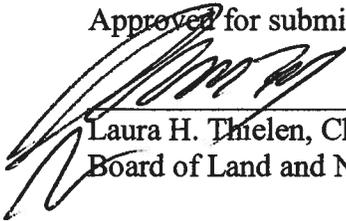
- significance of the find and recommend an appropriate mitigation measure, if necessary;
26. The applicant shall utilize Best Management Practices for the proposed project;
 27. The applicant acknowledges that the approved work shall not hamper, impede or otherwise limit the exercise of traditional, customary or religious practices in the immediate area, to the extent such practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;
 28. During construction, appropriate mitigation measures shall be implemented to minimize impacts to the aquatic environment, off-site roadways, utilities, and public facilities;
 29. The single-family residence shall conform to the single-family residential standards included as Exhibit 4 of the Hawaii Administrative Rules, Chapter 13-5;
 30. The applicant shall execute a waiver and indemnity agreement prior to submitting construction plans for approval that is satisfactory to the Department;
 31. Other terms and conditions as may be prescribed by the Chairperson; and
 32. Failure to comply with any of these conditions shall render this Conservation District Use Permit null and void.

Respectfully submitted,



K. Tiger Mills, Staff Planner
Office of Conservation and Coastal Land

Approved for submittal:



Laura H. Thielen, Chairperson
Board of Land and Natural Resources

Subzone Map

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

154°52'0" W
19°33'30" N
304000m E



Subject area

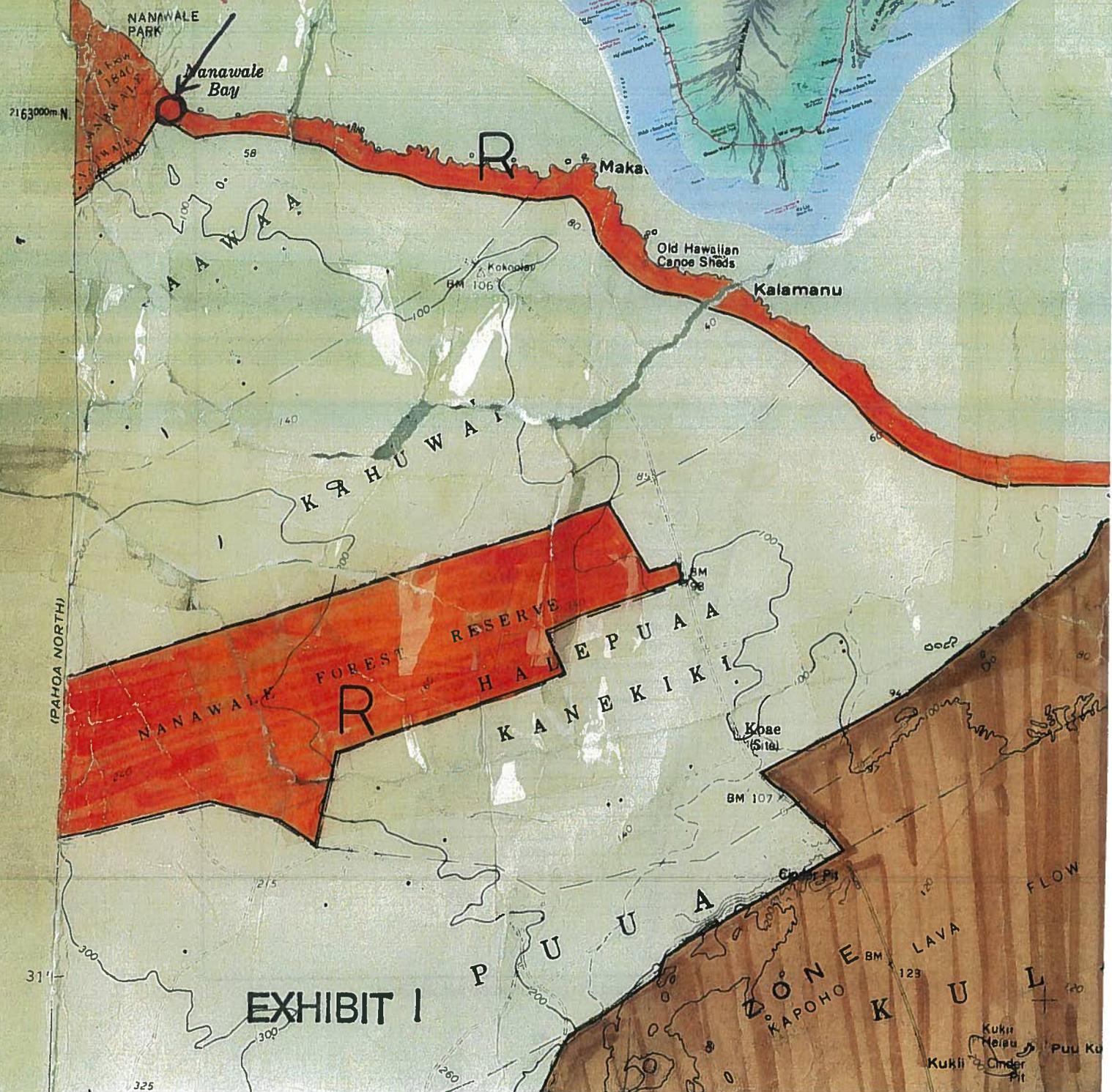


EXHIBIT I

(PAHOA NORTH)

