Draft Environmental Assessment

for a

Shoreline Setback Variance Application for a Seawall

Makaha, Oahu, Hawaii

TMK: 8-4-006:007

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September 2010

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List of Abbreviations

amsl	Above Mean Sea level
CRM	Concrete Rock Masonry
DLNR	Department of Land and Natural Resources
DPP	City and County of Honolulu, Department of Planning and Permitting
EA	Environmental Assessment
LUO	Land Use Ordinance
msl	Mean Sea Level
ROH	Revised Ordinances of Honolulu
SMA	Special Management Area
TMK	Tax Map Key

1.0 Introduction

This Environmental Assessment (EA) will be included with an application for a shoreline setback variance for Tax Map Key (TMK) 8-4-006:007, pursuant to the Revised Ordinances of Honolulu, (ROH) Chapter 23, Shoreline Setbacks, and Hawaii Revised Statutes, Chapter 343.

1.1 Background

The Ochis purchased the property (TMK 8-4-006:007) in 2005, and use it as a vacation home. At that time, the property contained a small house, a concrete-slab lanai with a cover that also functions as an observation deck, a rock and concrete rubble seawall, and a rusted chainlink fence.

The house was built in 1956, prior to the implementation of Coastal Zone Management regulations, in 1966. The house is a small, light-green, one-story, single family residence of wood construction. A concrete slab and elevated porch are located at the rear of the house. The elevated porch that shades the lanai is constructed in the same style and with the same materials as the rest of the house. The original house and plot plans from 1956 are not available in the public records at the Department of Planning and Permitting (DPP). DPP's public records only include the original 1956 permit and a 1970 permit for a detached carport was added near the road (see Appendix C). No plans are available for any of the structures on the site.

When the Ochis purchased the property in 2005, there was rusty chainlink fence and a rock and concrete rubble seawall along the makai property boundary. Photos taken in 2005 and presented in this EA as Figures 1, 2, and 3 show a rock and concrete rubble seawall on the makai side of a rusty chainlink fence. Evidence of weathering visible in the photo indicates that the rock and concrete rubble seawall and the rusty chainlink fence had been there for some time and were possibly built before 1966. No evidence indicating when the original rock and concrete rubble seawall was emplaced or when it was permitted has been found in records at the DPP.

Due to wear and tear by the elements (waves moving the rocks and corrosion of the metal posts and fencing), the rusted chainlink fence and rock and concrete rubble seawall were in a state of disrepair when the Ochis purchased the property in 2005. In 2006, the Ochi's removed the fence and replaced the rock and concrete rubble seawall with a substantial concrete, rock, and masonry (CRM) seawall. A renter in a neighboring house reported to DPP that the Ochis were repairing their existing seawall. Later that year, the Ochis received a notice of violation from the DPP dated May 9, 2006. The notice stated that "the existing seawall at the rear of the property was being reconstructed without first obtaining a building permit." The Ochis tried to obtain a permit, but the permit was not granted because there was no documentation on the original wall.

Next, they were asked to apply for a certified shoreline. In December 2006, a shoreline survey was submitted. On January 12, 2007, representatives from the Department of Land and Natural Resources (DLNR) Office of Conservation and Coastal Lands and the Land Division conducted a site inspection and located the shoreline at the seaward toe of the CRM seawall. The State Land Surveyor rejected the Ochis' application for certification because not all appropriate documents were submitted.

There is no record of permitting for the construction of the original seawall. No documents indicating that the seawall was or was not approved by government agencies—or if it was exempt from such approval—exist. Neither is there any documentation concerning whether any of the other structures are conforming, nonconforming or that would require a shoreline setback variance. Aerial photos available at the University of Hawaii did not provide conclusive evidence

of when the seawall, or any of the structures, were built. This is because the photos available from 1952–1993 do not have the resolution required to locate smaller structures on the parcel. Aerial photos from 1998 clearly show the single-story home, with the elevated porch, concrete slab, chainlink fence, and a rock and concrete rubble seawall makai of the chainlink fence. This indicates that the wall was built sometime between 1951 and 1998.

1.2 Project Information

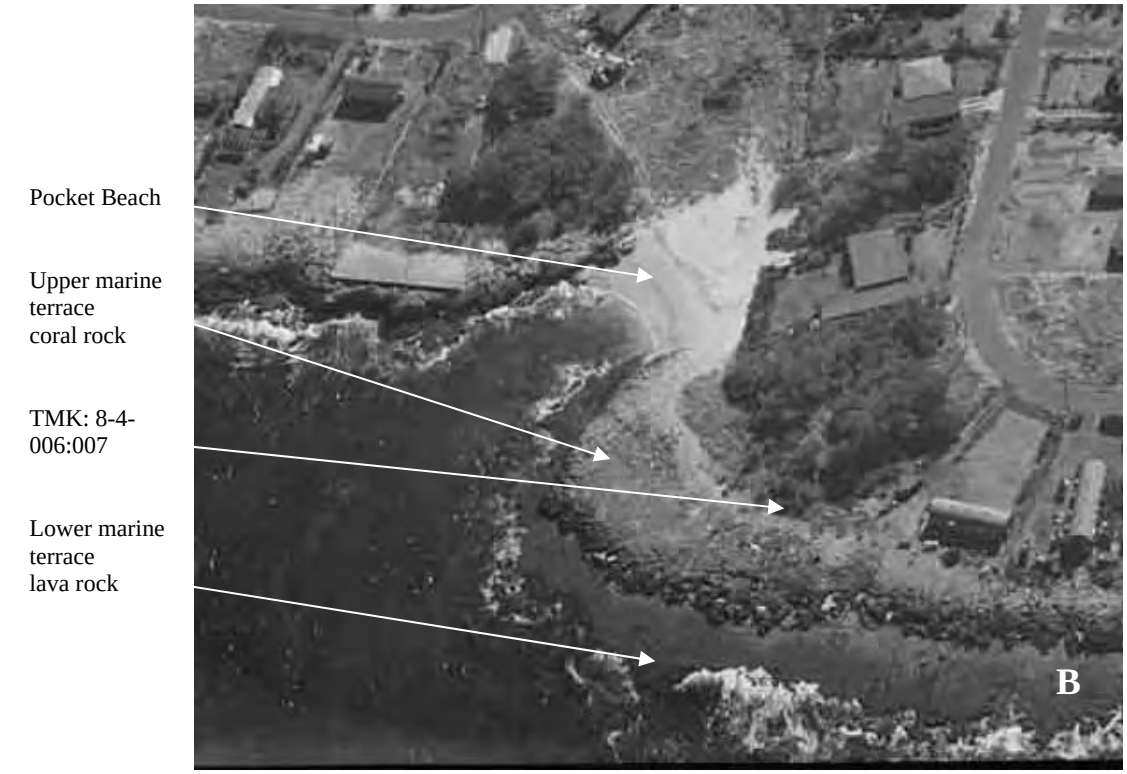
The Applicant:	Ken & Gene Ochi 2845 Via Victoria Palos Verdes Estates, CA 90274
EA Preparation:	Wil Chee - Planning & Environmental 1018 Palm Drive Honolulu, HI 96814 Phone: (808) 596-4688 Contact: Judy Mariant
TMK:	8-4-006:007
Lot Area:	23,620 square feet or 0.542 acres
Zoning (LUO):	R-10 Residential District
State Land Use:	Urban District
Height Limit:	25 Feet
Flood Zone:	FIRM Zone AE
Flood Zone:	FIRM Zone VE
Historic Register:	No
Lot Restrictions:	None
SMA/Shoreline:	Shoreline Setback
SMA/Shoreline:	Special Management Area
Special District:	Not in Special district
Agencies Consulted:	Department of Planning and Permitting City & County of Honolulu Department of Land and Natural Resources Office of Conservation and Coastal Lands
Required Approvals:	Shoreline Setback Variance Building Permit
Accepting Authority:	Department of Planning and Permitting, City & County of Honolulu

A. 2005 rock and concrete rubble seawall on the makai side of a rusty chainlink fence

B. 2005 rock and concrete rubble seawall

Figure 1. Shoreline Structures in 2005

A. Aerial view, 2004



B. Aerial View 1951

Figure 2. Aerial Photos

2.0 Description of the Proposed Action

The applicant is requesting a variance from Revised Ordinances of Honolulu (ROH) Chapter 23, Section 23-1.5 (b), which prohibits the building of any structures having a "fixed location on the ground" within the designated 40-foot shoreline setback area without a shoreline setback variance. Specifically, the applicant seeks after-the-fact permitting to legalize the wall that was built in 2006.

2.1 Shoreline Setback Area Requirements

As stated in Chapter 23 ROH, Section, 23-1.2, "It is a primary policy of the city to protect and preserve the natural shoreline, especially sandy beaches; to protect and preserve public pedestrian access laterally along the shoreline and to the sea; and to protect and preserve open space along the shoreline." It is a secondary policy of the city to reduce hazards to property from coastal floods. To carry out these policies, Chapter 23 "prohibits within the shoreline area any construction or activity which may adversely affect beach processes, public access along the shoreline, or shoreline open space."

Chapter 23 also states that the shoreline setback line shall be established 40 feet inland from the certified shoreline, and those structures and activities are prohibited within the shoreline area. A survey locating the anticipated certified shoreline is in Appendix B

This EA requests approval for a variance from these regulations. It also provides a description of the action and addresses the potential impacts of the project to the coastal environment.

2.2 Project Location

The property is located in an R-10 residential district and contains a single-family dwelling. It is located off of Farrington Highway, at 84-771 Moua Street, in Makaha (Figures 2, 3, 4, & 5). The project site is located on the coast, near the center of the residential community. Three public beach access-ways are close to the site (Figure 4). The waters offshore are classified by the state Department of Health as Class A Marine Waters.

2.3 Project Area Description

There is no sandy beach fronting the Ochi property or the adjacent and other nearby properties, only a rocky shoreline consisting of two wave-cut marine terraces that are "stepped" at different elevations. The lower terrace is composed of dark grey to black lava and has an average elevation of 2.45 feet above mean sea level (amsl). The second is an ancient fossil reef structure (light grey to tan) composed of limestone. It averages at its base, where it meets the back of the lower terrace, 3.12 feet amsl. Its mauka extension, at the base of the wall averages 8.11 feet amsl. During high tide, the waves wash up and over the upper marine terrace and reach the base of the Ochis' and neighboring seawalls. The wave-cut terraces are resistant to erosion (Fletcher, et. al. 2002, Fletcher et. al, 2009, Hwang, 1981), and no erosion rate for the area, on a human time scale, has been determined for the area.

Most of the neighboring properties that front the sea on the north and south have seawalls or other structures along their makai boundaries. These structures demarcate the boundaries between private and public property and protect the properties during the highest tides, high surf, storm surge, and other extreme conditions. If the seawalls were not in place, large waves would

degrade the properties by removing soil, vegetation, and other debris from the parcels and transporting it offshore, into the Class A Marine Waters.

To the north, the marine terraces are wide enough to provide public access parallel to the sea and the seawalls. To the south, there is no safe access that runs parallel to the shoreline. The wave-cut terraces are very narrow in places and lateral coastal access appears to be impossible without trespassing onto private property (Figures 2, 4 & 5).

All the adjacent and other nearby properties are fronted by shoreline protection structures such as seawalls and fences (see Figures 2 & 5). Most of the seawalls in the vicinity are permitted, and the parcels have received certified shorelines (Table 1).

Table 1. Certified Shoreline Near TMK: 8-4-006:007

TMK Number	Date Certified	Date Recertified	Date Recertified
8-4-005:002	November 10, 1975		
8-4-005:004	September 24, 1972	June 21, 1977	
8-4-005:005	May 19, 1977		
8-4-005:006	July 14, 1971	July 14, 1977	
8-4-005:007	June 2, 1997	June 21, 1988	
8-4-005:009	August 6, 1979		
8-4-005:014	January 8, 1976		
8-4-005:016	May 22, 2001		
8-4-005:017	April 29, 1998		
8-4-005:019	August 4, 1988		
8-4-005:020	June 12, 2003		
8-4-005:021	February 13, 1973	August 6, 1986	June 12, 2003
8-4-005:023	March 23, 1993		
8-4-006:006	February 7, 1990		
8-4-006:008	July 11, 1996		
8-4-006:011	July 5, 2006		
8-4-006-012	July 8, 1985		
8-4-007:001	May 24, 1993		
8-4-007:003	November 10, 1972		
8-4-007:005	October 15, 1985		
8-4-007:006	November 15, 1985	October 19, 1985	
8-4-007:011	June 9, 2004		
8-4-007:013	February 20, 2004		
8-4-007:016	August 4, 1988		
8-4-007:017	January 25, 1972		

Figure 3. Project Location Map

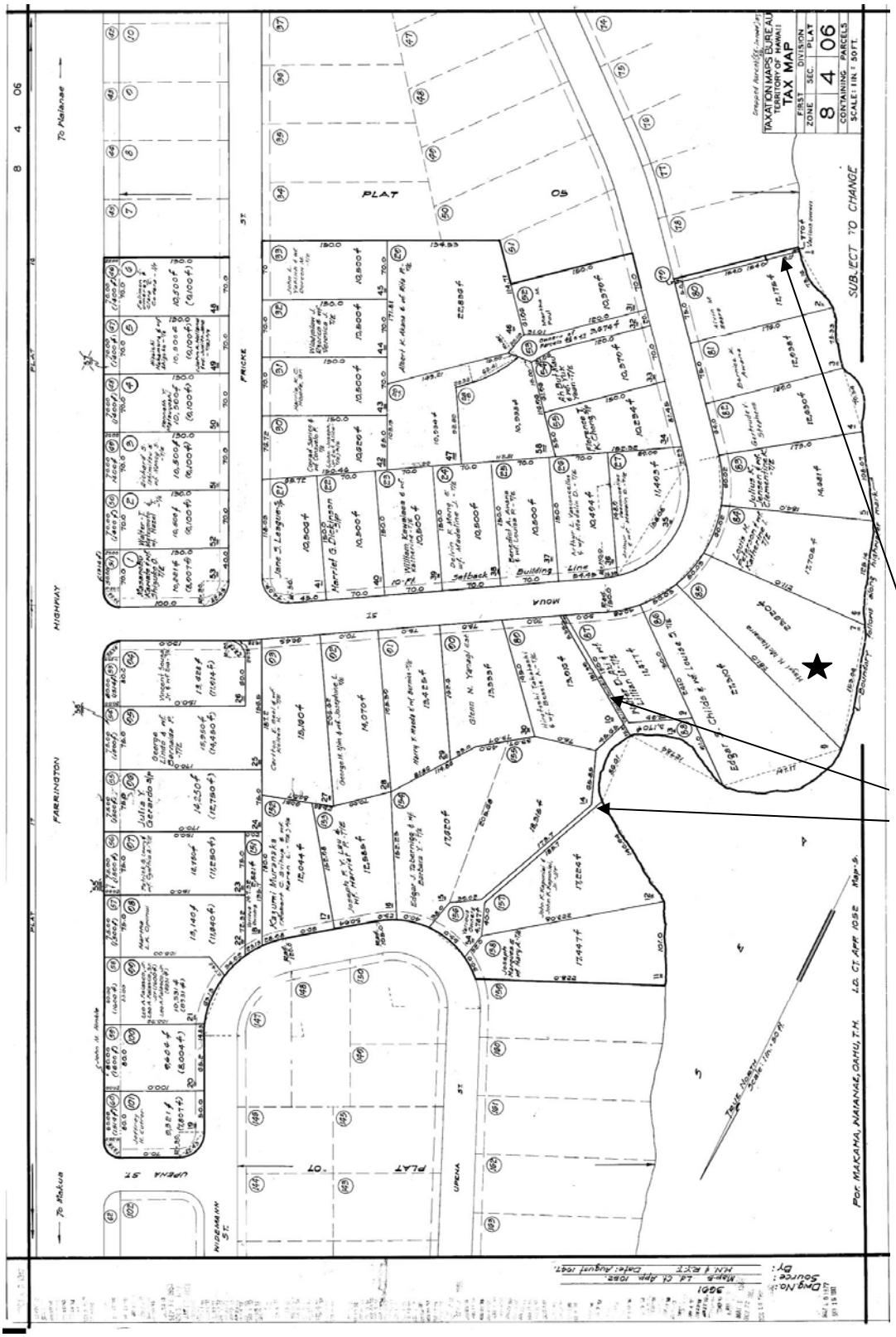


Figure 4. TMK Map 8-4-006:007 ★

Figure 5. Arial Photograph of the Area, 2007

2.4 Existing Site Conditions

The property contains a single-family residence with a concrete-slab lanai, elevated porch, a carport, and, along the makai side of the property, a CRM seawall. The purpose of the original rock and concrete rubble seawall, chainlink fence and the current structure is to provide privacy, separate public areas from private land, and to protect the home and property from wave over-wash during high tides and periods of intense wave activity. Northwest of the project site, the neighboring lot includes a CRM seawall similar to that of the Ochis, which is topped with a wire fence that stretches across the entire property. Southeast of the project site, the neighboring property is also protected by a seawall. A pile of debris consisting of large rocks and rubble fronts this seawall. The rock debris may be additional protection, to keep wave splash from hitting the property. The southeast side of this property contains a tile wall that separates it from the Ochi property and the project site.

Figure 6. Stairway leading down to the marine terrace

A. Mauka side of the existing CRM seawall

B. Makai side of the existing CRM seawall

Figure 7. Existing CRM Wall

2.5 Project Features

Tom Tanimura, P.E., of Tanimura & Associates, Inc., consulting structural engineers, inspected the seawall on October 5, 2009, to determine if the seawall was structurally sound. Next, he prepared an engineered drawing showing the dimensions of the seawall and depicting its condition (Appendix D). The structure is a one-level CRM seawall with a width of 2 feet 10 inches and a height that varies due to irregularities of the surface of the marine terrace. On the makai side of the wall, the maximum height is 6 feet above the marine terrace, and the average height of the entire wall is 5.75 feet. On the mauka side, the maximum height above ground level is 2.64 feet, and the average height is 2.42 feet.

Table 2. Elevations and Height of Wall

Stations	Elevations			Height of Wall	
S to N	Makai Base of Wall	Top of Wall	Mauka Base of Wall	Makai side of Wall	Mauka side of Wall
1	8.40	13.80	11.20	5.40	2.60
2	8.50	13.32	11.4	4.82	1.92
3	8.30	13.30	11.20	5.00	2.10
4	8.60	13.36	11.10	4.76	2.26
5	8.70	13.30	11.10	4.60	2.20
6	8.10	13.30	11.10	5.20	2.20
7	8.10	13.38	10.90	5.28	2.48
8	8.20	13.34	10.90	5.14	2.44
9	7.50	13.50	10.90	6.00	2.60
10	7.8	13.54	10.90	5.74	2.64
11	7.2	13.20	10.90	5.60	2.70
N of Steps	7.4	13.14	10.20	5.74	2.94
Average Height of Wall				**5.75**	**2.42**

Elevations in feet above mean sea level (msl) Survey Data from benchmark TU0597
Appendix B, Current Shoreline Survey Survey by Wesley T. Tengan 2010

During high tide, waves wash up and over the upper marine terrace, to the base of the seawall. A staircase on the northern edge of the property provides direct access to the wave-cut platform from the Ochi property, and to the south, another staircase provides access to the top of the wall from ground level on the Ochi property.

The existing Ochi seawall is not expected to increase the rate of soil erosion on the neighboring properties because all these properties are fronted by seawalls. These wave-cut platforms are composed of lava and limestone, which are resistant to erosion. Available sources give no

erosion rate for the area (Fletcher, et. al. 2002, Fletcher et. al, 2009, Hwang, 1981). The seawall complies with the Land Use Ordinance (LUO), Section 21-4.40; no portion exceeds 6 feet high, as measured from the existing or finished grade, whichever is lower, according to the engineer's plans.

Much of the rock from the original rock and concrete rubble seawall was reused in building the new seawall, and some of this rock appears to have been used as fill behind the new structure, as well.

3.0 Evaluation of Alternatives

Four alternatives were evaluated and are discussed in the following subsections.

3.1 No Action

The no action alternative is not practical; it would mean that no action would be taken to resolve the violation for the construction of the current seawall. The applicant will continue to accrue fines owed to the City and County of Honolulu for the permit violation. This will result in an unreasonable financial burden on the applicants and potential loss of the property.

3.2 Remove Existing Seawall

Alternative two consists of removing the seawall but not replacing it. This alternative is also not practical. If the applicants removed the existing seawall, they would expose their property to the effects of erosion from waves that wash up and over the marine terrace at high tide.

During high tides, the waves wash over the upper rocky outcrop and reach the base of the seawall. During periods of high surf, storm surges, and other extreme conditions, waves hit the rock face of the upper terrace with such force that the water is propelled onto and across the surface of the upper terrace until it strikes the seawall and is reflected back along the surface of the terrace into the ocean. If the seawall were removed, the waves would erode the property by removing soil, vegetation, and other debris from the parcel and transport it offshore, into the Class A Marine Waters. Over time, the house, lanai, elevated porch, and the carport would be compromised, after which, structural debris and anything in the structures would be washed over the marine terraces and out to sea.