Kukii Heiipu
Kukii Cinder Pit
Puu Ku

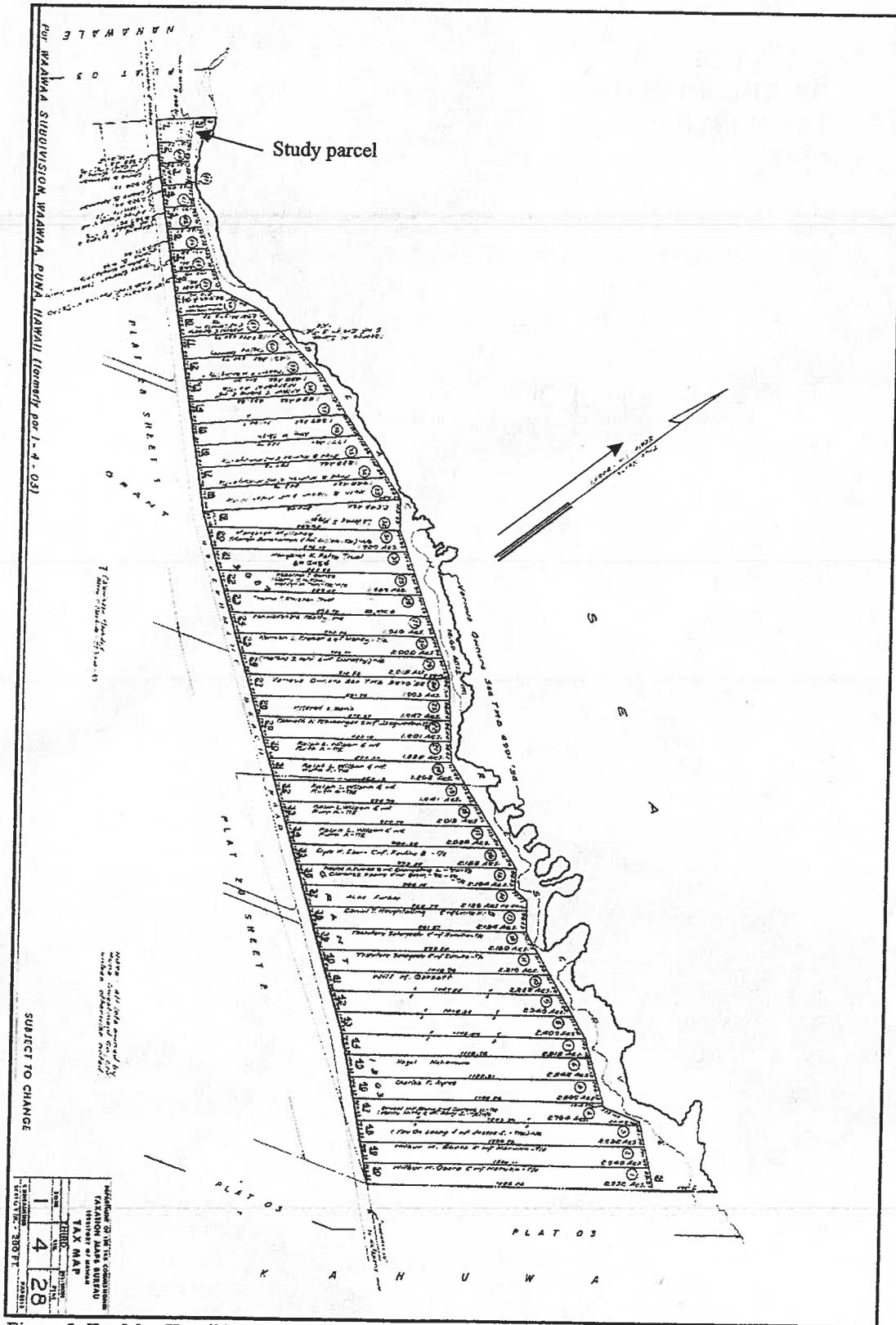


Figure 2. Tax Map Key (TMK): 3-1-4-028 showing the current study parcel (001).