This alternative would entail the potential loss of everything on the property: sod, trees, shrubs, and soil. It would also create large amounts of debris as waves batter the structures. Additional debris would include parts of the house, porch, carport, pipes, nails, roofing materials, appliances, furniture, and other household objects. All of this debris could ultimately end up in the Class A waters offshore. Thus the site would be rendered useless, which would result in a large financial loss and potential liability for the owners.

3.3 Build an Openwork Fence

Alternative three consists of removing the seawall and building some sort of openwork fence along the makai property boundary. An openwork fence such as a chainlink fence or a fence of wood or vinyl slats would provide a boundary that would allow wind, water, debris, and other material to pass through to the other side. This alternative is not practical because it would not retain the soil on the property or protect the structures. During periods of heavy precipitation the soil would easily be washed off the property, onto the wave-cut platform and into the Class A waters offshore.

During high tides, waves wash over the upper rocky outcrop and reach the base of the seawall. During periods of high surf, storm surge, and other extreme conditions, waves hit the rock face of the lower terrace with such force that the water is propelled onto the surface of the upper terrace, where it strikes the seawall and reflects back along the surface of the terrace, into the ocean.

An openwork fence would not be strong enough to reflect the waves; the waves would damage the fence, and it would collapse under their force. Debris would then become entrained in the waves and would wash over the rocky outcrop, into the sea. In this way, the waves would remove soil, vegetation, and other debris from the parcel and transport it into the Class A Marine Waters offshore. Next, the house and carport would be compromised, and structural debris and objects in the structures would be washed out over the marine terrace, and out to sea.

This alternative would also cause severe hardship for the property owners, as the structures were damaged and the soil washed offshore. It would also compromise the habitat of corals and the offshore feeding grounds of marine turtles, on submerged rocky outcrops.

3.4 Build a Rock Revetment

Rock revetments are sloped rubble structures of carefully placed, un-cemented rock. They are appropriate structures for shore protection under some conditions, such as where a foundation must be located on soft sediment of unknown strength, or in circumstances where it may be important to minimize wave reflection. To match the strength of a grouted CRM seawall, a revetment must be built of larger stone, be a more massive structure, and cover a greater area.

None of the advantages of a revetment is relevant for this project, because the structure would be built on rock averaging 8.11 feet above the waterline. Wave reflection is not an issue because there is no sandy beach at the site and because the escarpment formed by the lava and coralline limestone marine terraces, under normal conditions, reflects much of the waves' water and energy regardless of the presence of a seawall. Any reflections off the seawall during high-wave and high-water conditions wash back over the irregular rock terrace and escarpment.

3.5 Obtain an After-the-Fact Shoreline Setback Variance & Permitting

The preferred alternative is to apply for an after-the-fact shoreline setback variance and building permits to correct the current violation. The property has been separated from the makai public access area by the current seawall for approximately four years, and before that by the older rock and concrete rubble wall and the rusted chainlink fence that have been on site many years. Legalizing this seawall is the best alternative for protecting against the loss of property, retaining soil, and delineating public and private areas.

Of all the alternatives, this is also the most environmentally sound because it would retain the silty, sandy soil and vegetation on the property. None of the silty, sandy soil would wash off the marine terrace into the water, where it would increase the turbidity of the Class A waters, damaging marine turtle feeding grounds and settling over corals, smothering and killing the coral polyps. It would also prevent the hardship on the property owners that would result if any of the other alternatives were implemented.

4.0 Affected Environment and Environmental Consequences

4.1 Climate

Hawaii is recognized for having only two seasons. *Kau*, (May–September), is the warm season, when the sun is almost directly overhead and winds are reliably from the northeast. *Hooilo*, (October–April), is the season of cooler temperatures, a lower sun, more variable winds, and greater rainfall (Juvik and Juvik 1998).

The Ochi property is located on the leeward coast of Oahu, where summers are dry and most of the rainfall falls in winter. As descending, warming air passes over the Waianae Range, some moisture is removed, so that the leeward coast has fewer clouds and drier atmospheric conditions than windward Oahu.

During winter, cold fronts reach the Hawaiian Islands, from the north. A typical cold front brings clouds and rain to the islands; however, if the front passes directly over the islands, heavy rains and southwest winds may occur. The number of fronts reaching the Islands varies from year to year, and this variation is responsible for the occurrence of wet and dry years in leeward regions, which receive most of their rainfall from cold fronts (Juvik and Juvik 1998).

Hawaii is subject to other meteorological events such as large tropical storms, including hurricanes. During such storms, the shoreline is profoundly affected by storm surge. Storm surges forms under the influence of an atmospheric low pressure areas at the centers of hurricanes and other intense storms. When atmospheric pressure is low the ocean water tends to bulge upwards. Wind associated with storms pushes the bulge ahead of the storm, creating an area of regionally elevated sea level, 3 feet to 23 feet amsl (1 to 7 meters) that becomes hazardous when combined with the large waves that are whipped up by fierce storm winds. During particularly large tropical storms and hurricanes, storm surge along low-lying coastal areas can be devastating. The elevated seas with wind-generated waves batter the coast and any structures that are there. Debris carried by the waves adds to the problem. Downed trees and structural debris act like battering rams against wooden structures, and most residences are flattened. This kind of destruction occurred along the south-facing coast of Kauai during hurricane Iniki, in 1992.

4.1.1 Impacts to Climate

Legalizing the CRM seawall and allowing it to remaining place will cause no impacts to climate. Severe meteorological events and storm surge can profoundly impact the Makaha shoreline.

Mitigation Measures: The requested action consists of granting an after-the-fact shoreline setback variance and permitting to legalize an existing seawall. No action that would affect the climate is proposed by the property owners, so no mitigation for climate is required.

Because meteorological events can cause severe destruction along the south-facing coast of Oahu, protection of coastal property is required. During hurricanes and other large storms, seawalls function as protective barriers that dissipate the wave energy. If the Ochis are not granted permitting for the seawall and they are forced to dismantle it, they face the potential for extreme negative impacts. Permitting the seawall would mitigate these potential impacts; flooding could occur, but wave energy would be somewhat dissipated, and flooding landward of the wall would be reduced. Consequently, with less water thrown onto the land, less soil and debris from the property would be carried into the sea. This will protect the reef and the Class A waters offshore.

Mitigation for meteorological events would consist of granting a shoreline setback variance and allowing the owners to obtain after-the-fact shoreline setback variance and permitting to keep the seawall in place.

4.2 Topography, Geology, and Soils

Topography

The entire area from the shoreline to the base of the Waianae Range is a gently sloping coastal plain that abruptly steepens at the base of the ridges that make up the Waianae Range. This coastal-plain morphology was formed by fluctuations of sealevel over geologic time resulting in a series of stepped, rocky, wave-cut marine terraces at different elevations. Two of these terraces are terrestrial and located at or above the ocean surface. Others are marine and extend offshore, under the ocean.

This section addresses two terrestrial marine terraces. One begins at mean sea level (msl)and the other is above mean sea level and extends to the base of the Waianae Range. The terraces that are located below msl are described in the next section.

Geology

The coastline consists of dark-grey-to-black basalt flows capped by a light-tan-to-grey limestone that is a fossil reef structure that formed when sea level was much higher than it is now. Layered rocks, sand, and soil cover the inland portion of former marine terraces. Reef features are well preserved, and some of the corals can be identified (Hazlett and Hyndman 1996). Small pocket beaches and larger beaches have formed in locations where the basalt has eroded inland along faults, fractures, and joints. The beaches along this section of shoreline are separated by lava marine terraces topped with limestone (fossil corals).

Soils

The upper marine terraces are covered with Mamala Series soils that are described in the *Soil Survey of Islands of Kauai, Oahu, Molokai, and Lanai* (USDA 1972). These soils are found on the coastal plains, on 0% to 12% slopes. The entire parcel is covered with shallow, well-drained soils that are typical of the Mamala series found on the Oahu's coastal plain. Surface soils are a dark reddish-brown silty clay loam with sand and lithic fragments that is approximately 8–20 inches thick. The subsoil is a dark reddish brown silty clay loam with an average depth of 11 inches. The soil is underlain by coralline limestone and consolidated calcium carbonate sand.

The engineering properties of soils are important to engineers, contractors and others who use soil as a foundation on which to build. Such properties include permeability, shear strength, shrink-swell potential, water holding capacity, and corrosivity. Mamala soils are silty clay loam over hard coral and are moderately permeable. They have a low water-holding capacity, low shrink–swell potential, and a low corrosivity for uncoated steel or concrete.

Shrink–swell potential refers to the tendency of a soil to increase or decrease in volume as it absorbs or looses water. Soils with these properties are said to have shrink–swell potential. Soils with low shrink–swell potential are ideal for on-grade structures because they present little chance of damaging foundations, concrete slabs, CRM walls, or other structures as they gain or lose water.

Corrosion is slow chemical decomposition that proceeds from the surface into the ground. Corrosion can affect many types of objects buried in the ground. Pipes, cables, anchors, fence posts, and concrete are all subject to corrosion. Soil with low corrosivity is ideal for siting structures of any kind.

Mamala soils cover rocky marine terraces characterized by coralline limestone overlain on a base of lava. The limestone typical of the project area and vicinity has been eroded, pitted, and dissected over the years, resulting in a very irregular surface typical of chemically eroded limestone. Because of this rough, irregular surface, soil depths are extremely variable, ranging from 6 inches to 3 feet. The terrestrial marine terraces have a slope that ranges from 0 to 12 percent, with an overall average slope of 1 to 2% until it drastically steepens at the base of the mountains. Adjacent to the ocean, the terraces are nearly level, except for the irregularities of the rocky surfaces, which can be filled with soils.

Ground elevations of the Ochi property are the same as those of the adjacent properties, and the Ochi seawall, and all the nearby shoreline walls, are aligned with the adjacent seawalls protecting the parcels on either side. All of these parcels are nearly level, with an imperceptible slope of 0.6%.

On June 8, 2010, WCP personnel conducted a soils investigation on site by boring two holes with a hand auger. The first was located 1 foot from the seawall and the second was 40 feet inland from the wall; both were 50 feet from the property line on the north side of the parcel.

The bore closest to the seawall extended to a depth of 1.5 feet before hitting rock. Boring with the hand auger in this location was extremely difficult because of the rocks that had been used as infill behind the wall. It was impossible to proceed below a depth of 1.5 feet. It can be anticipated that the depths vary from 2 to 3 feet behind the wall, based upon the irregular surface of the marine terrace in front of the wall. The borehole placed 40 feet inland hit bedrock at 1.20 feet. Material removed from both holes consisted of silty clay loam mixed with sand and lithic fragments. The color of the soils became darker with depth and increased moisture content.

Soils on site are relatively shallow and range in depths from 1 to 1.5 feet at the base of the wall and appear to become shallower inland, near the road. Due to the varying soil depth and the irregular surface of the rocky marine terraces, it is difficult to calculate the volume of the soils on site.

4.2.1 Impacts to Topography, Geology, and Soils

Legalizing the current seawall will have a positive impact on topography, geology, and soils by preventing the soils from being washed off-site, onto the marine terrace, and out to sea during periods of heavy surf or storm surge.

Mitigation Measures: No mitigation for topography, geology, and soils is required for the project as proposed.

The potential exists for extreme adverse impacts if the seawall is not permitted and the owners are not allowed to keep it. During large storms and hurricanes, the seawall functions as protective barrier to dissipate wave energy and keep most of the returning water from washing the soil off the property. Sediment and debris entrained in the seawater or floodwaters would be stopped by, and deposited behind, the wall, rather than washing into the Class A waters offshore. With regard to this issue, mitigation would consist of allowing the seawall to be permitted and remain in place.

4.3 Offshore and Nearshore

Waters along the Waianae coast are classified as Open, Coastal, Class A waters, according to the Ocean Water Classification System developed by the state Department of Health. Class A waters are used for recreation, including scuba diving and aesthetic enjoyment, and as feeding grounds by the turtles that use the pocket beach as a haul-out area.

There are no large, sandy beaches in the vicinity. North of the project site there is a very small pocket beach called Laukinui Beach, which is used as a haul-out area by turtles and occasionally by neighborhood residents to enjoy the sun and sand. The area does not have a good surf break and it is not the best area for swimming because of the shallow rocky outcrops there.

There is public access to the pocket beach, and people can explore the marine terraces to the north and south. This includes the terrace that fronts the project site and the neighboring properties. The primary recreational use of the marine terraces is for fishing. The fishermen must stand close to the edge of the terraces, because if they were to fish on the upper terrace near the seawalls, their lines would snag on the rocks that make up the seaward fringes of the marine terraces. The seawalls delineate private property and prevent erosion of soil and vegetation. Most are 40 feet or more from the waters edge.

Offshore

At the face of the lower terrestrial rocky terrace, the ocean is rather shallow. The bottom is a submerged, rocky, wave-cut terrace that slopes gently (1.15% slope) to a depth of 18 feet at 1,200 feet offshore. Another submerged, seaweed-covered, rocky, wave-cut terrace extends from this point as far as 2,000 feet offshore, where the depth drops off to 60 feet (AECOS 1981).

Nearshore

The shoreline in the project area consists of a rocky, basalt lower marine terrace that extends seaward from under a limestone upper marine terrace (Figures 2, 5 & 8). The lower marine terrace averages 2.45 feet above mean sea level, and at low tide, the face of the lower terrace receives most wave impacts. The lower marine terrace is covered with brown marine algae and tide pools. The upper marine terrace is a limestone fossil reef that slopes gently toward the sea. The elevation of the upper terrace averages from 3.12 to 8.11 feet amsl. These rocky marine terraces are resistant to erosion, and standard sources give no erosion rate for the area (Fletcher et. al. 2002, Fletcher et. al, 2009, Hwang 1981). In spite of the fact that the rocky outcrops themselves are resistant to erosion, soil, vegetation and structures on the upper marine terrace can be impacted by wave action.

At low tide, during normal sea conditions, waves hit the face of the lower terrace, and water washes over its upper surface, reflects off the face of the upper terrace, and flows seaward again. When tides are exceptionally high, the waves wash over the upper rocky outcrop and flow back off the marine terraces to the sea. At the Ochi's property, during episodes of high surf, storm surges, and other extreme conditions, waves hit the rock faces of both terraces with such force that the water is propelled onto the surface of the upper terrace and travels 40 feet or more inland, where it strikes the seawall and is reflected back along the surface of the terraces, into the ocean. If the seawall were not in place, the waves would erode the property by removing soil, vegetation, and other debris from the parcel and transporting it into the Class A Marine Waters offshore.

Coastal and shoreline hazards at the project site and vicinity are tsunamis and storm surge during hurricanes and other severe tropical storms (Table 4). Fletcher et al. (2002) rank this part of Oahu's shoreline as high-hazard because of the low-lying, gently sloping coastal plain. Flood inundation heights of 12 and 14 feet, respectively, were recorded during the 1946 and 1957 tsunamis. Storm surge during hurricanes increases the threat of inundation from storm waves. The Waianae coast has, historically, received significant wind and wave energy associated with passing hurricanes. The two most recent of these, Iwa, in 1982, and Iniki, in 1992, generated

damaging storm surge, high waves and coastal flooding to an elevation of 11 feet above mean sea level and, regionally, higher.

Table 3. Elevations of the Marine Terraces

Stations	Lower Terrace	Upper Terrace		
	Makai Edge	Makai Base	Top Makai Edge	Makai Base Of Wall
S to N	S to N	S to N	S to N	S to N
1	2.50	2.90	2.90	8.40
2	2.90	3.10	4.80	8.50
3	2.60	2.90	5.90	8.30
4	2.80	3.00	6.50	8.60
5	2.80	3.10	7.10	8.70
6	2.60	2.90	3.70	8.10
7	2.30	3.0	6.10	8.10
8	2.30	3.20	6.30	8.20
9	2.1	3.10	4.80	7.50
10	1.90	3.20	6.10	7.80
11	2.20	3.20	6.10	7.70
12		3.10	6.40	7.40
13		3.10	6.20	
14		3.10	5.10	
15		3.20	5.80	
16		3.10	6.30	
16		3.20	6.50	
18		3.10	6.30	
19		3.30	6.20	
20		3.10	6.90	
21		3.10	6.40	
22		3.40		
23		3.30		
24		3.20		
Average	2.45	3.12	5.83	8.11

Elevations in feet above mean sea level
Survey Data from benchmark TU0597
Survey by Wesley T. Tengan 2010; full survey data in Appendix B

A. Marine terraces with a falling tide washing onto the lower terrace

B. Marine terraces at a low tide with waves breaking at the edge of the lower terrace.

Figure 8. Marine Terraces

The top photo in Figure 8 shows waves washing onto the lower marine terrace during a falling tide. The lower photo was taken at a low tide, and the waves are breaking on the face of the lower marine terrace. During high tide, large waves wash up and over the upper marine terrace and often reach the base of the seawall. The puddles shown in the bottom photo are seawater that was captured in the low spots when the high tide receded.

4.3.1 Impacts to Offshore and Nearshore Environments

Legalizing the existing seawall and allowing it to remain in place will not result in any adverse impacts on offshore and nearshore areas or on water quality. The seawall may, in fact, prevent sediment-containing runoff from reaching the ocean, where fine-grained sediment could smother the living corals and seaweed in the Class A waters.

Removing the seawall would result in adverse impacts. Waves that wash up over the marine terrace would remove and transport the silty, sandy soils into the Class A waters. This would increase turbidity, and deposit a potentially lethal layer of fine-grained sediment over coral and seaweed, thus destroying important marine habitat and feeding areas. Removing the seawall would result in severe damage to the property, as the soil, vegetation, and debris from damaged structures are removed from the property by large waves. In addition to compromising the quality of the Class A waters offshore and the turtle feeding grounds, this would create a public hazard, liability issues, and financial hardship for the property owners.

Mitigation Measures: The proposed legalization of the existing seawall would have no impact on the offshore and nearshore environments. Removing the seawall would result in negative impacts. Therefore, mitigation in this case would consist of legalizing the existing seawall and allowing it to remain in place.

4.4 Flooding, Tsunami, and Wave Action

According to *The Atlas of Natural Hazards in the Hawaiian Coastal Zone* (Fletcher et al. 2002), terrestrial sources of flooding are flash flooding along streams that occurs during periods of very heavy precipitation. There are no streams within a mile north or south of the property, so that flash flooding along streams is not a concern at the Ochi property.

The upper marine terrace in this area slopes gently (0.13%) toward the sea, and elevations along Moua Road are 12.3 feet amsl. The terrace is covered with Mamala Series soils, which are moderately permeable, and runoff is generally very slow to medium. During periods of very heavy precipitation, some surface ponding is likely to occur. During extreme surf and elevated sea levels, waves flow onto the upper rocky marine terrace and across the properties on the marine terraces, washing most of the debris and soil out to sea.

Any major flooding of the project area and vicinity will result either from an elevated sea level due to storm surge associated with low pressure areas in large tropical storms, or from a tsunami. Tropical storms (including hurricanes) tend to track just west of Oahu as they pass the Hawaiian Islands. Two storms in recent history, hurricanes Iwa (1982) and Iniki (1992) generated damaging high waves, and the associated storm surge produced coastal flooding to an elevation of 11 ft above mean sea level and higher. Tsunamis can impact the region. Inundation heights of 12 and 14 feet, respectively, were recorded during the 1946 and 1957 tsunamis.

Table 4. Events Causing Damaging High Waves on the Southwest Shore of Oahu

Date	Storm or Event
1957, Sept –17	Hurricane Della
1957, Nov 30–31	Hurricane Nina
1959, August 4–7	Hurricane Dot
1971, January 16	High Surf
1982, November 23	Hurricane Iwa
1989, March 1–4	High Surf
1989, July 18–20	Tropical Storm Dalilia, high surf
1992, September 11	Hurricane Iniki, high surf
1997, September 23–25	Typhoon David, high surf
1998, January 23–31	15-20 foot NNW swell, high surf

From the *Atlas of Natural Hazards in the Hawaiian Coastal Zone*

4.4.1 Impacts from Flooding, Tsunamis, and Wave Action

In the event of storm surge during a large tropical storm, or a medium to large tsunami, flooding can be anticipated. On the Flood Insurance Rate Map (FEMA Map Number 15003C0180G, 2005), the project site is located in Zone VE: coastal flood zone with velocity hazard (wave action); and also Zone AE: Base flood elevations are determined to be 14 feet above msl. Base flood elevations determined are based upon recorded events.

Flooding can be anticipated during a tsunami or a severe tropical storm. During storm surge and other extreme conditions, waves hit the rock face of the lower terrace with such force that the water is propelled onto the surface of the upper terrace and travels inland, after which it flows back along the surface of the terrace and falls back into the ocean. If the after-the-fact shoreline setback variance and permitting for the wall is not granted, and the wall is demolished, seawater would travel further and flood onto the Ochi property. It would strike and dislodge soil and vegetation, as well as structures and other property, and soil and debris would be washed back into the ocean and be dispersed in the nearshore Class A waters.

If the seawall remains in place, it would dissipate some of the wave energy during storms or tsunamis, and the structures would likely remain intact during the flooding. It might be effective in dissipating some of the wave energy as the destructive wave bore advances. Overtopping and wetting would likely occur during storm surge or tsunami inundation. The seawall would also prevent the soil from being washed offshore, by slowing and retaining some of the backwash. If the seawall were removed, the structures on the Ochi property would more than likely be severely damaged, and most of the debris, soil, and landscaping would be washed offshore. This would compromise the quality of the Class A waters offshore, possibly kill the coral polyps, and damage the turtle feeding areas.

Removal of the seawall would also create hardship, including financial hardship, for the landowners, who could possibly lose the soil, vegetation and all of the structures on the property. It would also create a public hazard and liability issues.

Mitigation Measures: In the case of a hurricane or other large tropical storm, or a large tsunami, mitigation is often difficult and very expensive. Mitigation for such hazards would include keeping the existing seawall in place to dissipate the energy of the onrushing ocean water. Most

damage in such events is caused by large, fast-moving masses of water that strike soil, vegetation and structures with great force (Keller 1999, Dunne & Leopold 1978). Because the top of the existing wall is less that 14 feet amsl, the highest recorded tsunami wave height to strike the vicinity, flooding can be anticipated.

Source: City and County of Honolulu, GIS

Figure 9. Flood Insurance Rate Map

4.5 Air Quality

The remoteness of the Hawaiian Islands from any large sources of industrial pollution keeps the surrounding air relatively clean. Currently, the Hawaiian volcanoes are a natural source of air pollution. Sulfur dioxide, carbon dioxide, carbon monoxide and other emissions from the volcanoes increased in 2008. When metrological conditions cause the prevailing trade winds to weaken or stop, the islands become enshrouded by a hazy atmosphere called vog. Vog can cause short-term symptoms in humans that include respiratory irritation and coughing.

There are no stationary sources of pollution within the project site. The greatest sources of pollution in the project area vicinity are motor vehicle traffic on Moua Street and Farrington Highway and, periodically, vog.

4.5.1 Impacts to Air Quality

Legalizing the seawall will not increase emissions of pollutants, and it will have no impact on air quality.

Mitigation Measures: No mitigation is required for anthropogenic pollution at the site. There is no mitigation for vog.

4.6 Noise

Ambient noise near the project site consists of the sound of motor vehicle traffic along Moua Street and waves striking the rocky marine terraces.

4.6.1 Impacts to Noise

Legalizing the seawall will not generate any additional noise.

Mitigation Measures: No mitigation for noise is required.

4.7 Flora and Fauna

The property has been used as a residence for over 50 years. Vegetation on the property consists of lawn grasses and common landscaping plants such as coconut palms *(Cocos nucifera).* Fauna on the project site are species that are commonly found in residential neighborhoods in West Hawaii. Because the property and vicinity has been fully developed, it is unlikely that there are endangered flora or fauna located on the property or nearby. The U.S. Fish and Wildlife Service has been consulted for this EA.

4.7.1 Impacts to Flora and Fauna

The existing seawall will not impact the flora and fauna on the property. Consultation with U.S. Fish and Wildlife Service was initiated and no rare or endangered species occur on site.

Mitigation Measures: No mitigation for flora or fauna is warranted.

4.8 Historic, Archaeological and Cultural Resources

Waianae District contains numerous archaeological sites associated with the history of the region. Local people consider these sites to be important as traditional or cultural sites. Various types of archaeological and cultural resources have been found in Leeward Oahu, such as fishing

areas, bird colonies, and shellfish collection areas. Early Windward residents would often come to visit and stay at small campsites along the Leeward coast. Almost every valley in Waianae District still contains archaeological sites associated with Oahu's and Waianae's life and history (City and County of Honolulu 2000).

Historic and cultural sites are spread widely throughout the upper parts of the valleys in Waianae. There are no historic or cultural sites on or near the Ochi property. The closest historic and cultural sites are found 1.3 miles northwest of the property, at Kepuhi Point. No Hawaiian practices or gatherings occur on or near the property.

4.8.1 Impacts to Historic, Archaeological, and Cultural Recourses

No impacts to archaeological, cultural, or historic resources have occurred as a result of construction of the property seawall. Neither will legalizing the CRM seawall as is have any impacts to such resources.

Mitigation Measures: No mitigation for historic, archaeological, or cultural recourses is required.

4.9 Land Use

The property is zoned R-10 residential district, according to the LUO of the City and County of Honolulu. The purpose of the R-10 residential district is to provide for developments containing large lots. The lands in this district are designated for residential use, but there are some constraints on development. R-10 zoning allows for a single-family dwelling on a minimum 10,000 square foot lot. The Ochi property is 23,620 square feet, and it contains one single-family home built in the year 1956 that has been used as a residence for over 50 years. The applicants use the house as a vacation home.

4.9.1 Impacts on Land Use

No changes in land use will occur as a result of legalizing the seawall.

Mitigation Measures: No mitigation for land use is required.

4.10 Circulation and Traffic

The property is located in a small, quiet residential area on Moua Street, off of Farrington Highway. In the residential community, traffic is very light throughout the day. Farrington Highway is subject to periods of light and moderate-to-heavy traffic on any day of the week.

4.10.1 Impacts on Circulation and Traffic

No construction is proposed, and use of the property will not change; therefore, legalizing the seawall will not affect any traffic patterns.

Mitigation Measures: No mitigation for circulation and traffic is required.

4.11 Public Utilities, Facilities, and Beach Access

Legalizing the seawall will not result in any change in the use of the parcel for a single family residence and will not increase the demand on existing infrastructure. Public utilities such as the potable water system, wastewater system, drainage facilities, solid waste disposal, electrical power, and communications systems would not be affected by legalizing the seawall.

This part of Makaha is a residential neighborhood located between the ocean and Farrington Highway. The area gets little, if any, public traffic. The nearest public beach parks with large sandy beaches and good swimming and surfing are located more than 0.6 miles to the north and 0.8 miles to the south.

The very small pocket beach known as Laukinui Beach is just north of the project site. Neighborhood residents use it occasionally, and it is used as a haul-out area by turtles. The area does not have a good surf break or a good area for swimming because of the shallow, rocky outcrops. A few surfers and some spear fishermen swim out from the beach.

There is public access to Laukinui Beach, and from there people can explore the marine terraces to the north and south, including the terrace that fronts the project site and the neighboring properties. Recreational use of the marine terraces is primarily for fishing. Fishermen stand close to the edge of the terraces because if they were to fish on the upper terrace near the surrounding seawalls, their lines would become entangled in the rocks that make up the seaward fringe of the lower marine terraces. The seawalls that delineate private property are, in some locations, 40 feet or more from the water's edge. Public access and public use will not be changed by legalizing the seawall.

4.11.1 Impacts on Public Services, Facilities, and Beach Access

If an after-the-fact shoreline setback variance & permitting are granted, the existing seawall will remain in place, and there will not be any impact on public services, roads, and utilities. Public access and use of the shoreline would not be changed or obstructed.

Mitigation Measures: No mitigation for public services, facilities, or beach access is required.

4.12 Visual Resources

There are no ocean views from Moua Street and Farrington Highway. Structures, fences, and vegetation on all of the parcels along the makai side of Moua Street obstruct views of the shoreline.

4.12.1 Impacts to Visual Resources

Keeping the seawall in place would cause no changes in the viewshed, and it would not impact coastal views or the visual aesthetics of the property. The seawall and the ocean cannot be seen from Moua Street.

Mitigation Measures: No mitigation for visual resources is required.

4.13 Socioeconomic Resources

The project site is located in a fully developed residential neighborhood. The applicants propose no new construction on the existing seawall. No jobs will be lost or gained. The proposed action will not affect the demographics in the vicinity of the property.

The existing seawall has been effective in providing privacy, in separating public areas from private land, and in protecting the Ochi home and property from overwash during extreme tides, storm surge, and other large wave events.

4.13.1 Mitigation Measures for Impacts on Socioeconomic Recourses

No impacts to socioeconomic resources are anticipated if the seawall is legalized. If the seawall is not legalized and must be removed, the property will immediately lose value as the market

recognizes its increased vulnerability to damage from waves. Over time, potential loss of value will become real losses, as the soil washes off the parcel and the house suffers structural damage.

Mitigation Measures: No mitigation for socioeconomic recourses is required for the Proposed Action.

5.0 Cumulative Impacts

The proposed project is to obtain an after-the-fact shoreline setback variance and permitting to legalize the existing seawall. As a result, no changes would be made to the Ochi property, and therefore, no impacts, including cumulative impacts, would occur.

If the seawall were removed, negative impacts would result, including transport of silty, sandy soil, sod, and other vegetative debris into the Class A waters offshore. The soil would increase ocean turbidity, harming corals and the turtle feeding grounds. Removal of the seawall would also create hardship for the landowners, who would lose their soil and vegetation, and, over time, everything else on the property. Similar damage to the reef and hardship for the Ochis could be expected if DPP requires the seawall to be rebuilt inland.

If the situation is not resolved and the seawall is not legalized, the City and County of Honolulu will place a lien with a foreclosure option on the property to collect the accruing fines. The property owners would face the real possibility of losing their property to the city. The property owners have, since 2006, been making a good faith effort to rectify the problem.

Mitigation Measures: To protect the environment and to reduce hardship for the landowners, mitigation in the form of legalizing the seawall is required. The alternative options discussed above would be ineffective at best and, at worst, would damage the environment and cause hardship to the landowners.

6.0 Findings and Determinations

The information presented in this Draft EA demonstrates that legalizing the existing CRM seawall would have no significant impact on the environment. There are no environmental impacts related to the applicant obtaining a shoreline setback variance. An Environmental Impact Statement is not required for this action, and a Finding of No Significant Impact is anticipated.

6.1 Reasons for Supporting Preliminary Determination

The findings and determinations of this EA are based on the significance criteria contained in Chapter 343, HRS, as amended, and Title 11, Chapter 200, HAR 1996. The proposed action:

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

The proposed action does not involve any irrevocable commitment to loss or destruction of natural or cultural resources.

2) Curtails the range of beneficial uses of the environment

Permitting and legalizing the structure will not lead to changes that will restrict the range of beneficial uses of the environment. Public access to the shoreline will not be reduced or eliminated.

3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 343, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders

The project complies with the state's long-term environmental policies, goals, and guidelines expressed in Chapter 343, HRS.

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

As proposed, the legalization of the seawall will not affect the economic or social welfare of the community or the state. The seawall will protect the Ochi property from wave damage during extreme tides and storm surges, and provides privacy from the public areas.

5) Substantially affect public health

The project will not affect public health.

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

No secondary impacts will occur because no new construction is being proposed. The existing structure will remain in place, causing no changes in population or to public facilities.

7) Involves a substantial degradation of environmental quality

The existing structure does not degrade the quality of the environment. The current structure and the original rock and concrete rubble seawall have been in place for years, protecting the property from waves that wash up and over the marine terrace. No new construction is proposed.

8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger action

No cumulative impacts are associated with the requested application for an after-the-fact shoreline setback variance and permitting to legalize the existing seawall.

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

No known endangered flora and fauna occur on the property. Consultation with the U.S. Fish and Wildlife Service was initiated.

Offshore areas will be negatively impacted if the seawall is removed. If the seawall is removed, waves will wash onto the property and carry silty, sandy soils, sod, and other vegetation and debris off the marine terrace and into the Class A waters. This will increase the turbidity of the waters, harming corals and inhibiting the growth marine algae that are part of the turtle feeding grounds.

10) Detrimentally affects air or water quality or ambient noise levels

No new construction activities will occur on the property; therefore, no detrimental effects on air, water quality, or ambient noise levels will occur.

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

The existing structure provides a beneficial impact because it minimizes the potential for removal of soil from the property and sediment-containing runoff from reaching the Class A waters offshore.

The structure will have little or no impact on flooding, tsunamis, geologically hazardous land, estuary, or fresh and coastal waters. Flooding can be anticipated during tsunamis or storm surges caused by severe tropical storms.

12) Substantially affects scenic vistas and viewplanes identified in county or state plans or studies

The existing seawall does not affect the scenic views of the vicinity. It is similar to other existing structures on neighboring properties along the shoreline. There are no ocean views from Moua Street or Farrington Highway in the vicinity of the property.

13) Requires substantial energy consumption

No new construction will take place and there will be no increased demand for energy. Therefore, legalizing the seawall will not require substantial energy consumption.

7.0 Justification for the Shoreline Setback Variance

The owners will suffer hardship if the shoreline setback variance is not granted and the seawall must be removed. This application for an after-the-fact shoreline setback variance is evaluated on three criteria for hardship set forth in the ROH Section 23-1.8(b)(3)(A):

(A) A structure or activity may be granted a variance upon grounds of hardship if:

i) The applicant will be deprived of reasonable use of the land if required to comply with the shoreline setback ordinance and the shoreline setback rules

The applicants' property is located on a limestone and lava outcropping (marine terrace) that extends offshore and steps off into the ocean. During high tides and storm conditions, waves wash over the rocky outcrop, and water strikes the base of the seawall. If the seawall were not in place, the waves would wash onto the makai portion of the property; then the retreating water would carry surface soil onto the rocky outcrop and, eventually, into the ocean.

During extreme, but not unusual, ocean activity, waves could endanger the house, which is mauka of the seawall. It is reasonable to assume that loss of soils will occur if the applicants are required to comply with shoreline rules and remove the existing wall that has been in place for five years. Soils will slough off onto the marine terraces makai of the Ochi property and eventually reach the ocean. Over time, soils under the existing concrete lanai floor would slough off and be washed off into the ocean, causing serious damage to the existing home.

The purpose of the seawall is not only to protect the house, but to permit the property owners to use and landscape their property within the constraints imposed by the shoreline setback provisions. In this area, without the seawall for protection, this would be impossible. The shoreline setback provisions do not require a landowner to abandon his property in the shoreline setback area; rather, use of the property is permitted within the constraints imposed by the statute. This is what is occurring on this property, and the owners hope to be able to continue to use their property in this way.

On this portion of coastline, there is no environmental benefit to be gained by refusing the after-the-fact shoreline setback variance and permitting, and requiring the wall to be demolished or

moved. Likewise, no environmental processes are being degraded by having a protective seawall at the anticipated certified shoreline.

ii) The applicant's proposal is due to unique circumstances and does not draw into question the reasonableness of this chapter and the shoreline setback rules

The project circumstances are unique relative to the shoreline setback rules (ROH Section 2301.2), as it does not involve the protection of a sandy beach or an eroding shoreline; it does not artificially fix the shoreline; and it does not question the reasonableness of the ordinance.

The CRM seawall is not designed as a major shoreline structure to prevent shoreline erosion. The seawall is constructed on an elevated marine terrace composed of extremely durable basalt topped with erosion-resistant, coralline limestone. The basalt-limestone shoreline is not subject to erosion on a human time scale (Fletcher et. al. 2009, Hwang, 1981). The CRM seawall, therefore, does not artificially fix the shoreline.

All of the properties along this part of the shoreline have similar seawalls that are approximately the same height and in similar locations on the properties they protect. All of these seawalls serve the purpose of delineating private areas from public access areas and, under extreme conditions (heavy precipitation, storm surge and tsunami), preventing wave inundation and reducing flood hazards and, thereby, allowing the property owners reasonable use of their property.

The purpose of the seawall is to permit the owners to use and landscape their property, within the constraints imposed by the shoreline setback provisions. In this area, using and landscaping their property would be impossible without some sort of seawall for protection from wave damage during high tides, storm surge, and tsunami, and to retain runoff of sediment and debris into the sea. The shoreline setback provisions do not require a land owner to abandon their property in the shoreline setback area. Rather, use of the property is permitted within the constraints imposed by the statute. This is what is occurring on this property.

iii) The proposal is the practicable alternative that conforms best to the purpose of the shoreline setback regulations

This EA reviews four alternative actions. The first alternative examined was the no action alternative. Under the no action alternative, the applicants will continue to accrue fines owed to the City and County of Honolulu for the current violation. This alternative is not practical because it will not solve the problem of the applicants' accruing fines and will not correct the outstanding violation.

The second alternative action is to remove the existing seawall. This alternative will solve the problem of the applicants' notice of violation and would stop the accruing fines. If this action is implemented, the property will be vulnerable to effects of erosion and wave damage. Soils washed off the property will increase the turbidity of the Class A waters offshore, and corals will be covered with a layer of fine-grained soil that will eventually kill the coral polyps. Turtle feeding grounds offshore would also be damaged or destroyed. Over time, as erosion continues, property will be lost due to the effects of wave damage and the Class A waters offshore will be degraded, making this alternative unacceptable.

The third alternative action is to build an openwork fence. This alternative is not a practical alternative because it will not keep soil, sod, other vegetation, and other debris on the property. During periods of heavy precipitation, the soil could be washed off the property, onto the wave-cut platform and be carried into the sea. Once in the ocean, the fine-grained soils will cover the

coral polyps and seaweed growing offshore, potentially smothering the coral colonies and degrading turtle feeding grounds in the seaweed. Damage to the yard and loss of property would also occur.

The last and preferred alternative is to correct the current violation by granting the after-the-fact shoreline setback variance and leaving the seawall in place. The seawall is the best alternative for protecting against environmental damage and loss of property. The landowners are applying for an after-the-fact shoreline setback variance and permitting to correct the current violation. Other after-the-fact shoreline setback variances have been granted for several neighboring properties. This is the best and most practical alternative.

The preferred alternative is the best practicable alternative to reduce the hazards and problems due to high wave conditions. The CRM seawall has a minimal footprint and elevation and does not affect coastal access. Leaving it in place would also have the least impact on the marine environment.

8.0 Conclusions

The findings of this EA indicate that granting a shoreline setback variance and permitting for the existing seawall will cause no adverse environmental impacts and appears the most reasonable action compared to possible alternative actions at this location. . In terms of ocean processes, the seawall structure does not cause adverse effects to the coastal marine environment and does not cause adverse impacts to the adjoining properties. The wall would, in fact, have the beneficial environmental impact of protecting structures and other property, as well as soils and vegetation on the Ochi property during large wave events. It would slow the retreating water and capture the entrained soil, vegetation, and debris, preventing most of it from reaching the ocean. This would protect corals and turtle feeding grounds offshore and the quality of the Class A waters, generally.