EXHIBIT 2

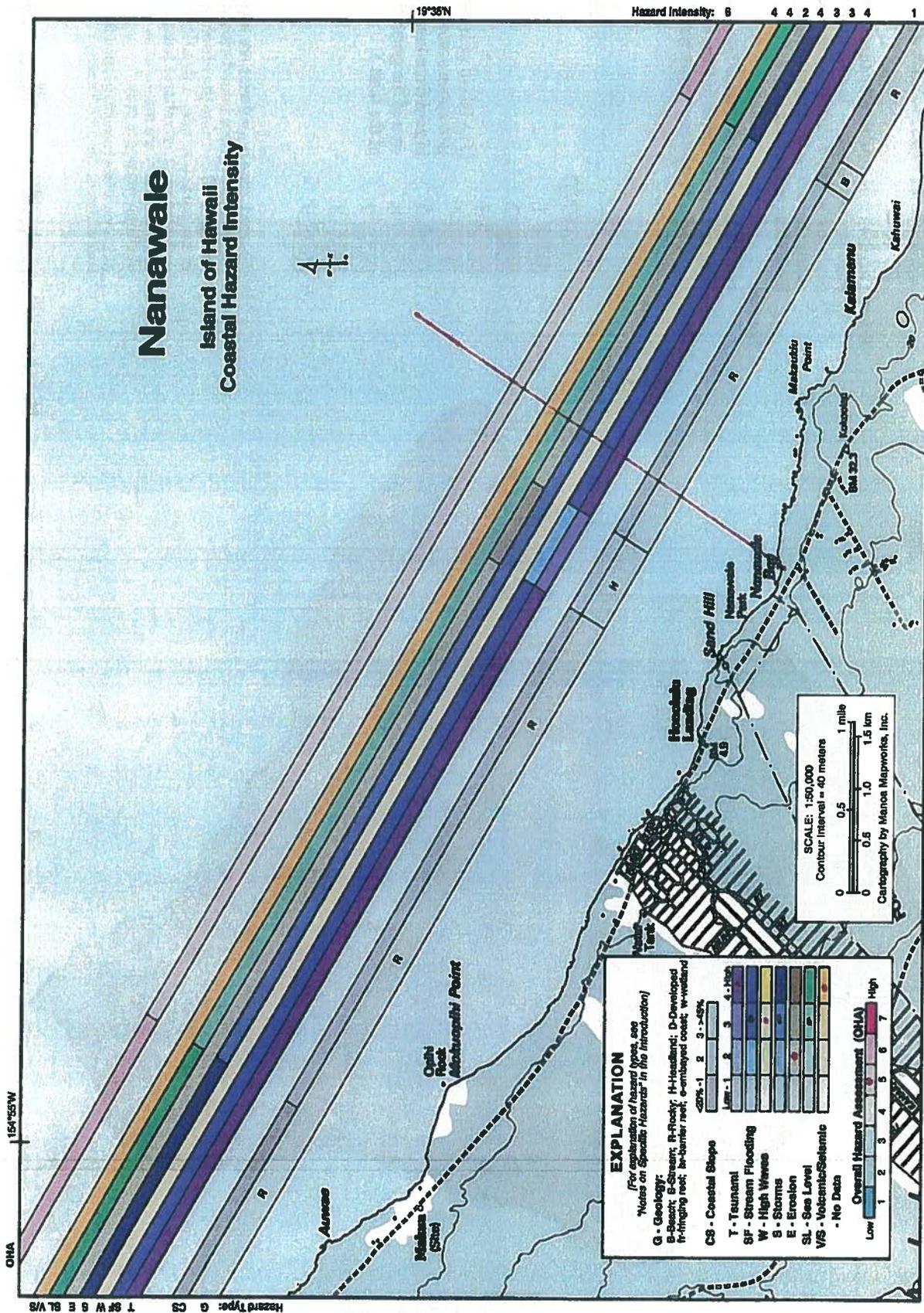


EXHIBIT 3

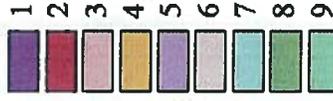
LAVA HAZARD ZONE

Note: This map was produced by the County of Hawaii, Planning Department. It is intended for planning purposes only and should not be used for boundary interpretations or other spatial analysis beyond the limitations of the data.

Sources :

U.S. Department of Interior / Geological Survey
State of Hawaii, Office of Planning
(Website address: www.state.hi.us/dbedt/gis)

LEGEND



(The Island of Hawaii is divided into zones according to the degree of hazard from lava flows: Zone 1 is the area of the greatest hazard, Zone 9 of the least.)

"Hazard zone boundaries are approximate and gradational. These boundaries are not specific enough to determine the absolute degree of danger at any particular site. Lava flow hazard maps are designed to show relative hazard across the Island of Hawaii and are meant to be used for general planning purposes only."

(U.S. Dept. of the Interior/Geological Survey and the State of Hawaii, Office of Planning)