9.0 Public Agency Involvement, Review, and Consultation

Federal Agencies
U.S. Fish & Wildlife Service

State Agencies
Office of Environmental Quality Control
Office of Hawaiian Affairs
Department of Land and Natural Resources

City and County of Honolulu
Department of Planning and Permitting

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11.0 Appendices

Appendix A: Preliminary Consultation, Letters, and Responses

Appendix B: Notice of Violation
Denied Shoreline Certification Survey
Current Shoreline Survey

Appendix C: Permit and Parcel Information (from DPP Records)

Appendix D: Engineered Plans of the CRM Seawall

Appendix A

Preliminary Consultation, Letters, and Responses

Project Information for

Shoreline Setback Variance Application

for a CRM Wall
TMK: 8-4-006:007
Makaha, Oahu, Hawaii

General project information:

THE APPLICANT	Ken & Gene Ochi 2845 Via Victoria Palos Verdes Estates, CA 90274 (310) 971-3866
APPLICANTS REPRESENATIVE	Ken & Gene Ochi c/o Mr. Mike Hitzeman Sugar Kane Realty 86-120 Farrington Highway Waianae, Hawaii 96792 (808) 306-1799
THE APPLICANT'S AGENT	Analytical Planning Consultants, Inc. 928 Nuuanu Avenue, Suite 502 Honolulu, Hawaii 96817 Contact: Mr. Donald Clegg (808) 536-5695
EA PREPARATION	Wil Chee - Planning & Environmental 1018 Palm Drive Honolulu, Hawaii 96814 (808) 596-4688
TMK AND OWNER	8-4-006:007 Ken & Gene Ochi 2845 Via Victoria Palos Verdes Estates, CA 90274 (310) 971-3866
LAND AREA	23,620 square feet or 0.542 acres
ZONING	R-10 Residential District
AGENCIES CONSULTED	Department of Planning and Permitting City & County of Honolulu Department of Land and Natural Resources Office of Conservation and Coastal Lands

---

Project Information for

Shoreline Setback Variance Application

for a CRM Wall

TMK: 8-4-006:007

Makaha, Oahu, Hawaii

REQUIRED PERMITS AND APPROVALS:	Shoreline Setback Variance Building Permit
ACCEPTING AUTHORITY	Department of Planning and Permitting City & County of Honolulu 650 South King Street, 7th Floor Honolulu, Hawaii 96813

Project Location:

The project site is located at 84-771 Moua Street, off Farrington Highway in Makaha on the Island of Oahu. (Figures 1, 2, & 3)

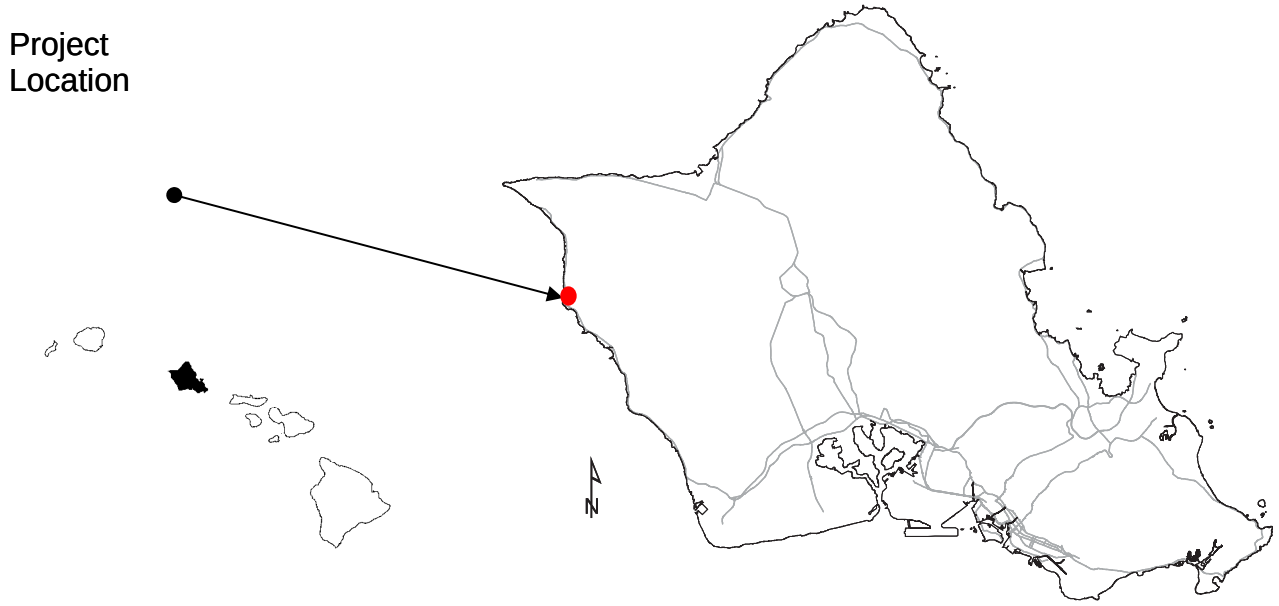

Figure 1: Project Location Map

Project Information for

Shoreline Setback Variance Application

for a CRM Wall

TMK: 8-4-006:007

Makaha, Oahu, Hawaii

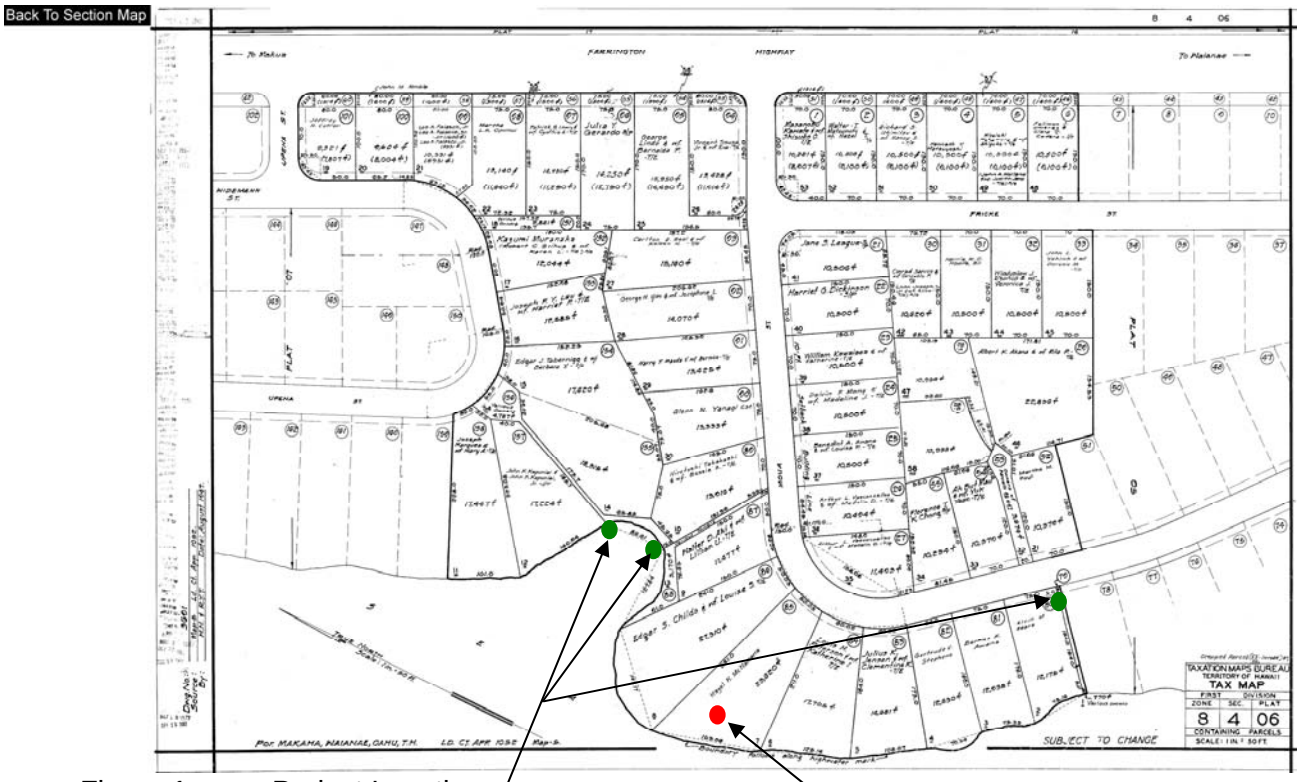

Figure 1 Project Location

Figure 2: TMK Map

Proposed Action:

The proposed project is to request a Shoreline Setback Variance to obtain after-the fact permits for a concrete rock masonry wall. Based on the information available, it is unknown when the original wall was constructed. The CRM wall is a free standing structure approximately 2 feet in height on the mauka side and is approximately 5 feet on the makai side. The base of the wall is constructed and follows the uneven coralline limestone platform. The wall is made of lava rock and concrete and separates the private property from public areas (Figure 4). The wall extends approximately 116 ft across the entire property and ends at the adjacent property lines. Photographs of the wall are shown in Figure 5, Shoreline Photographs.

Figure 3: Aerial Photo of the Vicinity

Land Area:

Parcel 007 is approximately 23,620 square feet (0.542 acres). This exceeds the City Land Use Ordinance guidelines for R-10 that requires a minimum of 10,000 square feet for a single family residence.

Surrounding Land Use and Land Use Designations:

The property is within the Urban State Land Use District and R-10 Residential District, according to the City LUO. The property is surrounded by parcels used as residential lots fronting the ocean and all have walls that block public access to private areas.

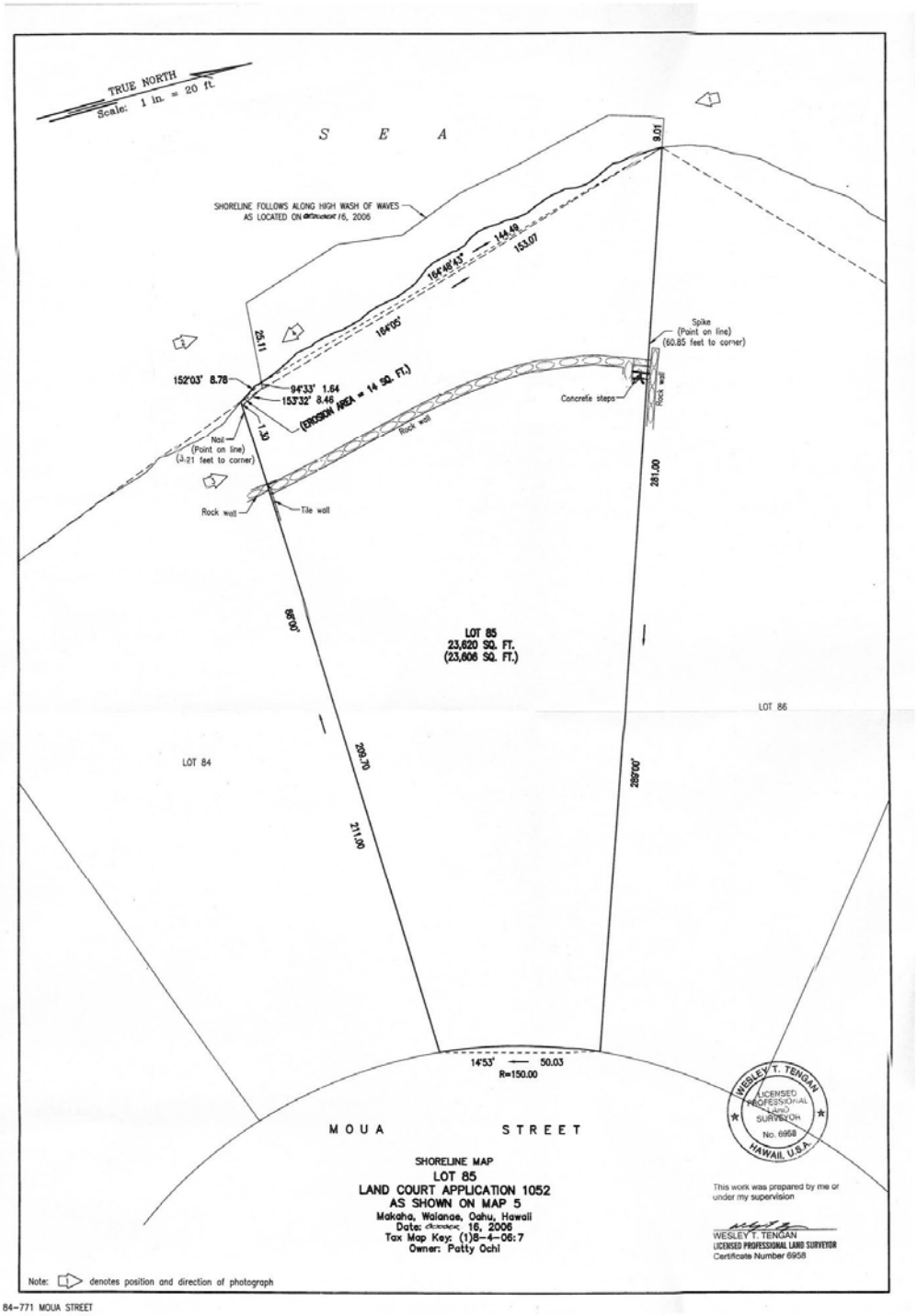

Figure 4: Survey, 2006

Photograph 1: Wall along TMK 8-4-006:007

Photograph 2: The coralline limestone platform fronting the wall

Photograph 3: The coralline limestone platform along the certified shoreline

Photograph 4: The wall fronting the property

Photograph 5: Stairs on the right side of the wall leading down to the limestone coralline platform

Photograph 6: Stairs on the left side of the wall adjacent to the neighboring property

Figure 5: Shoreline Photographs, 2009

History of Proposed Project:

The original home was built in 1956 and the wall was constructed shortly after this, prior to CZC regulations that established setback requirements in 1966. It appears that the original wall was not permitted. In 2005, the Ochi's purchased the property and due to wear & exposure to the elements on the wall, repairs were needed.

In 2006, the Ochi's made repairs to the existing CRM wall and later received a notice of violation dated May 9, 2006. The violation stated, "the existing 5` retaining wall at the rear of the property is being reconstructed without first obtaining a building permit." The Ochi's tried to obtain a permit, but the permit was not granted because there was no documentation of the original wall being permitted. They were then asked to do a shoreline survey. In 2007, a shoreline survey was conducted and later rejected. The State Land Surveyor rejected the application because not all appropriate documents were submitted. There is no record of permitting for the construction of the original wall. Therefore, there is no supporting documentation to support the CRM wall was approved by the appropriate government agencies or is exempt from such approval.

Existing Site Description:

The property is located off of Farrington Hwy on Moua Street in an older residential area. The property is surrounded by numerous residential lots that currently have certified shorelines and walls to separate public access from private properties. There is no beach fronting the property only rocky shoreline consisting of a limestone wave cut platform. In the area, there are three public beach accesses. (See Figure 2)

The property is used as the Ochi's vacation home. Currently, the site has one single family dwelling. Fronting the residence is the CRM wall. The original wall over time was damaged by weathering over the years and hurricanes; therefore, the Ochi's made repairs to the wall. The repairs were needed for safety and protection of the property from wave splash.

Public Agency Involvement, Review and Consultation:

The following agencies will be consulted during the preparation of the Draft Environmental Assessment (DEA):

- City & County of Honolulu, Department of Planning and Permitting
- State Office of Environmental Quality Control
- State of Hawaii, Department of Land and Natural Resources
- U.S. Fish & Wildlife Services

Permits required for this project are:

- Shoreline Setback Variance pursuant to Chapter 23, Revised Ordnances of Honolulu
- After-the-Fact Building Permit from the City and County of Honolulu

References:

City & County of Honolulu, Department of Planning and Permitting. May 9, 2006. Notice of Violation; Violation No.: 2006/NOV-05-074 (BV).

WIL CHEE - PLANNING & ENVIRONMENTAL

July 22, 2009

Laura Thielen, Chairperson
State of Hawaii, Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Thielen

Subject: Shoreline Setback Variance Application & Environmental Assessment (EA) for a CRM Wall Makaha, Oahu, Hawaii

Dear Ms. Laura Thielen,

Wil Chee – Planning & Environmental, is preparing an Environmental Assessment (EA) that will be submitted together with an application for a Shoreline Setback Variance for the CRM Wall in Makaha. The project site is located in a residential area off of Farrington Highway.

The project will require after-the fact permits for the current concrete rock masonry wall existing on the property.

In compliance with § 11-200-9 Hawaii Administrative Rules Department of Health, Title 11 Chapter 200, *Environmental Impact Statement Rules*, this letter is intended to initiate early consultation with agencies and groups having jurisdiction or expertise related to the project. We have enclosed a project information sheet consisting of maps and a description of the proposed project. We would appreciate receiving any comments or concerns which may influence the subject EA.

If you have any questions or need more information on this project please contact Kelly Shoji at (808) 596-4688. Thank you for you time and interest.

Sincerely,

Kelly Shoji

Kelly Shoji

Attachments

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

August 22, 2009

Wil Chee – Planning & Environmental
1018 Palm Drive
Honolulu, Hawaii 96814

Attention: Ms. Kelly Shoji

Ladies and Gentlemen:

Subject: Shoreline Setback Variance Application & Environmental Assessment (EA) for a CRM Wall Makaha, Oahu

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Division of Aquatic Resources, Division of Boating & Ocean Recreation, Land Division, Division of Forestry & Wildlife, Division of State Parks, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Charlene E. Unoki
for Morris M. Atta
Administrator

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 28, 2009

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
x Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Oahu District /Ian
x Historic Preservation

FROM: Morris M. Atta
SUBJECT: Proposed Shoreline Setback Variance Application and Environmental Assessment for a CRM wall
LOCATION: Waianae, Oahu, TMK: (1) 8-4-6:7
APPLICANT: Wil Chee Planning & Environmental on behalf of Ken & Jean Ochi

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by August 20, 2009.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

(X) We have no objections.
( ) We have no comments.
( ) Comments are attached.

Signed: Paul J Conry
Date: JUL 29 2009

PAUL J. CONRY, ADMINISTRATOR
DIVISION OF FORESTRY AND WILDLIFE

53325

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

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July 28, 2009

DEPT OF LAND & NATURAL RESOUR

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
x Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Oahu District /Ian
x Historic Preservation

RECEIVED
LAND DIVISION
2009 JUL 31 P 1:14
DEPT. OF LAND & NATURAL RESOURCES STATE OF HAWAII

FROM: Morris M. Atta
SUBJECT: Proposed Shoreline Setback Variance Application and Environmental Assessment for a CRM wall
LOCATION: Waianae, Oahu, TMK: (1) 8-4-6:7
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Attachments

( ) We have no objections.
(✓) We have no comments.
( ) Comments are attached.

Signed:
Date: 7/30/09

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

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STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 28, 2009

AQUATIC RESOURCES: 2517

DIRECTOR	
COMM. FISH.	
AQ RES/ENV	
AQ REC	
PLANNER	
STAFF SVCS	
RCUH/UH	
STATISTICS	
AFRC/FED AID	
EDUCATION	
SECRETARY	
OFFICE SVCS	
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No. Copies	
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Due Date:	

RECEIVED
JUL 29 2009
AQUATIC RESOURCES

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
x ~~Div. of Boating & Ocean~~ Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x Office of Conservation & Coastal Lands
x Land Division –Oahu District /Ian
x Historic Preservation

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SUBJECT: Proposed Shoreline Setback Variance Application and Environmental Assessment for a CRM wall
LOCATION: Waianae, Oahu, TMK: (1) 8-4-6:7
APPLICANT: Wil Chee Planning & Environmental on behalf of Ken & Jean Ochi

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If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

(X) We have no objections.
( ) We have no comments.
( ) Comments are attached.

Signed:
Date: 30 July 2009

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

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HONOLULU, HAWAII 96809

July 28, 2009

RECEIVED
LAND DIVISION
2009 JUL 30 P 2:37
DEPT. OF LAND & NATURAL RESOURCES STATE OF HAWAII

MEMORANDUM

TO: **DLNR Agencies:**
- x Div. of Aquatic Resources
- x Div. of Boating & Ocean Recreation
- x Engineering Division
- x Div. of Forestry & Wildlife
- x Div. of State Parks
- x Commission on Water Resource Management
- x Office of Conservation & Coastal Lands
- x Land Division –Oahu District /Ian
- x Historic Preservation

FROM: Morris M. Atta
SUBJECT: Proposed Shoreline Setback Variance Application and Environmental Assessment for a CRM wall
LOCATION: Waianae, Oahu, TMK: (1) 8-4-6:7
APPLICANT: Wil Chee Planning & Environmental on behalf of Ken & Jean Ochi

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by August 20, 2009.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
(X) We have no comments.
( ) Comments are attached.

Signed: 7/29/09
Date:

JUL29'09aM10:32BOR DIV

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 28, 2009

MEMORANDUM

TO: **DLNR Agencies:**

x Div. of Aquatic Resources
x Div. of Boating & Ocean Recreation
x Engineering Division
x Div. of Forestry & Wildlife
x Div. of State Parks
x Commission on Water Resource Management
x ~~Office of Conservation~~ & Coastal Lands
x Land Division – Oahu District /Ian
x ~~Historic Preservation~~

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LOCATION: Waianae, Oahu, TMK: (1) 8-4-6:7
APPLICANT: Wil Chee Planning & Environmental on behalf of Ken & Jean Ochi

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If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(x) Comments are attached. see below

Signed:
Date: 7/29/09

There is no application for cert. shoreline for this property at this time. No further comments at this time. Thank you.

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

July 28, 2009

MEMORANDUM

FROM: ~~TO:~~

DLNR Agencies:
x Div. of Aquatic Resources
x Div. of Boating & Ocean Recreation
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x Div. of Forestry & Wildlife
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x ~~Historic Preservation~~

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Attachments

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(X) We have no comments.
( ) Comments are attached.

Signed: _____
Date: 7/29/09

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

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

STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
Office of Conservation and Coastal Lands
POST OFFICE BOX 621
HONOLULU, HAWAI'I 96809

DLNR:OCCL:.CC

Correspondence: OA-10-024

08/20/2009

Kelly Shoji
Wil Chee Planning & Environmental
1018 Palm Drive
Honolulu, Hawaii 96814

Dear Mrs. Shoji,

SUBJECT: RE: Shoreline Setback Variance Application and Environmental Assessment (EA) for a CRM Wall at TMK (1) 8-4-006:007, Makaha, Oahu, owners Ken & Jean Ochi

The Office of Conservation and Coastal Lands (OCCL) received your letter requesting preliminary comments for a Draft Environmental Assessment (DEA) for an After The Fact (ATF) permit for seawall construction at TMK (1) 8-4-006:007.

Sea Grant Extension Agent Chris Conger, at the OCCL, assisted Land Division and the State Land Survey Office in a shoreline certification site inspection for the parcel on January 12, 2007. During the course of the site visit it was determined that the wash of the waves, during that same day, had reached the face of the new seawall. It was determined at that time that the shoreline location, for certification purposes, as defined in both Hawaii Revised Statute §205A and Hawaii Administrative Rules §13-222, was at the face of the new seawall and along the face of the third step from the bottom at the north end of the seawall, not at the edge of the carbonate bench as previously located in the uncertified 2006 map. Salt water was still present on the carbonate bench up to the face of the seawall, at the time of the site visit. Attachment 1 contains copies of several ground photographs taken during the site visit. An occupant of the house who reported that waves had been washing the face of the seawall that morning confirmed the shoreline location. Additionally, the swell and nearshore wave environment before and during the site visit were well within the annually recurring wave parameters for the western shores of Hawaii (Attachment 2).

Review of existing aerial photographs showing the parcel revealed that no seawall was present on August 30, 2004, in the location of the current seawall (Attachment 3).

The shoreline certification application was subsequently rejected due to failure of the applicant to show the seawall was either legally built or nonconforming to either the Conservation District rules or City and County Ordinances.

The OCCL recommends that the DEA include a copy of the last Certified Shoreline (signed by the Chairperson of the BLNR) for the parcel, as well as identifying the recommended location pursuant to HRS §205A and HAR §13-222. The OCCL considers the seawall to be a shoreline structure as it defines the shoreline location at this parcel.

Should you have any questions, please call Sea Grant Extension Agent Chris Conger, 808-587-0049, at the OCCL.

Sincerely,

Samuel J. Lemmo, ADMINISTRATOR
Office of Conservation and Coastal Lands

CC: C&C DPP

Attachment 1 – Ground photographs from the 1/12/2007 shoreline certification site inspection.

Top left: Looking north at the north end of the seawall and stairs. Seawater has ponded on the carbonate bench, up to the face of the seawall, due to wash of the waves. Top right: Looking south at the south end of the seawall. Seawater has ponded on the carbonate bench, up to the face of the seawall, due to wash of the waves.

Attachment 2 – NOAA Surf Forecast for 1/11-12/2009

FZHW50 PHFO 120445 SRFHFO

SURF ZONE FORECAST NATIONAL WEATHER SERVICE HONOLULU HI **700 PM HST THU JAN 11 2007**

OAHU- 700 PM HST THU JAN 11 2007

HIGH SURF ADVISORY FOR NORTH AND WEST FACING SHORES

Surf along north facing shores, will rise to heights of 15 to 17 feet, with occasional sets to 22 feet Friday.

Surf along west facing shores, will rise to heights of 8 to 12 feet, with occasional sets to 15 feet Friday.

Surf along east facing shores will be 4 to 6 feet Friday.

Surf along south facing shores will be 2 to 4 feet through Friday.

Attachment 3 – Aerial Photograph with date (8/30/2004) from Google Earth. No wall is present in the location of the new seawall.

WIL CHEE - PLANNING & ENVIRONMENTAL

July 22, 2009

David K. Tanoue, Director
Department of Planning and Permitting
City & County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Tanoue

Subject: Shoreline Setback Variance Application & Environmental Assessment (EA) for a CRM Wall Makaha, Oahu, Hawaii

Dear Mr. Tanoue

Wil Chee – Planning & Environmental, is preparing an Environmental Assessment (EA) that will be submitted together with an application for a Shoreline Setback Variance for the CRM Wall in Makaha. The project site is located in a residential area off of Farrington Highway.

The project will require after-the fact permits for the current concrete rock masonry wall existing on the property.

In compliance with § 11-200-9 Hawaii Administrative Rules Department of Health, Title 11 Chapter 200, *Environmental Impact Statement Rules*, this letter is intended to initiate early consultation with agencies and groups having jurisdiction or expertise related to the project. We have enclosed a project information sheet consisting of maps and a description of the proposed project. We would appreciate receiving any comments or concerns which may influence the subject EA.

If you have any questions or need more information on this project please contact Kelly Shoji at (808) 596-4688. Thank you for you time and interest.

Sincerely,

Kelly Shoji

Kelly Shoji

Attachments

WIL CHEE - PLANNING & ENVIRONMENTAL

July 22, 2009

Patrick Leonard
U.S. Fish & Wildlife Services
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

Dear Mr. Leonard

Subject: Shoreline Setback Variance Application & Environmental Assessment (EA) for a CRM Wall Makaha, Oahu, Hawaii

Wil Chee – Planning & Environmental, is preparing an Environmental Assessment (EA) that will be submitted together with an application for a Shoreline Setback Variance for the CRM Wall in Makaha. The project site is located in a residential area off of Farrington Highway.

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If you have any questions or need more information on this project please contact Kelly Shoji at (808) 596-4688. Thank you for you time and interest.

Sincerely,

Kelly Shoji

Attachments

WIL CHEE - PLANNING & ENVIRONMENTAL

July 22, 2009

Katherine Puana Kealoha, Esq., Director
State Office of Environmental Quality of Control
235 S. Beretania St., Suite 702
Honolulu, Hawaii 96813

Dear Ms. Puana Kealoha

Subject: Shoreline Setback Variance Application & Environmental Assessment (EA) for a CRM Wall Makaha, Oahu, Hawaii

Wil Chee – Planning & Environmental, is preparing an Environmental Assessment (EA) that will be submitted together with an application for a Shoreline Setback Variance for the CRM Wall in Makaha. The project site is located in a residential area off of Farrington Highway.

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If you have any questions or need more information on this project please contact Kelly Shoji at (808) 596-4688. Thank you for you time and interest.

Sincerely,

Kelly Shoji

Kelly Shoji

Attachments

WIL CHEE – PLANNING & ENVIRONMENTAL

August 30, 2010

David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Attention: Mike Friedel, Code Compliance Branch

Subject: Notice of Order 2008/NOO-239
CRM Retaining Seawall without a Building Permit
84-771 Moua Street - Makaha
Tax Map Key 8-4-006:007 (POID 15918)

Dear Mr. Tanoue:

This is the second response to the Notice of Order sent May 5, 2010 to Messrs. Ochi regarding the Notice of Violation issued by the City and County of Honolulu, Department of Planning and Permitting (DPP). The Notice concerns the uncorrected violation for the reconstruction of a concrete-and-rock-rubble (CRM) retaining seawall with steps that was built without a building permit. Please be advised the property owners, Ken and Gene Ochi, are continuing their good-faith effort to rectify this situation.

Since our last response, on May 13, 2010, progress has slowed a bit. Conversations with Elizabeth Kruger indicated that we needed to engage a surveyor to provide additional elevations and conduct a soils investigation to provide information requested by DPP.

On June 8, 2010, WCP personnel, including our civil engineer, conducted a soils investigation of the Ochi property by boring holes with a hand auger to depths of 1.5 feet. The first was located 1 foot from the wall, and the second was 40 feet inland from the wall; both were 50-feet from the parcel's northern property line. The following information has been added to the Draft Environmental Assessment.

Boring with the hand auger was extremely difficult because of the rocks that had been used as infill behind the wall. The borehole closest to the wall was advanced to a depth of 1.5 feet before hitting rock, and it was impossible to go deeper. Based on the undulations of the marine terrace in front of the wall, it is estimated that the soil depths behind the wall vary from 1 to 1.5 feet. The second borehole, placed 40 feet inland, hit bedrock at 1.20 feet. Material removed from the

holes consisted of silty clay loam mixed with sand and lithic fragments. The soil color became darker with depth and moisture content.

Soil depths on the parcel are relatively shallow and range in depth from 1 to 1.5 feet at the base of the wall. They appear to become shallower inland, near the road. Due to the varying depths of the soil and the irregular surface of the rocky marine terraces, it is difficult to calculate the volume of the soils on site.

Ground elevations of the Ochi property are the same as those of the adjacent properties, and the shoreline walls are all aligned with the adjacent seawalls on the parcels on both sides. All of the parcels are nearly level.

The Ochi property is being resurveyed to provide elevations for the parcel, the marine terrace, the property lines, the locations of all of the structures on the parcel. The property owner was apprised of the additional survey work required by DPP, and the surveyor was instructed to perform the survey. Unfortunately, the surveyor has been very busy this summer, and our request was placed behind many other requests for survey work, based upon the date the request was received. We anticipate that the survey will be completed and finalized by the first of September. Once the survey information and survey is incorporated into the Draft EA, WCP will resubmit the document to Elizabeth Kruger.

The Ochis are continuing their good faith efforts to correct the violation, and they hope that your agency will take into consideration that in these types of projects there are numerous unforeseen delays that are often beyond the control of the land owners, consultants, and subcontractors.

It is our hope that DPP will respond to this communication by (a) acknowledging the continued good faith efforts of the Ochis to correct the violation; and (b) affirming that in response to their efforts, no lien will be placed on their property or foreclosure action be initiated, and that, (c) as is customarily done, their fine will be reduced when the violation is corrected.

If you have questions or need more information, please contact Judy Mariant (jmariant@wcphawaii.com) or Kelly Shoji (kshoji@wcphawaii.com) or call us at (808) 596-4688.

Sincerely,

Kelly Shoji for

Judy J. Mariant
Senior Planner

Cc: Art Challacombe
Elizabeth Kruger

WIL CHEE – PLANNING & ENVIRONMENTAL

May 13, 2009

David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Attention: Mike Friedel, Code Compliance Branch

Subject: Notice of Order 2008/NOO-239
CRM Retaining Seawall without a Building Permit
84-771 Moua Street - Makaha
Tax Map Key 8-4-006:007 (POID 15918)

Dear Mr. Tanoue:

This is a response to the Notice of Order sent May 5, 2010 to Messrs. Ochi regarding the Notice of Violation issued by the City and County of Honolulu, Department of Planning and Permitting (DPP) for the reconstruction of a concrete-and-rock rubble (CRM) retaining seawall with steps without a building permit that has not been corrected. Please be advised the property owners Ken and Gene Ochi are making an effort in good faith to rectify this situation.

The Ochis purchased the property (TMK 8-4-006:007) in 2005 and use it as a vacation home. At the time of purchase, the property contained a small house with a concrete-slab lanai covered with a second, elevated porch, or observation porch; a CRM retaining wall, and a chainlink fence.

The house was built in 1956, prior to the implementation of Coastal Zone Management regulations in 1966. No plans can be found for the house in the DPP records. The house is a small, light-green, one-story, single-family residence of wood construction. The concrete slab lanai and elevated porch are located at the rear of the house. A detached carport was added in 1970, near the road.

Photographs taken in 2005, when the Ochis purchased the property, show a CRM rubble wall along the boundary, on the makai side of a rusty chainlink fence. It appears that the CRM rubble wall had been there for some time, but DPP records contain no evidence indicating when the original wall was emplaced.

Due to wear and tear by the elements, the chain link fence and CRM wall needed repair when the Ochis purchased the property in 2005. In 2006, the Ochi's removed the chain link fence and rebuilt a substantial CRM wall. A neighboring renter reported to DPP that the Ochis were repairing their existing wall, and later that year, the Ochis received a notice of violation dated May 9, 2006. The notice of violation stated, "the existing 5' seawall at the rear of the property is being reconstructed without first obtaining a building permit." The Ochis tried to obtain a permit, but the permit was not granted because there was no documentation for the original wall.

In 2006, the Ochis filed for a shoreline certification through the surveyor Wesley Tengan. The application was accepted by Department of Land and Natural Resources (DLNR) on December 23, 2006, and was sent to the Office of Environmental Quality Control's (OEQC) *The Environmental Notice* for public comment. The shoreline was inspected on January 12, 2007, by representatives of the DLNR State Land Division and Office of Conservation and Coastal Lands. The applicant's surveyor, Wesley Tengan, received a letter from DLNR dated March 8, 2007, stating that the shoreline application was being rejected because no documents had been provided showing that the CRM wall had been approved by appropriate government agencies or that it was exempt from such approval. To allow for appeals, the proposed rejection was submitted for publication in the March 8, 2007, issue of *The Environmental Notice*.

Unable to obtain a certified shoreline, the Ochis did not know what to do next and temporarily let their efforts lapse. A second notice of violation, dated March 24, 2009, was sent by DPP.

Seeking help in resolving what had become a daunting and complex problem, the Ochi's contacted Don Clegg, of Analytical Planning Consultants Inc., who in turn recommended Wil Chee - Planning & Environmental, (WCP) to prepare the Environmental Assessment (EA) and perform other tasks. WCP was contacted in late March of 2009 and on April 16, 2009, signed a contract to work on rectifying the situation. WCP began work on the project immediately.

First, WCP spoke with Mr. John Friedel, who explained how fees would accrue until the problem was resolved. Subsequently WCP presented to the Ochis three potential courses of action that could be taken to rectify the situation. The Ochis chose to seek a Shoreline Setback Variance (SSV) so they could obtain after-the-fact permitting for the wall.

Next, WCP contacted a structural engineer, who prepared drawings of the wall to be included in various documents that WCP would be preparing and submitting with the application for an SSV.

WCP then prepared a project information sheet summarizing the purpose of the SSV application. It contained a brief overview of the project and included the engineered plans. It was mailed on July 22, 2009, to the Department of Planning and Permitting, State Department of Land and Natural Resources (DLNR) who forwarded copies to all of their departments, U.S. Fish and Wildlife Service, and the State OEQC. WCP hoped to initiate consultation as quickly as possible with the government agencies that could become involved. Only the various departments at State DLNR responded with comments.

Those comments were included in the draft EA that we submitted to the City Department of Planning and Permitting on November 19, 2009. On December 8, 2009, we received comments

on the draft EA (DEA) from Elizabeth Kruger, a planner at DPP. Ms. Kruger stated that DEA was inadequate. We made the recommended changes and resubmitted the DEA on February 22, 2010.

Two months later, on April 7, 2010, we received comments on the revised DEA from Ms. Kruger. As a result of the April 7th comments, we engaged a surveyor to provide additional elevations and other information requested by DPP. Currently, we are waiting on the results of the survey.

Steps have already been taken to get the process moving to rectify this situation; however, as you and others at DPP well know, it could take some time to completely resolve this problem. We greatly appreciate your patience and understanding in helping to get this moving along and completed within a reasonable time frame.

The Ochis greatly regret undertaking the repairs to the retaining wall without proper permitting and seek assurance that in response to their good faith efforts to correct the violation, your agency will ease the threat of fines and foreclosure that they now face. We hope that DPP will respond to this communication with a letter in which DPP (a) acknowledges the good faith efforts of the Ochis to correct the violation; and (b) affirms that in response to their efforts, no lien will be placed on their property or foreclosure action be initiated, and that, as is customarily done, their fine will be reduced when the violation is corrected.

If you have questions or need more information, please contact Kelly Shoji (kshoji@wcphawaii.com) or Judy Mariant (jmariant@wcphawaii.com) or call us at (808) 596-4688

Sincerely

Judy J. Mariant
Senior Planner

Cc: Art Challacombe
Elizabeth Kruger

WIL CHEE – PLANNING & ENVIRONMENTAL

May 21, 2010

David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th floor
Honolulu, Hawaii 96813

Attention: Elizabeth Kruger

RE: File No. 2010/ED-5
Shoreline Setback Variance Application for a Retaining Wall
Ochi Residence, Makaha, Oahu, Hawaii
TMK: 8-4-006:007

Dear Mr Tanoue,

We have reviewed DDP's second set of comments, dated April 7, 2010, on the Draft Environmental Assessment (EA) for the subject shoreline setback variance application. We have prepared the attached responses. We will incorporate the necessary changes into the Draft EA and send a revised version for the Department of Planning and Permitting (DPP) to submit to the state Office of Environmental Quality Control (OEQC) for public review.

If you have any questions please contact Kelly Shoji or Judy Mariant at 596-4688.

Sincerely

Kelly Shoji

Kelly Shoji
Planner

cc: Art Challacombe
Mike Fridel

WCP Response

1. *Based on the site plan in your application, it appears that the elevated porch at the rear of the dwelling encroaches into the (anticipated) 40-foot shoreline setback area. You must either conclusively document that this structure is nonconforming or provide detailed plans and drawings for the structure. [Note: If this structure will also require and after-the-fact shoreline setback variance, then the applicant must be prepared to justify its location in the shoreline setback area in addition to the CRM wall]*

The Ochis purchased the property (TMK 8-4-006:007) in 2005 and use it as a vacation home. At the time of purchase, the property contained the house shown in the site plan, a small, one-story, light-green, single-family house of wood construction, with a concrete-slab lanai covered with a second, elevated, lanai, or observation porch. The property also contained a CRM retaining wall and a chainlink fence.

The house was built in 1956, prior to the implementation of Coastal Zone Management regulations, in 1966. No plans can be found for the house in the DPP records. The concrete slab lanai and elevated porch are located at the rear of the house. A detached carport was added in 1970, near the road.

The elevated porch at the rear of the dwelling may or may not encroach into the anticipated 40-foot shoreline setback area and may or may not be subject to an after-the-fact variance. The original plans for the structure, built in 1956, are not on record at DPP, so we cannot provide conclusive evidence that the concrete slab and elevated porch were or were not built at that time. Also, the application and documentation for the building permit available in DPP files do not describe what or where anything was built.

2. *The site is incorrectly marked in Figure 5 on page 6 of the submitted Draft EA.*

The arrow designating the parcel has been moved and it now points to the correct site.

3. *In our previous Notice of Incomplete Application to you (dated December 28, 2009), we requested a more detailed description of the CRM retaining wall, including the extent of cut/fill, and the wall's height above mean sea level (MSL). You responded that you could not get that information. However, we reiterate that this information can be feasibly provided by a qualified surveyor, and is <u>necessary</u> to adequately document the environmental conditions relevant to the request.*

We have contacted the surveyor who surveyed the parcel for the Ochi's first application for a certified shoreline, in 2006. His response was that he cannot determine the amount of cut and fill. Please recall that this is a request for an after-the-fact estimate. At this point, it will be extremely difficult for anyone to accurately determine the amount of cut and fill, and it is likely that any attempt to estimate it will be inaccurate.

It appears that the rock rubble wall that was removed may account for most of the material that was removed. In the photographs of the original concrete, rock, and concrete rubble wall, it appears that it was not a solid structure; that is, there appear to be large spaces between many of the boulders and chunks of concrete. No plans of the original structure are available, and no

dimensions for the extent of the original rock-rubble structure are available. Much of the rock from the rubble wall was reused in building the new wall, and some may have been used as fill behind the new structure. It is not possible to determine how much soil, if any, covered the marine terrace behind the rock-rubble wall or how much was removed and replaced.

The base of the new wall rests on the rocky marine terrace and is cemented (grouted) to the terrace (see Figure 7 on page 8 of the DEA). We will include in the draft EA a photograph that more clearly illustrates the fact that the base of the existing CRM wall is cemented to the rocky marine terrace.

Mortar layer that cements the rock at the base of the wall to the upper rocky marine terrace

4. *All scaled plans and drawings included in the Draft EA must include an appropriate graphic ("bar") scale.*

Appropriate bar scales will be placed on all scaled plans and drawings.

5. *The photographs included in the submitted draft EA show stairs on both the north and south edges of the property; yet, the plans/drawings only show them on the north edge. Please correct this discrepancy.*

The stairs on the south edge of the property provide access only to the top of the wall and do not go down to the marine terrace on the makai side of the wall. They will be added to the drawing.

6. *The comments from the State Department of Land and Natural Resources, Office of Conservation and Coastal Lands (OCCL), you received in connection with your preparation notice should be specifically addressed within the text of the Draft EA; in particular, the discussion of the anticipated location of the regulatory shoreline (as expressed by the OCCL) and the assertion that there was no seawall (or retaining wall) visible at the current location in a 2004 aerial photograph of the site needs to be addressed.*

The last draft EA that DPP returned to us contains the 2004 aerial photo used by DLNR in their comment and photographs from the Ochi's, taken in 2005, that clearly show a chainlink fence and a concrete and rock-rubble wall on the makai side of the chainlink fence. The wall was in place when the Ochi's purchased the property in 2005. Chris Conger (personal communication), at DLNR OCCL, provided us with the link to obtain a copy of the aerial photo used for Figure 3 in the last version of the EA. Please refer to the photos on pages 2 and 3 and the brief description in the second paragraph of page 1 and in the second paragraph of page 4.

Mr. Conger was also the person that delineated the anticipated location of the certified shoreline when the 2006 survey was conducted. We will add that to the DEA.

7. *Our records show that the site is in both the VE (Coastal High Hazard) and AE (Floodway or Flood Fringe) Flood Districts, as shown on the current Flood Insurance Rate Map (FIRM) for the property. The Draft EA should include an appropriately scaled map of the site showing the regulatory flood district boundaries and related flood elevations, appropriate elevation contours, appropriate spot elevations relevant to the CRM wall and any other structures which will require a shoreline setback variance to retain (i.e., the deck, if applicable), and the actual heights of these structures above MSL. An adequate narrative description of the regulatory flood districts affecting the site, and compliance with related regulations should be included in the Draft EA.*

The last draft of the EA that DPP returned to us contains, on <u>pages 12 and 13,</u> a discussion that addresses the flood potential and potential impacts from flooding. The discussion states that in the event of a large tropical storm or tsunami, flooding can be anticipated. We had also included a chart showing the recurrence intervals of events causing damage on the southwest shore of Oahu. That section also addresses the Flood Insurance Rate Map and discusses Zones VE and AE.