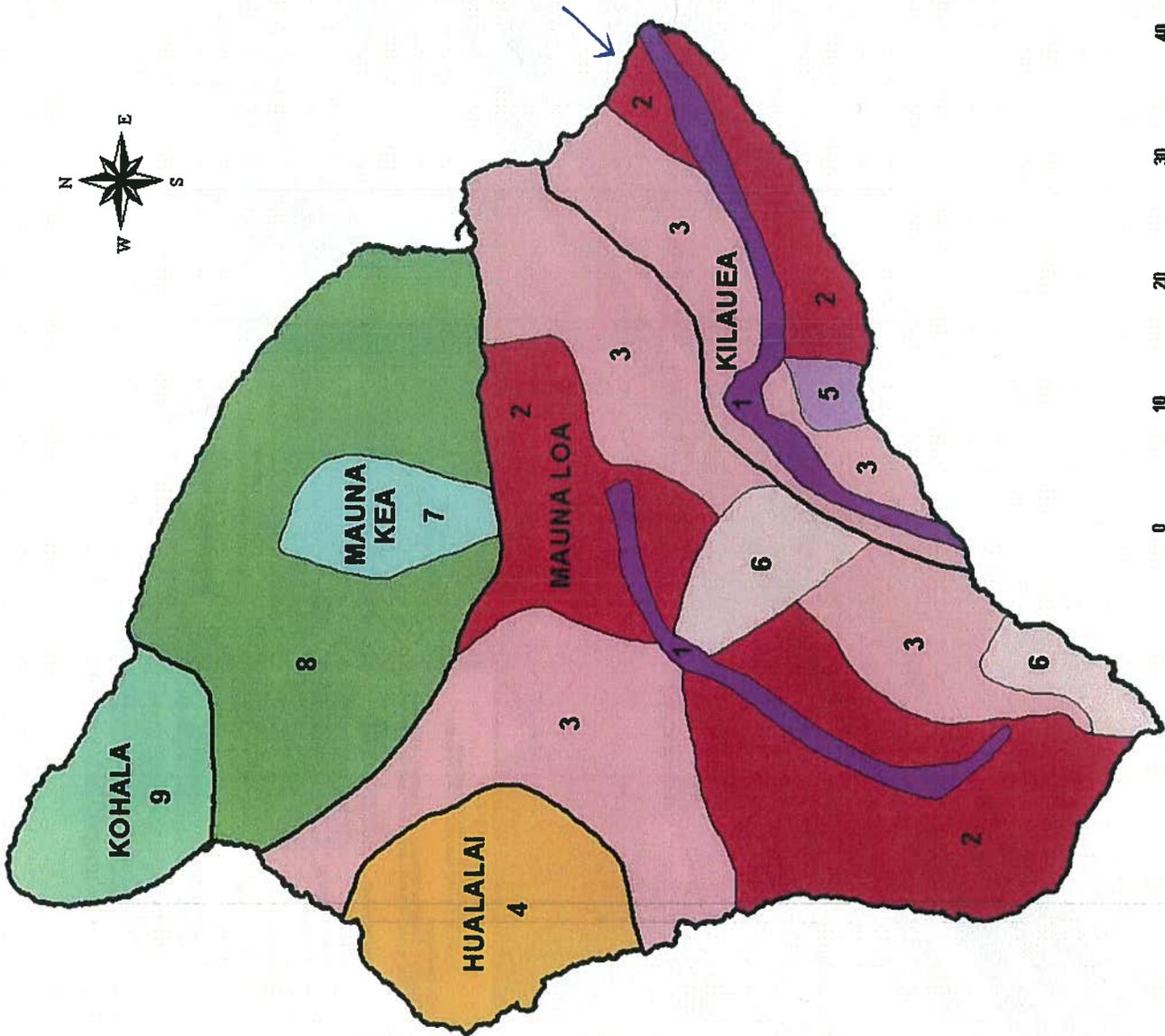
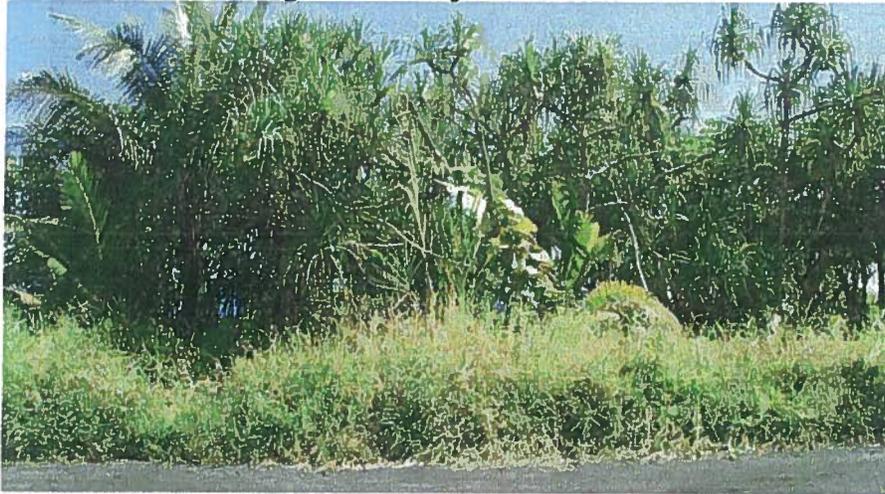