We will include a copy of the Flood Insurance Map with a Map Key that explains Zones VE and AE along with the text to understand that flooding can be anticipated with an inundation height of 12 to 14 feet. We will highlight those and any other changes that we make in the document so it is easy for you to find the information that you requested.

8. *The Draft EA should include a complete permitting history for <u>all</u> uses and structures on the lot, including the dwelling and the elevated deck at the rear of the building.*

You have probably already researched the existing permits for the site. We found only three permits on record with the Department of Planning and Permitting.

One is for the house, which was built in 1956. Unfortunately there are <u>no plans available</u> for the house, or plot plan, or any documentation indicating what was or was not included under the

1956 permit. The second permit is for the carport, which was built in 1970, and the most recent permit on record is for plumbing, in 1986. Again there were no complete plans or plot plans included in DPP records.

There are no records of the chainlink fence, the concrete-rock-rubble wall, the elevated porch, and what was or was not included in the original permit. All of those structures were on the property when the Ochi's purchased it in 2005.

9. *You stated in your submittal that you are requesting a "waiver" of the requirement to submit a current certified shoreline survey, pursuant to DPP Part 2 Rules Relating to Shoreline setbacks and the Special Management Area ("Rules"), Section 13-5(a)(6). This rule allows an applicant for a Shoreline Setback Variance (SSV) to waive the certified shoreline survey requirement when the Board of land and Natural Resources will not certify a shoreline survey due to the presence of an unauthorized shoreline structure. Accordingly, the requirement for a current certified shoreline survey is granted. However, Rules Section 13-5(a)(6)(A) also explicitly stipulates that the applicant must provide a shoreline survey; albeit, not certified. And this survey should also show the location of the presumed (i.e, likely or anticipated) 40-foot shoreline setback.*

Please refer to Appendix B of both of the versions of the EA. Appendix B contains all of the information necessary for applying for a certified shoreline, including a survey that was submitted to the State DLNR.

We have contacted a surveyor to prepare another survey showing the elevations and the 40-foot shoreline setback with respect to all of the structures on the parcel. This new survey will be used later, when another request for a certified shoreline is submitted.

The request for a waiver of the certified shoreline requirement is for the purpose of processing the EA and the Shoreline Setback Variance Application. During the permitting process a Certified Shoreline will be obtained.

10. *Please note that Section 23-1.8(b)(3)(C) of the Shoreline Setback Ordinance states, "If the activity or structure may artificially fix the shoreline, a variance may be granted only if hardship is likely to be cause* [sic] *by shoreline erosion." If the site is being affected by shoreline erosion, adequate documentation of those conditions must be included in the EA.*

According to the maps produced by Fletcher and others (2009) the shoreline is not retreating inland. This is because the shoreline in this area is made up of erosion resistant limestone and lava marine terraces. This is a unique circumstance because the erosion-resistant marine terraces are subject to events that cause the waves to wash up and over them.

The ocean is relatively shallow at the edge of the lower rocky marine terrace and slopes gently (1.5% slope) to a depth of 18 feet, at 1,200 feet offshore (AECOS 1981). During normal sea conditions, waves hit the face of the terrace, wash over the lower rocky outcrop, and reflect seaward. During periods of higher tides, the waves wash over the upper rocky outcrop and reflect off the marine terrace

At the Ochi's property, during storm surges and other extreme conditions, waves hit the lava-rock face with such force that the water is propelled onto the surface of the upper rock outcrop and travels 40 feet or more inland, where it strikes the wall and is reflected back along the surface of the rock outcrop, from where it falls back into the ocean. If the wall were not in place,

the waves would erode the property by removing soil, vegetation, and other debris from the parcel and transport it into the Class A waters offshore.

The photo was taken on 10/5/09 at 1:19 p.m., is of waves washing up the lower marine terrace during a low tide. During high tide the waves wash up and over the upper marine terrace and often reach the base of the wall. The puddles are sea water that was left in the low spots earlier as the high tide receded.

References:

AECOS, Inc. 1981, *O'ahu Coastal Zone Atlas, Part C.* Prepared for U.S. Army corps of Engineers, Pacific Ocean Division, Fort Shafter Hawaii.

Fletcher, Romine, Barbee, Lim, and Vinson. 2009. *Coastal Information, Oahu Erosion Maps*. University of Hawaii Coastal Geology Group School of Ocean and Earth Science and Technology. http:/www.soest.hawaii.edu/asp/coasts.oahu

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

MUFI HANNEMANN
MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2008/NOO-239 (JMF)

May 5, 2010

Mr. Kenneth D. Ochi
Mr. Gene T. Ochi
1444 Aviation Boulevard, #201
Redondo Beach, California 90278

Dear Messrs. Ochi:

Subject: Notice of Order 2008/NOO-239
CRM Retaining Seawall without a Building Permit
84-771 Moua Street – Makaha
Tax Map Key 8-4-006: 007 (POID 15918)

The Notice of Violation for the above-referenced property, issued for the reconstruction of a CRM retaining seawall with steps without a building permit, has not been corrected. The civil fine assessed as part of the above Notice of Order remains unpaid. The total amount due is $20,150.

Please be advised that unless you contact us within 30 days from the date of this letter, and arrange for resolution of this matter, action will be initiated to place the fines associated with this case as a lien on the property with foreclosure an option to collection of the fines.

In addition to the enforcement action mentioned above, an advisory notice will be placed on this property and will affect any permit, fees and charges administered by the City and County of Honolulu until the outstanding fines are paid and the case resolved.

It is in your best interest to discuss this matter with us immediately. Please contact Mike Friedel of our Code Compliance Branch at (808) 768-8110.

Very truly yours,

John M. Friedel

for David K. Tanoue, Director
Department of Planning and Permitting

DKT:ra

[771047]

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

MUFI HANNEMANN
MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2010/ED-5 (EK)

NOTICE OF INCOMPLETE APPLICATION

File No.:	2010/ED-5
Applicant:	Ken and Gene Ochi
Agent:	Wil Chee – Planning and Environmental
Location:	84-771 Moua Street – Makaha
Tax Map Key:	8-4-6: 7
Received:	February 24, 2010
Request:	DRAFT ENVIRONMENTAL ASSESSMENT (EA) for a pending after-the-fact Shoreline Setback Variance (SSV) application.

Your submittal of a Draft EA to allow (retain) a concrete rubble masonry (CRM) wall within the shoreline setback area on the subject property cannot be accepted at this time because it is not complete, as noted below.

1. Based on the site plan in your application, it appears that the elevated porch at the rear of the dwelling encroaches into the (anticipated) 40-foot shoreline setback area. You must either conclusively document that this structure is nonconforming or provide detailed plans and drawings for the structure. [Note: If this structure will also require an after-the-fact shoreline setback variance, then the applicant must be prepared to justify its location in the shoreline setback area in addition to the CRM wall.]

2. The site is incorrectly marked in Figure 5 on page 6 of the submitted Draft EA.

3. In our previous Notice of Incomplete Application to you (dated December 28, 2009), we requested a more detailed description of the CRM retaining wall, including the extent of cut/fill, and the wall's height above mean sea level (MSL). You responded that you could not get that information. However, we reiterate that this information can be feasibly provided by a qualified surveyor, and is necessary to adequately document the environmental conditions relevant to the request.

4. All scaled plans and drawings included in the Draft EA must include an appropriate graphic ("bar") scale.

5. The photographs included in the submitted Draft EA show stairs on both the north and south edges of the property; yet, the plans/drawings only show them on the north edge. Please correct this discrepancy.

6. The comments from the State Department of Land and Natural Resources, Office of Conservation and Coastal Lands (OCCL), you received in connection with your preparation notice should be specifically addressed within the text of the Draft EA; in particular, the discussion of the anticipated location of the regulatory shoreline (as expressed by the OCCL) and the assertion that there was no seawall (or retaining wall) visible at the current location in a 2004 aerial photograph of the site needs to be addressed.

7. Our records show that the site is in both the VE (Coastal High Hazard) and AE (Floodway or Flood Fringe) Flood Districts, as shown on the current Flood Insurance Rate Map (FIRM) for the property. The Draft EA should include an appropriately scaled map of the site showing the regulatory flood district boundaries and related flood elevations, appropriate elevation contours, appropriate spot elevations relevant to the CRM wall and any other structures which will require a shoreline setback variance to retain (i.e., the deck, if applicable), and the actual heights of these structures above MSL. An adequate narrative description of the regulatory flood districts affecting the site, and compliance with related regulations should be included in the Draft EA.

8. The Draft EA should include a complete permitting history for *all* uses and structures on the lot, including the dwelling and the elevated deck at the rear of the building.

9. You stated in your submittal that you are requesting a "waiver" of the requirement to submit a current certified shoreline survey, pursuant to DPP Part 2 Rules Relating to Shoreline Setbacks and the Special Management Area ("Rules"), Section 13-5(a)(6). This Rule allows an applicant for a Shoreline Setback Variance (SSV) to waive the certified shoreline survey requirement when the Board of Land and Natural Resources will not certify a shoreline survey due to the presence of an unauthorized shoreline structure. Accordingly, the requirement for a current certified shoreline survey is granted. However, Rules Section 13-5(a)(6)(A) also explicitly stipulates that the applicant must provide a shoreline survey; albeit, not certified. And, this survey should also show the location of the presumed (i.e., likely or anticipated) 40-foot shoreline setback.

10. Please note that Section 23-1.8(b)(3)(C) of the Shoreline Setback Ordinance states, "*If the activity or structure may artificially fix the shoreline, a variance may be granted only if hardship is likely to be cause by shoreline erosion.*" If the site is being affected by shoreline erosion, adequate documentation of those conditions must be included in the EA.

The application to process the EA may be resubmitted when it is complete, as noted above. We are retaining two copies of your application materials for the file, and are returning the remaining copies to you.

If you have any questions, please call Elizabeth Krueger of our staff at 768-8019.

David K. Tanoue, Director
Department of Planning and Permitting

Date: April 7, 2010

DKT:cs
Enclosures

WIL CHEE – PLANNING & ENVIRONMENTAL

TRANSMITTAL

DATE: 24 February 2010

TO: David K. Tanoue, Director
Department of Planning and Permitting
City & County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

ATTENTION: **Elizabeth Krueger**

FROM: Kelly Shoji

SUBJECT: After-the-Fact Shoreline Setback Variance Application & Environmental Assessment (EA) for Retaining Wall, Makaha, Oahu, Hawaii. TMK 8-4-006:007

Copies	Description
5	Revised Draft Environmental Assessment
1	CD-Electronic Copy of the Revised Draft Environmental Assessment & OEQC Publication Form

FOR:

( ) Information and Use	**(x) Necessary Action**
(x) Review and Comment	**( ) Signature**
( ) As Requested	**( ) Record and File**
(x) via Delivery	

REMARKS: Enclosed are 5 copies of the Revised Draft Environmental Assessment for an After-the-Fact Shoreline Setback Variance Application for a CRM retaining wall, and 1 CD is included with an electronic copy of the Revised Draft EA & OEQC Publication Form.

If there are any questions or comments please contact Kelly Shoji at (808) 596-4688.

WIL CHEE – PLANNING & ENVIRONMENTAL

January 27, 2010

David K. Tanoue, Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th floor
Honolulu, Hawaii 96813

Attention: Elizabeth Kruger

RE: File No. 2009/ED-17
Shoreline Setback Variance Application for a Retaining Wall
Ochi Residence, Makaha, Oahu, Hawaii
TMK: 8-4-006:007

Dear Mr Tanoue,

We have reviewed DDP's comments dated December 28, 2009 on the Draft Environmental Assessment (EA) for the subject shoreline setback variance application. We have prepared the attached responses. We will incorporate any necessary changes into the Draft EA and send a revised version for the Department of Planning and Permitting (DPP) to submit to the state Office of Environmental Quality Control (OEQC) for public review.

If you have any questions please contact Kelly Shoji or Judy Mariant at 596-4688.

Sincerely

Kelly Shoji

Kelly Shoji
Planner

1. *a. The Draft EA must provide the reader with a clear understanding of the both the subject site and the situation associated with the pending SSV request.*

   Please refer to section 1.1 Background on page 1 of the Draft EA (reproduced below). This section provides a brief but complete history of the situation associated with the pending SSV request.

   1.1 Background

   The Ochis purchased the property (TMK 8-4-006:007) in 2005, and they use it as their vacation home. The home was built in 1956. The first retaining wall was constructed shortly after, and prior to the 1966 Coastal Zone Management (CZM) regulations that established setback requirements. It appears that the original wall was not permitted. Due to wear and tear by the elements and poor construction techniques, the wall required repairs when the Ochi's purchased the property in 2005.

   In 2006, the Ochi's made extensive repairs to the existing retaining wall. A neighboring renter had reported to the City and County of Honolulu, Department of Planning and Permitting that the Ochis were repairing their existing wall. Later that year, they received a notice of violation dated May 9, 2006. The violation stated, "the existing 5 foot seawall at the rear of the property is being reconstructed without first obtaining a building permit." The Ochis tried to obtain a permit in July 7, 2006, but the permit was not granted because there was no documentation concerning the original wall. They were then asked to do a shoreline survey. In 2007, a shoreline survey was conducted and submitted to DLNR. The State Land Surveyor rejected the survey because it did not show the location of the anticipated certified shoreline. DPP suggested that the shoreline is located at the base of the wall.

   There are no records of permitting for the construction of the original wall. Therefore, there are no documents indicating that the retaining wall was or was not approved by the appropriate government agencies or that it is exempt from such approval.

1. b. *A more detailed written narrative should involve a description of the lot, dwelling, any other structures on the site, and shoreline setback area.*

   There is a discussion of the lot and the dwelling in sections 2.1 and 2.2 of the Draft EA. The house was built in 1956 prior to the implementation of Coastal Zone Management regulations in 1966. The dwelling is a small light-green one-story single family residence of wood construction with a detached carport near Moua Street. We will revise the site plan to include the location of the house and carport.

1. c. *The description of the CRM retaining wall should account for all steps in the structure, the concrete cap, the height of the inside-face of the wall, the extent of cut/fill, and the wall's height above mean sea level (MSL).*

   Please refer to section 2.3 Project Features

   2.3 Project Features
   Mr. Tom Tanimura, P.E., of Tanimura & Associates, Inc, inspected the wall on October 5, 2009, to determine if the wall was structurally sound. He prepared an engineered drawing showing the dimensions and conditions of the wall (Appendix C). The structure is a one level CRM retaining wall with a width of 2'-10" and a height varying in length due to irregularities

on the marine terrace surface. The maximum height is 6'. A staircase provides direct access to the wave-cut platform on the makai edge of the property. The existing retaining wall is not expected to increase the rate of erosion on the neighboring properties because all these properties are fronted by retaining walls. The wall is in compliance with the Land Use Ordinance (LUO) Section 21-4.40; no portion will exceed 6' in height, as measured from the existing or finishing grade, whichever is lower, according to the engineer's plans.

The height of the wall above mean sea level has not been determined. It appears that mean sea level is at the height of the second wave cut terrace. During periods of high surf or storm surge the water reaches the toe of the wall. However, mean sea level is the mid point between the low-low tide and the high-high tide. Storm surge and high surf are not the norm and are not related to tides and mean sea level.

At this point in time it is not possible to determine whether the wall protects a cut or fill and how much of each. Commonly the amount of cut and fill can not be determined for most projects until actual construction begins because the depth of bedrock varies considerably.

Please refer to Appendix C in the Draft EA that includes the engineered plans for the wall.

1. d. *All structures in shoreline setback area should be accurately drawn and mapped, with full dimensions provided, and described in detail.*

   We will add the residence and carport to the plot plan that is on the sheet with the wall plans. It will illustrate the location of the residence and carport with respect to the wall, property line and the anticipated certified shoreline.

1. e. *Also, the Draft EA should note whether the walls and/or structures on the side property lines of the lot are to be included as part of the applicant's lot or are owned by the adjoining neighbors.*

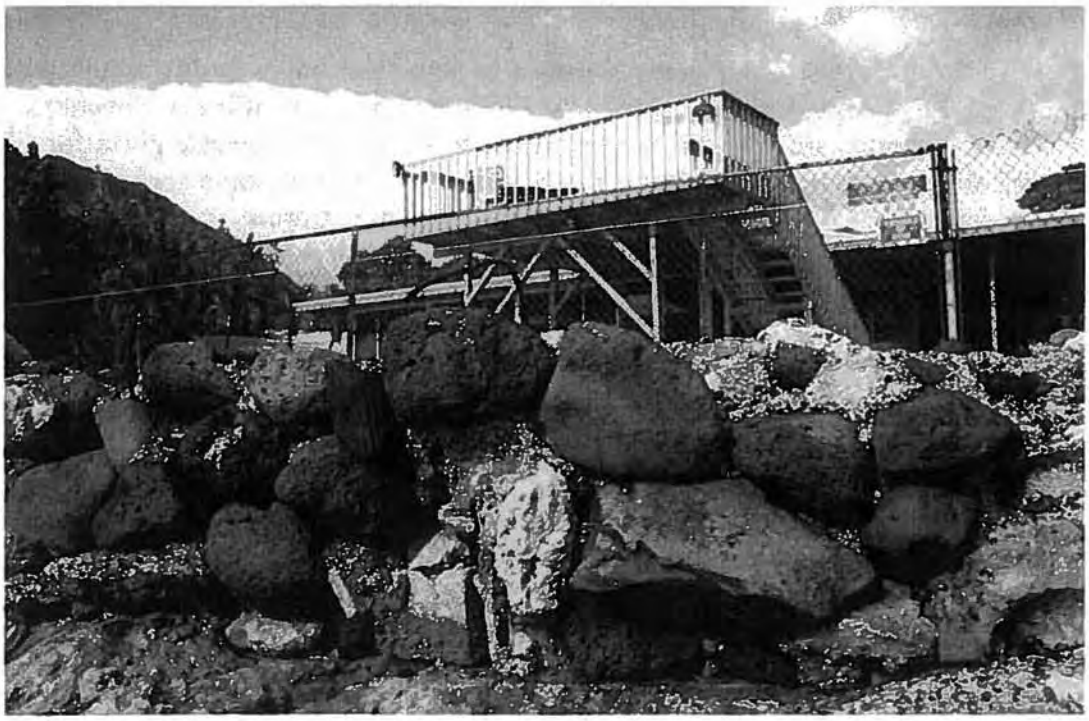
   The rock wall on the north side of the parcel is located on the adjoining property. The tile wall on the south side of the property is on the subject property (TMK (1) 8-4-06:7).

2. *Provide fully dimensioned scaled plans and drawings, which must include an appropriate graphic scale, of the entire lot, including all structures, the assumed shoreline, and the 40-foot shoreline setback.*

   A fully dimensioned scaled plan with a graphic scale that includes the entire lot, including all structures, the anticipated certified shoreline and the 40-foot shoreline setback will be included.

3. *The document you submitted states that the original wall was constructed prior to 1966. The statement must be supported with appropriate documentation in the Draft EA.*

   The owners purchased the property in 2005 and they have provided photographs of the shoreline taken just after they purchased the property and prior to rebuilding the wall in 2006. The photos below indicate that there was a cement rock rubble wall on the makai side of a rusty chain link fence topped with barbed wire. It appears that the debris wall had been there for some time and possibly constructed prior to 1966, however, there is no documentation of when the original wall was built.



4. *Comments received for government agencies in response to your preparation notices should be overtly addressed within the text of the Draft EA.*

   The comments and recommendations received from government agencies in response to the preparation notice were incorporated into the Draft EA. DPP's December 28, 2009 comments will also be included.

5. *a. Provide more detail regarding the conditions of the shoreline along adjacent properties.*

   Please refer to Section 2.1 Project Location in the Draft EA (reproduced below).

   2.1 Project Location
   The Ochi property is located off of Farrington Highway, at 84-771 Moua Street (Figure 1). The project site is located towards the center of the residential community. There is no beach fronting the property, only a rocky shoreline consisting of two wave-cut platforms. One is composed of lava and just barely above sea level, and the second is composed of an ancient limestone fossil reef structure set higher above sea level. Three public beach access ways are close to the site. The property is located in an R-10 residential district and contains a single-family dwelling. Most of the neighboring properties along the oceanfront have retaining walls along their makai boundaries or other structures to differentiate between private and public property and to protect the properties from storm surge. Almost all properties adjacent to and near the Ochi property (TMK 8-4-006:007) have certified shorelines

5. *b. The Draft EA should include specific descriptions of the shoreline in a regional approach.*

   Please refer to Section 2.1 Project Location in item 5.a. above. In this region properties are fronted by rocky wave cut platforms that are stepped at different elevations. These wave cut platforms are resistant to erosion and there is no erosion rate given for the area. Nearly all of the properties fronting the ocean have a wall of some sort to delineate the private yards from public access on the rocky wave cut platforms.