EXHIBIT 4

Figure 1b Project Site Photos



1b1 Obscured View from Road to Shoreline ▲ ▼ 1b2 Building Site



1b3 Shoreline in Front and to Northwest ▼

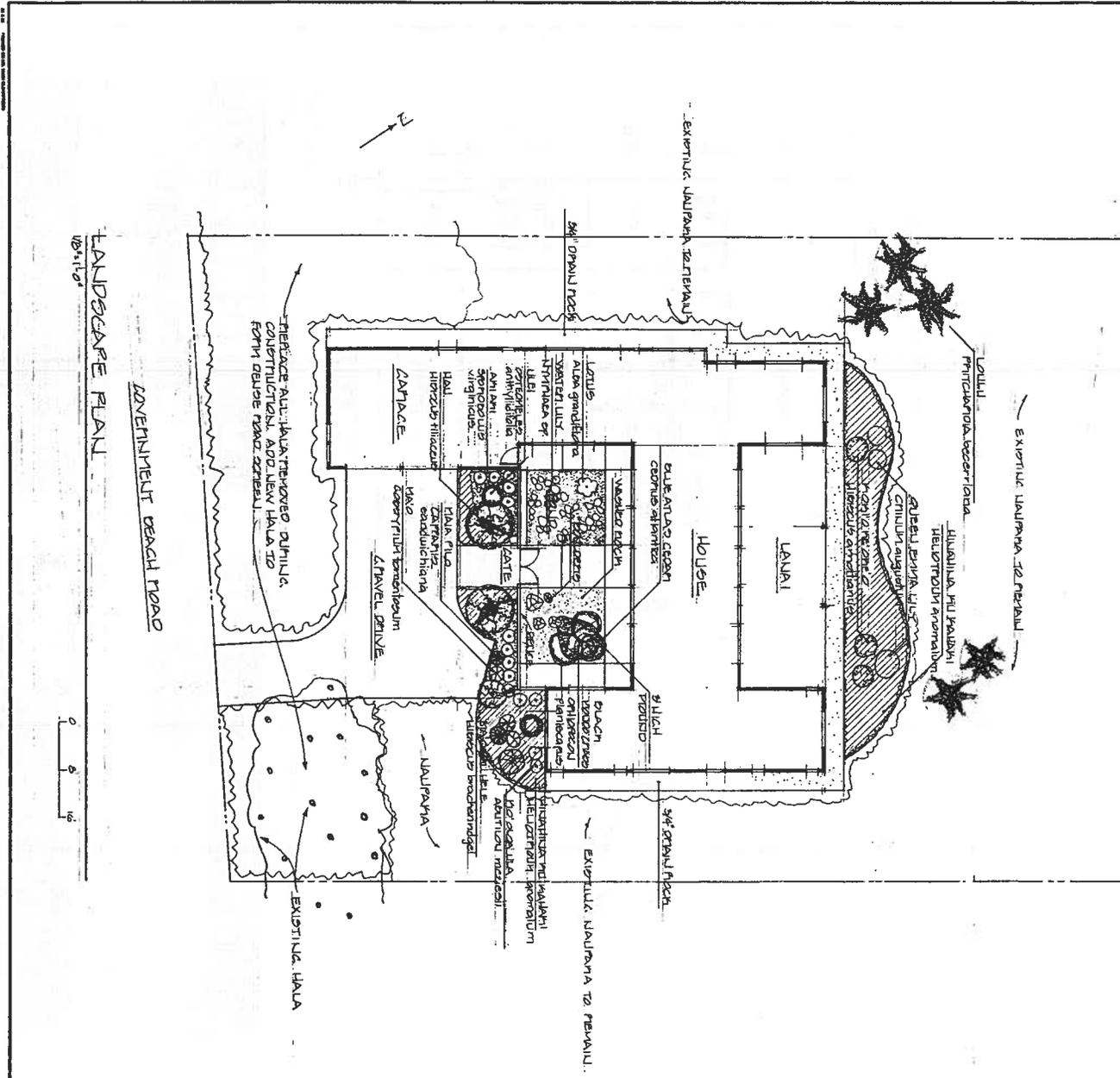




Figure 3. View to east of the Government Beach Road along the *mauka* boundary of the current project area.



Figure 4. View to west of vegetation within the current project area.



PLANT LIST

| Common Name | Botanical Name |
|----------------------|--------------------------|
| PALMS | |
| Local | Pritchardia beccariana |
| TREES | |
| Blue Atlas Cedar | Cedrus atlantica "Glauc" |
| Hau" | Hibiscus tiliaceus |
| SHRUBS | |
| Ko'ole'ole | Hibiscus amotillanus |
| Ko'ole'ole | Abutilon nuttallii |
| Maka Pilo | Casipora sanrochiana |
| Maka Pilo | Casipora sanrochiana |
| Maka Pilo | Casipora sanrochiana |
| Green Emma Lily | Citrus aurantium |
| Ulei | Osteomeles antyridifolia |
| GROUND COVERS | |
| Alu Alu | Sporobolus virginicus |
| Black Mondo Grass | Ophiopogon planiscapus |
| Hinahina Ku Kohala | Heterotrium anomalum |
| WATER PLANTS | |
| Alu Alu | Albu graniflora |
| Water Lily | Nymphaea sp. |
| * native plants | |

EXHIBIT 8

William P. Kenoi
Mayor



BJ Leithead Todd
Director

Margaret K. Masunaga
Deputy

County of Hawai'i

PLANNING DEPARTMENT

Aupuni Center • 101 Pauahi Street, Suite 3 • Hilo, Hawai'i 96720
Phone (808) 961-8288 • Fax (808) 961-8742

March 16, 2010

Ms. Joan M. Shafer
209 Honeysuckle Lane
Maggie Valley, NC 28751

Dear Ms. Shafer:

**SUBJECT: Special Management Area Use Permit Assessment Application
(SAA 10-000545)**

Applicant: Joan M. Shafer

Land Owner: Joan M. Shafer Trust

Request: Construction of a Single Family Residence

Tax Map Key: 1-4-028:001, Wa'awa'a, Puna, Hawai'i

This is to acknowledge receipt of the Special Management Area Use Permit Assessment Application on February 24, 2010 for the construction of a single family residence and related improvement on the subject parcel. A site inspection of the property was conducted by Planning Department staff on March 9, 2010, accompanied by your planning consultant Mr. James Leonard.

The 17,076 square foot parcel is situated in the State Land Use Conservation District. The parcel is zoned Agricultural (A-3a) by County of Hawai'i, and designated Open (ope) by the Hawai'i County General Plan Land Use Allocation Guide Map. The parcel is situated within the Special Management Area (SMA).

Chapter 205A-22, Hawaii Revised Statutes and Planning Commission Rule 9-4(10)B(i) relating to Special Management Area, states that "development" does not include "Construction of a single-family residence that is not part of a larger development". Therefore, we have determined that the proposed construction of a single-family residence and related improvements are considered exempt from the definition of "development".

There are known historic remains in a below-ground lava tube along the makai (seaward) end of the parcel. Department of Land and Natural Resources State Historic Preservation

EXHIBIT 9

Division has agreed with the preservation plan proposed by the landowner and their archaeological consultant to preserve the remains in place. No burial marker was recommended, and the entrance to the lava tube was covered with lava rock. There is a hala tree growing approximately five feet north of the lava tube entrance. An additional construction setback will be imposed to protect the integrity of the historic feature.

There is also a public access parcel makai of the subject parcel, along the pali edge. This area is frequently used by fisherman seeking lateral access along the shoreline, though no defined trail is evident on the ground. Keeping passage within 40-feet of the top of the pali clear of obstructions to allow continued lateral access of the shoreline will be required.

The requirement of a certified shoreline survey is waived as all construction and improvements will be approximately 75-feet from the top of the pali (cliff). Also, the proposed improvements will not have an adverse effect on the environment.