5. *c. The neighboring shoreline should be detailed for a half mile in each direction from the subject lot.*

   Please refer to Section 2.1 Project Location in item 5.a above.

   The discussion inserted above discusses the shoreline in the half mile to the north of the property. To the south there is no safe shoreline access that runs parallel to the shoreline. Therefore, we did not walk the shoreline. The shoreline can only be inferred from aerial photographs. To the south of the parcel there are no wide wave cut terraces and all of the properties are fronted by walls. The spaces between the walls and the ocean are very narrow rocky outcrops that are impassable without trespassing on private property. Please see Figure 3 in the Draft EA.

5. *d. Describe any other shoreline protection structures along the shoreline in proximity to the site, noting the type of structure (e.g., seawall, revetment, etc.), material used, and whether they are authorized structures.*

   The neighboring lot to the north of the project site includes a similar CRM wall with a wire fence stretching across the entire property. The neighboring property to the south of

the project site has a seawall protecting its property. There is also a lot of debris consisting of large rocks and rubble fronting this seawall. The rock debris may be used for added protection from wave splash hitting the property. The side of the subject property contains a tile wall which separates the project site and the neighboring property.

Along the adjacent properties there is no beach fronting the property, only a rocky shoreline consisting of two wave-cut platforms. The adjacent properties contain shoreline protection structures (seawalls, fences) see figure 3 (aerial photo). Many of the shoreline protection structures are authorized and the parcels have received certified shorelines.

Parcels That Have Received a Certified Shoreline Near TMK: 8-4-006:007			
TMK Number	Date Certified	Date Recertified	Date Recertified
8-4-005:002	November 10, 1975		
8-4-005:004	September 24, 1972	June 21, 1977	
8-4-005:005	May 19, 1977		
8-4-005:006	July 14, 1971	July 14, 1977	
8-4-005:007	June 2, 1997	June 21, 1988	
8-4-005:009	August 6, 1979		
8-4-005:014	January 8, 1976		
8-4-005:016	May 22, 2001		
8-4-005:017	April 29, 1998		
8-4-005:019	August 4, 1988		
8-4-005:020	June 12, 2003		
8-4-005:021	February 13, 1973	August 6, 1986	June 12, 2003
8-4-005:023	March 23, 1993		
8-4-006:006	February 7, 1990		
8-4-006:008	July 11, 1996		
8-4-006:011	July 5, 2006		
8-4-006-012	July 8, 1985		
8-4-007:001	May 24, 1993		
8-4-007:003	November 10, 1972		
8-4-007:005	October 15, 1985		
8-4-007:006	November 15, 1985	October 19, 1985	
8-4-007:011	June 9, 2004		
8-4-007:013	February 20, 2004		
8-4-007:016	August 4, 1988		
8-4-007:017	January 25, 1972		

6. *Provide facts to show whether the lot is located on an eroding shoreline.*

   Erosion maps of Oahu that are being developed jointly by the University of Hawaii, the U.S. Geological Survey and other agencies indicate that this portion of the Makaha shoreline is not eroding. http://wwwsoeset.hawaii.edu/asp/coasts/oahu/

   The Atlas of Natural Hazards in the Hawaiian Coastal Zone that was published by the U.S. Department of the Interior, U.S. Geological Survey indicates that the area is a zone with no or very low amounts or erosion. This is due to the presence of the resistant rock that makes up wave cut platforms fronting the parcels.

7. *a. Section 3.0, Evaluation of Alternatives, should explore alternative solutions to the stated reasons for keeping the retaining wall (i.e., providing privacy, separating public areas from private land, and preventing erosion). Currently you only provide two alternatives: retain or remove the wall. In other words, are there other feasible alternatives which the applicant could employ to achieve privacy and demarcation of private property, such as an open work fence, which would only require a Minor Shoreline Structure permit.*

   Building an Open Work Fence was one of the alternatives that we discussed prior to preparing the EA and we discarded it early on. This alternative is not viable because it will not retain the soil on the property. During periods of heavy precipitation the soil can be washed off the property onto the wave cut platform and reach the sea. Once in the ocean the fine grained soils will cover the coral polyps thus impacting the coral colonies of shore. There would cause damage to the yard and loss to the property. Please recall that one of the objectives is to keep the soil on the property and not let it wash off into the ocean. We shall include an open work fence as an alternative and then show why it's not feasible.]

8. *Provide information on the Flood Insurance Rate Map (FIRM) flood districts and base flood elevations. On a map of the site, show the floodway boundaries and corresponding actual heights above MSL.*

   It appears that we inadvertently left the Hydrology section out of the Draft EA. We will include it in the revisions.

   According to *The Atlas of Natural Hazards in the Hawaiian Coastal Zone* that was published by the U.S. Department of the Interior, U.S. Geological Survey, terrestrial sources of flooding are from flash flooding along streams that occur during periods of very heavy precipitating. There are no streams within a mile of the property to the north and a mile to the south. There for flash flooding along streams is not a concern.

   The marine terraces in this area are covered with Malama Series Soils that are described in the soil survey of the Islands of Kauai, Oahu, Molokai, and Lanai (USDA 1972). These soils are found on the coastal planes on slopes that range for a 0% slope to a 12% slope. Lithic fragments found in these soils are predominately coral fragments, coral sand, lava fragments, and organic material. This soil moderately permeable and runoff is generally very slow to medium. During periods of very heavy precipitation it is likely that some surface ponding may occur. If there was not a wall the ponding water could flow onto the rocky marine terrace carrying debris and soil to the sea. Due to the

moderate permeability of the soils on the subject property, ponds will not result in flooding on the site because the water will percolate into the ground.

Any major flooding of the area will come from elevated sea level due to storm surge during large tropical storms or from a tsunami. Tropical storms (including hurricanes) tend to track just west of Oahu as they pass the Hawaiian Islands. Two storms in recent history, Hurricanes Iwa (1982) and Iniki (1992) generated damaging high waves, and the associated storm surge produced coastal flooding to an elevation of 11 ft above mean sea level and higher.

Events Causing Damaging High Waves On the South West Shore of Oahu	
Date	Storm or Event
1957, Sept 1-17	Hurricane Della
1957, Nov 30-31	Hurricane Nina
1959, August 4-7	Hurricane Dot
1971, January 16	High Surf
1962, November 23	Hurricane Iwa
1989, March 1-4	High Surf
1989, July 18-20	Tropical Storm Dalilia, High Surf
1992, September 11	Hurricane Iniki, High Surf
1997, September 23-25	Typhoon David, High Surf
1998, January 23-31	15-20 foot NNW swell, High Surf

Tsunamis can impact the region. Inundation heights of 12 and 14 feet were recorded during the 1946 and 1957 tsunamis.

In the case of storm surge during a large tropical storm and a medium to large tsunami flooding can be anticipated. The Flood Insurance Rate Map (FIRM 2004), the project site is located in Zone VE: coastal flood zone with velocity hazard (wave action). Base flood elevations determined are based upon recorded events.

9. *Describe the public uses of the affected shoreline and ocean waters proximate to the site.*

This area of the Makaha coastline is located in a residential neighborhood off of Farrington Highway. The area does not get much, if any public traffic. The nearest beach parks with large sandy beaches, with good swimming and surfing are located over a mile to the north and a mile to the south of the subject area.

There are no large sandy beaches in the vicinity. To the north (three parcels north) of the site there is a very tiny pocket beach that is lightly used by neighborhood residents. The area does not have a good surf break or a good area for swimming because the water

tends to be choppy. There is public access from the small pocket beach to the marine terraces to the north and south. This includes the terrace that fronts the project site and the neighboring properties. Recreational use of the marine terrace primarily consists of fishing. The people who fish stand close to the edge of the terraces. If they were to fish from the upper terrace near the surrounding seawalls their lines would become entangled in the rocks that make up the seaward fringes of the marine terraces because the walls in some areas are close to 40 feet from the water.

10. *Provide a complete permitting history for all uses and structures on the lot.*

Please refer to section 1.1 Background of the Draft EA which states the following.

> In 2006, the Ochi's made extensive repairs to the existing retaining wall. A neighboring renter had reported to the city Department of Planning and Permitting that the Ochis were repairing their existing wall. Later that year, they received a notice of violation dated May 9, 2006. The violation stated, "the existing 5` seawall at the rear of the property is being reconstructed without first obtaining a building permit." The Ochis tried to obtain a permit, but the permit was not granted because there was no documentation concerning the original wall. They were then asked to do a shoreline survey. In 2007, a shoreline survey was conducted but was later rejected. The State Land Surveyor rejected the Shoreline Setback Variance application containing the survey because not all appropriate documents were submitted. There is no record of permitting for the construction of the original wall. Therefore, there are no documents indicating that the retaining wall was or was not approved by the appropriate government agencies or that it is exempt from such approval.

We will search for permits issued for this TMK and include them in the revised EA.

11. *On the plans provided which show a cross-section of the wall, indicate whether the retaining wall protects a cut or fill, and how much.*

During periods of heavy precipitation and storm surge the wall retains the soils on the site that would otherwise be washed off onto the marine terrace and ultimately into the ocean. At this point in time it is not possible to determine whether the wall protects a cut or fill and how much of each. Commonly the amount of cut and fill can not be determined for most projects until actual construction begins because the depth of bedrock varies considerably.

12. *A certified shoreline survey is not required for the Draft EA. However, it will be required for the SSV application. Nevertheless, the Draft EA must include a map indicating the assumed shoreline. The shoreline map provided in your current submittal is not adequate. The shoreline map should be at least 8.5 X 11 inches in size, and must include an appropriate graphic ("bar") scale. Furthermore, it should not have contradictory information concerning the location of the shoreline; and, it should show the40-foot shoreline sebtack from the presumed shoreline. According to a letter from the Office of Conservation and Coastal Lands, dated August 20, 2009, the shoreline is likely to be "at the face of the seawall and along the face of the third step from the bottom at the north end of the seawall." Therefore, you should use that as the presumed shoreline location; and, this information should be explicitly addressed in your analysis.*

Our understanding of the requirements for a certified shoreline comes from the Shoreline Setback regulations from Chapter 13-1 through 13-5. Per chapter 13-5 WCP requested a waiver of the requirement for a certified shoreline survey for the purpose of obtaining a Shoreline Setback Variance on November 19, 2009 (See attached letter). To date we have not received a response from the Department of Planning and Permitting.

We will use the shoreline designated by Chris Conger, Department of Land and Natural Resources, Office of Conservation and Coastal Lands, that is located at the toe of the wall as the Anticipated Shoreline.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

MUFI HANNEMANN
MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2009/ED-17 (EK)

NOTICE OF INCOMPLETE APPLICATION

File No.:	2009/ED-17
Applicant:	Ken and Gene Ochi
Agent:	Wil Chee – Planning and Environmental
Location:	84-771 Moua Street – Makaha
Tax Map Key:	8-4-6: 7
Received:	November 19, 2009
Request:	DRAFT ENVIRONMENTAL ASSESSMENT (EA) for a pending after-the-fact Shoreline Setback Variance (SSV) application.

Your submittal of a Draft EA to allow (retain) a concrete rubble masonry (CRM) wall within the shoreline setback area on the subject property cannot be accepted at this time because it is not complete, as noted below.

1. The Draft EA must provide the reader with a clear understanding of the both the subject site and the situation associated with the pending SSV request. A more detailed written narrative should involve a description of the lot, dwelling, any other structures on the site, and the shoreline setback area. The description of the CRM retaining wall should account for all steps in the structure, the concrete cap, the height of the inside-face of the wall, the extent of cut/fill, and the wall's height above mean sea level (MSL). All structures in the shoreline setback area should be accurately drawn and mapped, with full dimensions provided, and described in detail. Also, the Draft EA should note whether the walls and/or structures on the side property lines of the lot are to be included as part of the applicant's lot or are owned by the adjoining neighbors.

2. Provide fully dimensioned scaled plans and drawings, which must include an appropriate graphic scale, of the entire lot, including all structures, the assumed shoreline, and the 40-foot shoreline setback.

3. The document you submitted states that the original wall was constructed prior to 1966. This statement must be supported with appropriate documentation in the Draft EA.

4. Comments received from government agencies in response to your preparation notices should be overtly addressed within the text of the Draft EA.

5. Provide more detail regarding the conditions of the shoreline along adjacent properties. The Draft EA should include specific descriptions of the shoreline in a regional approach. The neighboring shoreline should be detailed for a half mile in each direction from the subject lot. Describe any other shoreline protection structures along the shoreline in proximity to the site, noting the type of structure (e.g., seawall, revetment, etc.), material used, and whether they are authorized structures.

6. Provide facts to show whether the lot is located on an eroding shoreline.

7. Section 3.0, Evaluation of Alternatives, should explore alternative solutions to the stated reasons for keeping the retaining wall (i.e., providing privacy, separating public areas from private land, and preventing erosion). Currently you only provide two alternatives: retain or remove the wall. In other words, are there other feasible alternatives which the applicant could employ to achieve privacy and demarcation of private property, such as an open work fence, which would only require a Minor Shoreline Structure permit.

8. Provide information on the Flood Insurance Rate Map (FIRM) flood districts and base flood elevations. On a map of the site, show the floodway boundaries and corresponding actual heights above MSL.

9. Describe the public uses of the affected shoreline and ocean waters proximate to the site.

10. Provide a complete permitting history for all uses and structures on the lot.

11. On the plans provided which show a cross-section of the wall, indicate whether the retaining wall protects a cut or fill, and how much.

12. A certified shoreline survey is not required for the Draft EA. However, it will be required for the SSV application. Nevertheless, the Draft EA must include a map indicating the assumed shoreline. The shoreline map provided in your current submittal is not adequate. The shoreline map should be at least 8.5 X11 inches in size, and must include an appropriate graphic ("bar") scale. Furthermore, it should not have contradictory information concerning the location of the shoreline; and, it should show the 40-foot shoreline setback from the presumed shoreline. According to a letter from the Office of Conservation and Coastal Lands, dated August 20, 2009, the shoreline is likely to be "*at the face of the seawall and along the face of the third step from the bottom at the north end of the seawall.*" Therefore, you should use that as the presumed shoreline location; and, this information should be explicitly addressed in your analysis.

The application may be resubmitted when it is complete, as noted above. We are retaining two copies of your application materials for our records, and will return the other three. If you have any questions, please call Elizabeth Krueger of our staff at 768-8019.

David K. Tanoue, Director
Department of Planning and Permitting

Date: December 28, 2009

DKT:cs

Enclosures

WIL CHEE – PLANNING & ENVIRONMENTAL

RECEIVED

'09 NOV 19 P3:29

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLU

TRANSMITTAL

DATE: 19 November 2009

TO:

David K. Tanoue, Director
Department of Planning and Permitting
City & County of Honolulu
650 South King Street, 7th Floor
Honolulu, HI 96813

FROM: Kelly Shoji, Wil Chee – Planning & Environmental

SUBJECT: After-the-Fact Shoreline Setback Variance Application & Environmental Assessment (EA) for Retaining Wall, Makaha, Oahu, Hawaii. TMK 8-4-006:007

Copies	Description
5	Draft Environmental Assessment
1	CD-Electronic Copy of the Draft Environmental Assessment
1	Letter Requesting a waiver for a certified shoreline

FOR:

( ) Information and Use	
(x) Review and Comment	**(x) Necessary Action**
( ) As Requested	**( ) Signature**
(x) via Delivery	**( ) Record and File**

REMARKS: Enclosed are 5 copies of the Draft Environmental Assessment for an After-the-Fact Shoreline Setback Variance Application for a CRM retaining wall, 1 CD is included with an electronic copy of the Draft EA, and a letter requesting the certified shoreline to be waived.

If there are any questions or comments please contact Kelly Shoji at (808) 596-4688.

WIL CHEE – PLANNING & ENVIRONMENTAL

November 19, 2009

David K. Tanoue, Director
Department of Planning and Permitting
City & County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Dear Mr. Tanoue

Reference: Shoreline Setback Variance Application for a Retaining Wall
Makaha, Oahu, Hawaii
84-771 Moua Street
TMK: 8-4-006:007

Subject: **Shoreline Setback Variance Application for a Retaining Wall**
Request for waiver of Shoreline Certification by Department of Land and Natural Resources (DLNR) State of Hawai`i.

Wil Chee – Planning & Environmental (WCP) has been hired by Ken and Gene Ochi, the property owners, to prepare a Shoreline Setback Variance application and required documents in compliance with Department of Planning and Permitting (DPP) regulations.

The Ochis purchased the property (TMK 8-4-006:007) in 2005, and the dwelling is used as a vacation home. The house was built in 1956, and the first wall was constructed shortly after this, prior to the Coastal Zone Management (CZM) regulations that established setback requirements, in 1966. It appears that the original wall was not permitted. Due to wear and tear of the elements, the wall required repairs when the Ochis purchased the property in 2005.

In 2006, the Ochi's made extensive repairs to the existing retaining wall. A neighboring renter had reported to the city Department of Planning and Permitting that the Ochis were repairing their existing wall. Later that year, they received a notice of violation dated May 9, 2006. The violation stated, "the existing 5` seawall at the rear of the property is being reconstructed without first obtaining a building permit." The Ochis tried to obtain a permit, but the permit was not granted because there was no documentation concerning the original wall. They then started the application process for shoreline certification. On December 23, 2006, the shoreline certification application for File No.: OA-1132 was found to be complete and accepted by the State of Hawaii Department of Land and Natural Resources Land Division.

On January 12, 2007, the shoreline was inspected by representatives of the Office of Conservation and Coastal Land (OCCL). The shoreline was determined to be at the seaward face of the CRM wall. The applicant's surveyor was instructed to provide copies of documents

that approved the CRM wall by the appropriate governmental agencies or to indicate factors which make the wall exempt from such approval. A representative from OCCL spoke with the applicant's surveyor, on February 9, 2007. The surveyor stated that there were no such documents to support the prior approval of the CRM wall.

On March 8, 2007, the State Land Surveyor rejected the Shoreline Setback Variance application containing the survey because not all appropriate documents were submitted. There is no record of permitting for the construction of the original wall. Therefore, there are no documents indicating that the retaining wall was or was not approved by the appropriate government agencies or that it is exempt from such approval.

A Notice of Order was sent to the applicants on March 24, 2009 from the Department of Planning and Permitting (DPP) stating that the violation for the reconstruction of the CRM retaining wall without a building permit had not been corrected. The order stated that if the violation was not corrected by April 24, 2009, a fine of $50/day would accrue until the wall is removed or permitted,

Faced with the destruction and loss of their home, the Ochis acted responsibly in attempting to protect their home. The current CRM retaining wall is an improvement to the damaged condition of the previous wall. The existing wall is structurally sound and has been inspected by a licensed structural engineer from Tanimura & Associates, Inc. The existing CRM retaining wall which was repaired will remain in place pending the approval and permitting for an engineered seawall. There are no reasonable viable alternatives.

Due to the current situation, we respectfully request on behalf of the Ochi family that the Shoreline Certification requirement be waived so they can proceed with the Shoreline Setback Variance Application as required by DPP. If the SSV is granted they will proceed to reapply to DLNR for the Shoreline Certification.

Thank you for your consideration of our request in this matter. Should you have any questions, please feel free to contact me at 596-4688.

Sincerely,

Kelly Shoji

Kelly Shoji
Planner

Appendix B

Notice of Violation

Denied Shoreline Certification Survey

Current Survey with Structures and Elevations

To: Kelly Shoji From: Patty Cobi

808-691-1851

DEPARTMENT OF PLANNING AND PERMITTING

CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET * HONOLULU, HAWAII 96813

Fax: (808) 523-4400

Notice of Violation

Violation No.: **2006/NOV-05-074 (BV)** Date: **May 09, 2006**

Owner(s)

OCHI, KENNETH
1444 AVIATION BLVD 201
REDONDO BEACH, CA 90278

Contractor(s)	Tenant/Violator	Architect/Plan Maker
Lessee	Agent	Engineer

TMK: **8-4-006-007 84-771 MOUA ST**

I have inspected the above-described premises and have found the following violations of City and County of Honolulu's laws and regulations governing same:

Codes and/or Ordinance(s) and Section(s)	Violation(s)
ROH 1990, as amended, Chapter 18 Section 18-3.1	**AN EXISTING 5' FOOT RETAINING SEAWALL AT REAR OF PROPERTY IS BEING RECONSTRUCTED WITHOUT FIRST OBTAINING A BUILDING PERMIT PLEASE OBTAIN A BUILDING PERMIT FOR THE WALL WITHIN THE TIME SPECFIED BELOW.**
ROH 1990, as amended, Chapter 18 Section 18-6.2(d)	**THE BUILDING PERMIT FEE WILL BE DOUBLED FOR WORK DONE WITHOUT FIRST OBTAINING A BUILDING PERMIT.**

You are hereby ordered to obtain permit(s) and/or correct violation by June 9, 2006.