While further review of the proposed subdivision against the Special Management Area rules and regulations will not be required, all other applicable Zoning and Subdivision Code requirements must be satisfied. Additionally, this determination of exemption from the SMA definition of development is subject to compliance with the following conditions:

1. The applicant, its successors or assigns shall be responsible for complying with all stated conditions of approval.
2. The applicant shall secure all necessary approvals and permits from other affected federal, state, and county agencies as necessary to comply with all applicable laws and regulations within two (2) years from the date of this permit.
3. Any additional discovery of any unidentified sites or remains, such as artifacts, shell, bone or charcoal deposits, human burials, rock or coral alignments, pavings or walls will require that all work in the immediate area shall cease. The Planning Director shall be immediately notified. Work may proceed with an archaeological clearance from the Planning Director. The archaeological clearance requires a finding that sufficient mitigative measures are taken for the discovery; with written guidance from the State Historic Preservation Division of the Department of Land and Natural Resources.
4. A construction barrier, meeting with the approval of the Planning Director, shall be erected along the entire makai length of the parcel no less than 5-feet mauka (inland) of the lava tube entrance, or approximately 20-feet mauka of the makai parcel boundary. The barrier shall be erected prior to the commencement of land altering and construction activities and shall remain in place until final inspection has been granted by the Building Division for the new single family dwelling. No construction activities, including, but not limited to, the stockpiling of construction materials, rubbish or debris, or the use of mechanized equipment, shall occur makai of the construction barrier without further SMA review.

5. The construction barrier must be shown and properly noted on the plans submitted with any permits required for any land altering or construction activities. The construction notes on the plans must include the following statement, "The construction barrier must be erected prior to any land altering or construction activities, and must remain in place until final inspection by Department of Public Works. No construction activities, including, but not limited to, the stockpiling of construction materials, rubbish or debris, or the use of mechanized equipment, shall occur makai of the construction barrier."
6. No landscaping, including but not limited to the removal or alteration of existing vegetation or planting of new vegetation shall occur from twenty-feet mauka of the makai parcel boundary, extending to the top of the pali.
7. The proposed below-grade water tank must be installed in such a manner that it will not breach the adjacent lava tube containing the remains. The project archaeologists must be on site during the excavation for the tank, and during placement of the tank, to ensure no breach occurs and to oversee any mitigation should a breach of the lava tube occur.
8. Neither the landowner nor any agent of the landowner or its successors shall, at any time, impede or otherwise restrict lateral public access along the shoreline within 40-feet of the top of the pali, or further mauka as may be necessary for the safety of the public traversing the area. This restriction is inclusive of, but not limited to, erecting fencing, planting shrubs, or other actions that may impede lateral access.
9. Artificial light from exterior lighting fixtures, including, but not necessarily limited to floodlights, uplights or spotlights used for decorative or aesthetic purposes shall be prohibited if the light directly illuminates, or is directed to project across property boundaries toward, the shoreline and ocean waters, except as may otherwise be permitted pursuant to Section 205A-71(b), Hawaii Revised Statutes.
10. An extension of time for the performance of the conditions contained herein may be granted by the Planning Director upon the following circumstances:
 - a) The non-performance is the result of conditions that could not have been foreseen or are beyond the control of the applicant, successors or assigns, and that are not the result of their fault or negligence;
 - b) Granting of the time extension would not be contrary to the original reasons for the granting of the permit; and
 - c) The time extension granted shall be for a period of not to exceed the period originally granted for performance (i.e., a condition to be performed within one year may be extended up to one additional year).
11. Should any of the conditions not be met or substantially complied with in a timely fashion, the Planning Director shall initiate procedures to revoke the permit.

Joan M. Shafer
Page 4
March 16, 2010

Should you have any questions, please feel free to contact Dana Okano of this office at 961-8134.

Sincerely,



BJ LEITHEAD TODD
Planning Director

DO:cs

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cc: Long Range Planning Division
Mr. Larry Brown, Public Access

✓Mr. James M. Leonard
JM Leonard Planning, LLC
1100 Ainalako Road
Hilo, HI 96720