Please call the undersigned after the corrections have been made.

You are reminded that if no action is taken within the specified time:

1. This matter will be referred to the Prosecuting Attorney and/or Corporation Counsel for appropriate action; and/or
2. A Notice of Order will be issued by the Department of Planning and Permitting imposing CIVIL FINES for the specified violations.

Special Instructions:

Inspector: Phillip Cole Phone: 692-5717

for the Director Department of Planning and Permitting

BLDG

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX! (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

E. HANNEMANN
MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

CERTIFIED MAIL
7007 2680 0002 2282 0840
RETURN RECEIPT REQUESTED

NOTICE OF ORDER

NO.: 2008/NOO-239 Date: March 24, 2009

TO: Owner/Contractor/Lessee/Tenant:
Owner: Kenneth D. Ochi
Gene T. Ochi
1444 Aviation Boulevard, #201
Redondo Beach, California 90278

Address of Violation: 84-771 Moua Street – Makaha

Tax Map Key: 8-4-006: 007

Description: Reconstruction of CRM retaining seawall with steps without a building permit

The Department of Planning and Permitting (DPP) inspected the above-described structures and/or premises and found a violation of one or more ordinances of the City and County of Honolulu. As a result, Notice of Violation (NOV) 2006/NOV-05-074 was issued on May 9, 2006 (copy attached). As of this date, the violation described on the NOV has not been corrected. Pursuant to the authority granted by the Revised Ordinances of Honolulu (ROH), you are hereby ordered to:

1. Pay a fine of $50 by April 24, 2009.

2. Correct the violation by April 23, 2009. If corrective action has not been completed by this date, a daily fine of $50 will be assessed until the correction is completed. You are responsible for contacting the inspector, Brent Ho at (808) 768-3186, to verify the corrective action.

Checks (with the Notice of Order number) are payable to the City and County of Honolulu, and should be mailed or delivered to the Department of Planning and Permitting, 650 South King Street, 8th Floor, Honolulu, Hawaii 96813.

DM / aw
3/30/09

If the fine is not paid and/or violation is not corrected by the due date, this matter may be referred to the Department of the Corporation Counsel for civil remedy and/or the Prosecuting Attorney's Office for criminal prosecution. The fine, if unpaid, may also be added to taxes, fees or charges such as your driver's license, vehicle registration, business license, and/or building permit. Further, the civil fine may be placed as a lien on your property with foreclosure an option to collection of the fine.

If the order is issued to more than one person, each person shall be jointly and severally liable for the full amount of any fine imposed by the order.

This order shall become final on April 24, 2009. Before the final date, any person(s) subject to an order may appeal the provisions of the order. However, an appeal does not suspend any provision of the order, including the imposition of the civil fines. Copies of the appeal rules are available at the DPP.

Should you have any questions regarding this order, please contact our Code Compliance Branch at (808) 768-8110.

for David K. Tanoue, Director
Department of Planning and Permitting

DKT:ra

Attach: 2006/NOV-05-074

cc: Brent Ho, Building Division,
Building Code Inspection Section (Kapolei)

08-239luv.doc (Doc 685137 rev 1)

LINDA LINGLE
GOVERNOR OF HAWAII

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

ROBERT K. MASUDA
DEPUTY DIRECTOR

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

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

Mar 8 2 1- PM '07

March 8, 2007

File No.: OA-1132

Mr. Wesley T. Tengan, LPLS
P.O. Box 240953
Honolulu, Hawaii 96824

Dear Mr. Tengan:

Subject: Rejection of Shoreline Certification Application
Owner: Patty Ochi
Tax Map Key: (1) 8-4-006:007

The State Land Surveyor has recommended the rejection of your shoreline application for the subject property for the following reason:

> As a result of the inspection conducted on January 12, 2007, the shoreline was determined to be at the seaward face of the CRM wall. You were instructed to provide copy of all documents supporting that the CRM wall was approved by the appropriate government agencies or is exempt from such approval. To date, we have not received the required documents. In accordance with Section 13-222-7(b)(14), Hawaii Administrative Rules, your application for shoreline certification is rejected.

We have submitted this proposed rejection for publication in the March 8, 2007 OEQC Environmental Notice to allow for appeals. Any person wishing to file an appeal shall have twenty (20) days from the publication. If you would like to appeal, please go to our website (at http://www.hawaii.gov/dlnr/lmd/rulesindex.html) for the "Notice of Appeal" form.

If you have any questions, please feel free to contact us at (808) 587-0430. Thank you.

Sincerely,

Barry Cheung

Barry Cheung
Land Agent

cc: DAGS
District Branch

LINDA LINGLE
GOVERNOR

RUSS K. SAITO
Comptroller

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
SURVEY DIVISION
P.O. BOX 119
HONOLULU, HAWAII 96810-0119

Response refer to:
O-506(06)
OA-1132

February 14, 2007

Shoreline Determination
T.M.K. 8-4-06: 07
Makaha, Waianae, Oahu, Hawaii

Mr. Russell Y. Tsuji, Administrator
Land Division
Department of Land and Natural Resources
P. O. Box 621
Honolulu, Hawaii

Attn.: Mr. Steve Molmen, Supervising Land Agent

Dear Mr. Tsuji:

Your request dated December 22, 2006 for shoreline determination has been reviewed.

This shoreline was inspected on the ground on January 12, 2007 by Chris Conger and Keith Tasato. As a result of the inspection, the shoreline was determined to be at the seaward face of the CRM wall. The applicant's surveyor, Mr. Wesley T. Tengan was instructed to provide a copy of all documents supporting that the CRM wall has been approved by the appropriate governmental agencies or is exempt from such approval. Per the conversation between Mr. Tasato and Mr. Tengan on February 9, 2007, Mr. Tengan stated that the required documents are unavailable.

In accordance with HAR Sections 13-222-19 and 13-222-7(i), this shoreline should be rejected. Copies of the map are being returned to you for further action. A copy of the application, map and photographs are being retained for our records.

Should you have any questions on this matter, please contact me at 586-0390.

Very truly yours,

REID K. SIAROT
State Land Surveyor

Received From
D.A.G.S. - SURVEY DIVISION
BY:
DATE: 2-14-07

Enclosures
KT:lk

LINDA LINGLE
GOVERNOR OF HAWAII

O-506 (06)

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

ROBERT K. MASUDA
DEPUTY DIRECTOR

DEAN NAKANO
ACTING DEPUTY DIRECTOR - WATER

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

DEC 22 11 17 AM

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 22, 2006

File No.: OA-1132

MEMORANDUM

TO: Reid Siarot, State Land Surveyor
Department of Accounting and General Services, Survey Division

FROM: Robert Ing, Land Agent RI
Department of Land and Natural Resources, Land Division

SUBJECT: Request Review of Shoreline Certification Application

Applicant:	Wesley T. Tengan
Owner:	Patti Ochi
District/Island:	Makaha, Waianae, Oahu
Tax Map Key:	(1) 8-4-006:007

Transmitted herewith for your review and appropriate action are the following items:

1) 7 copies of shoreline survey maps;
2) 1 set of photographs dated October 16, 2006;
3) Copy of right-of-entry from property owner;
4) Copy of application.

Please review and recommend the shoreline for certification or rejection. Public notice of this application is scheduled to appear in the December 23, 2006 OEQC Environmental Notice.

The commencement date for processing this application for shoreline certification is December 23, 2006 and the completion date is March 23, 2007.

If you have any questions, please feel free to call me at (808) 587-0383. Thank you.

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 23, 2006

File No.: OA-1132

Mr. Wesley T. Tengan
P.O. Box 240953
Honolulu, Hawaii 96824

Dear Mr. Tengan:

Subject: Accepted Application for Shoreline Certification
Applicant: Wesley T. Tengan
Owner: Patty Ochi
District/Island: Makaha, Waianae, Oahu
Tax Map Key: (1) 8-4-006:007

Your application for shoreline certification of the subject property has been found to be complete and is accepted for processing. The commencement date for application processing is **December 23, 2006** and the completion date is **March 23, 2007**.

The file number assigned to this application for shoreline certification is **OA-1132**.

We have submitted your application for publication in the **December 23, 2006** OEQC Environmental Notice to allow public comment. We have also transmitted your application to the Department of Accounting and General Services (DAGS) Survey Division for their review and action. Upon receipt of the State Land Surveyor's recommendation, we will schedule another public notice in the next available OEQC Environmental Notice.

If you have any questions, please feel free to call me at (808) 587-0383, or DAGS Survey Division at (808) 587-0380. Thank you.

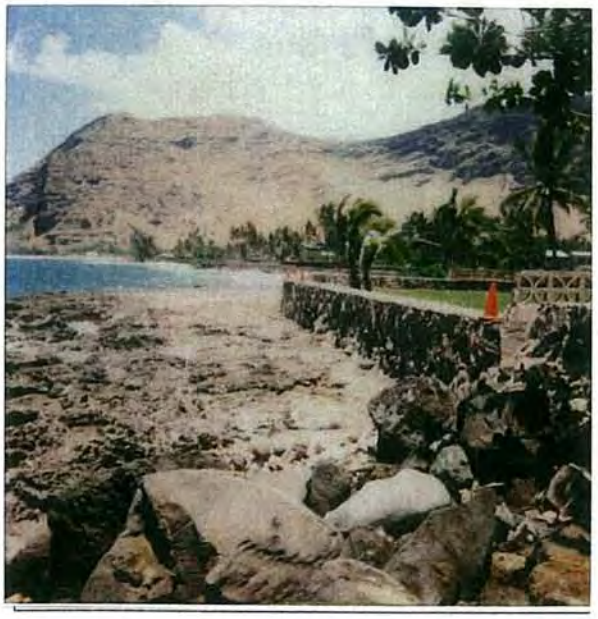
Sincerely,

Robert M. Ing
Land Agent

cc: DAGS

1

2



3

4

TMK: (1)8-4-06:7
84-771 MOUA STREET
OCTOBER 16, 2006
1:00 PM
PARTY CHIEF: GRANT FUJISHIGE

8-4-6:7

November 21, 2006

To Whom It May Concern:

I hereby give DNLR permission to inspect property located at 84-771 Moua Street in Waianae for completion of a shoreline application.

Patty Ochi
Owner
310-265-5989

MAP 71

FOR CONTINUATION SEE MAP 77

PAGE DATA

PARKS
Mauna Lahilahi Beach Park A3
Waianae Pk C4

SCHOOLS
Waianae HS B4

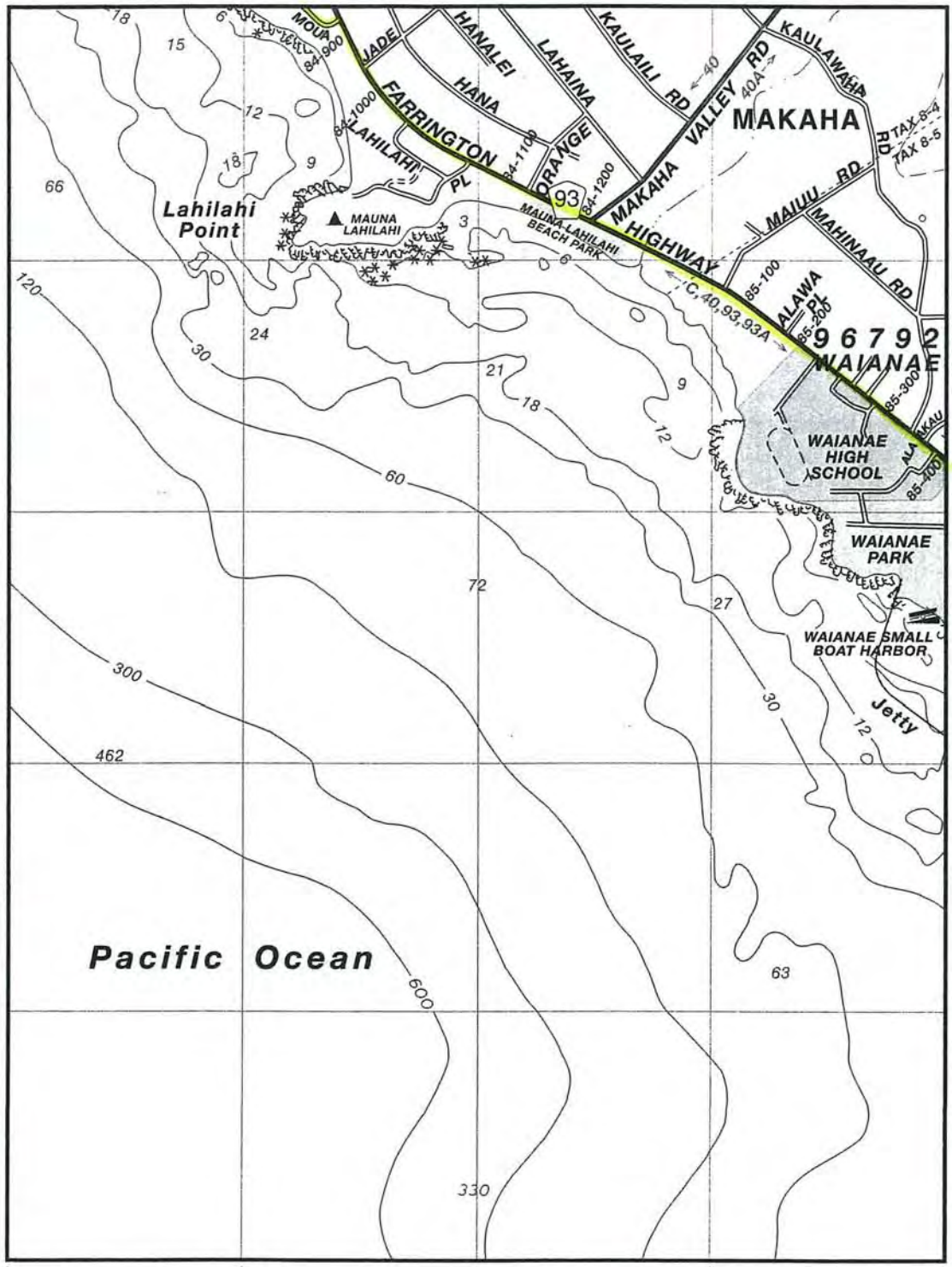
BUS INFO

Eastbound:
C Country Express
40 Honolulu
93 Express(AM) Downtown/ CBD
93 Express(AM) Pearl Harbor

Westbound:
C Country Express
40 Makaha
40A Makaha
93 Express Makaha (PM)
93A Express Makaha (PM)

Westbound: (from Map 72)
C Country Express
40 Makaha
93 Express Makaha (PM)
93A Express Makaha (PM)
401 Waianae Valley Circulator
402 Lualuaei Homestead Circulator
403 Nanakuli-Maili-Waianae Circulator

For More Route Info see Bus Index



MAP SCALE: 1" = 1500'

N

0 .4 mi. (2,156 ft.) .8 mi. (4,312 ft.) 1.2 mi. (6,468 ft.) 1.6 mi. (8,625 ft.)

BUS ROUTE ← 1 → BENCHMARK ▲ ZIP CODE BOUNDARY TAX BOUNDARY

WAIANAE

MAKAHA

1704 Waiola Street Honolulu, HI 96826 - Google Maps

File Edit View Favorites Tools Help

Back Search Favorites Media

Address http://maps.google.com/?q=1704+Waiola+Street+Honolulu%2c+HI+96826

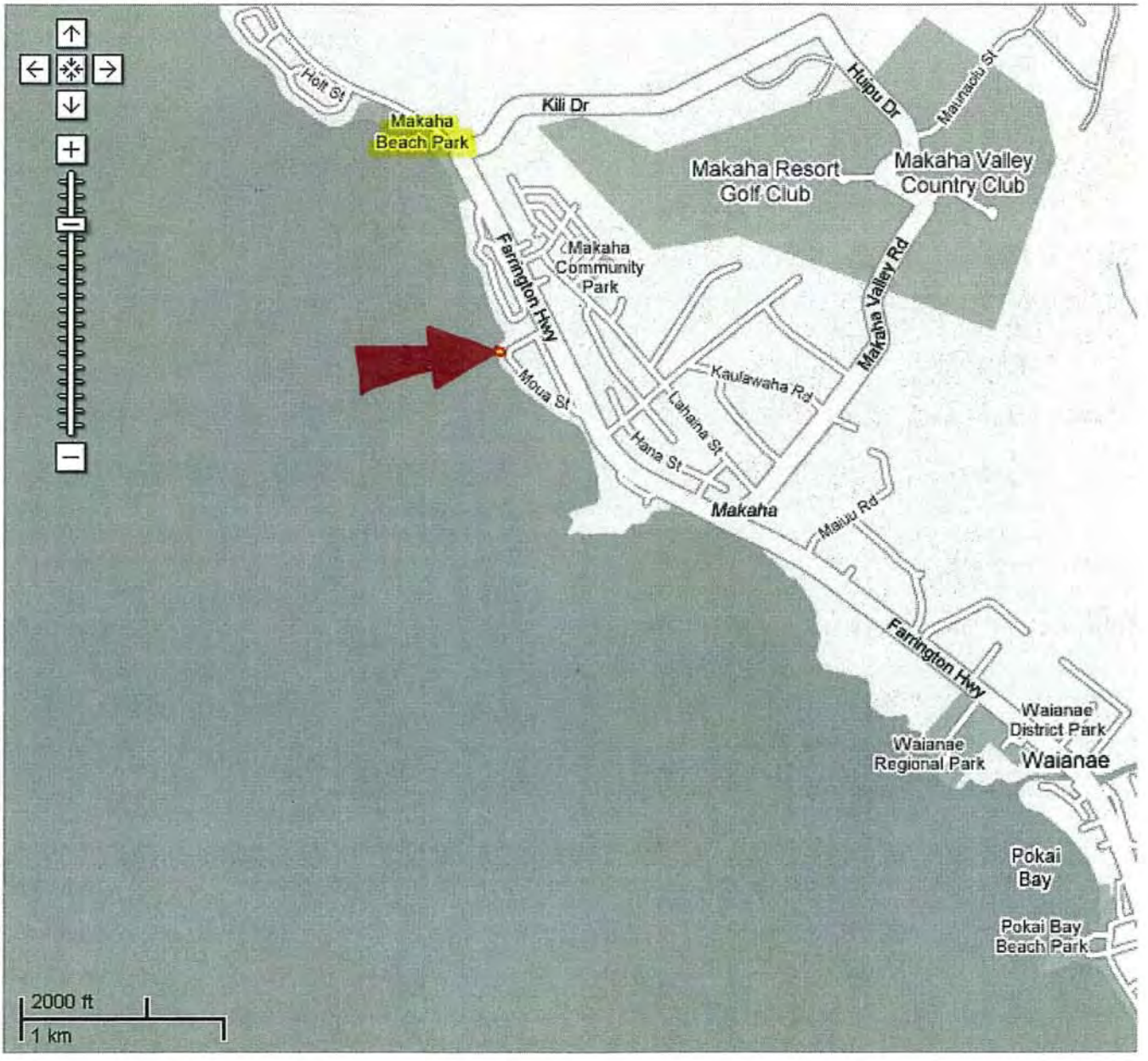
Google Maps

Web Images Video News **Maps** more »

1704 Waiola Street Honolulu, HI 96826 Search M

Search the map Find businesses Get directions

Maps



Done

Start ftp://gisftp.hicentral.com... 1704 Waiola Street Ho...

OA-1137

TRUE NORTH
Scale: 1 in. = 20 ft.

S E A

SHORELINE FOLLOWS ALONG HIGH WASH OF WAVES AS LOCATED ON October 16, 2006

9.01

144.49

153.07

164°48'43"

164°05'

shoreline follows edge of wall

25.11

Spike
(Point on line)
(60.85 feet to corner)

152°03' 8.78

94°33' 1.64

153°32' 8.46

(EROSION AREA = 14 SQ. FT.)

Face of 3rd step

Concrete steps

Rock wall

1.30

Nail
(Point on line)
(3.21 feet to corner)

Rock wall

281.00

Rock wall

Tile wall

88°00'

LOT 85
23,620 SQ. FT.
(23,606 SQ. FT.)

LOT 86

LOT 84

209.70

289°00'

211.00

14°53' 50.03
R=150.00

M O U A S T R E E T

WESLEY T. TENGAN
LICENSED PROFESSIONAL LAND SURVEYOR
No. 6958
HAWAII, U.S.A.

SHORELINE MAP
LOT 85
LAND COURT APPLICATION 1052
AS SHOWN ON MAP 5
Makaha, Waianae, Oahu, Hawaii
Date: October 16, 2006
Tax Map Key: (1)8-4-06:7
Owner: Patty Ochi

This work was prepared by me or under my supervision

WESLEY T. TENGAN
LICENSED PROFESSIONAL LAND SURVEYOR
Certificate Number 6958

Note: 1 denotes position and direction of photograph

84-771 MOUA STREET

KEPUHI PT.

To Kaena Point

01 U.S. Military Res. Keaau Ridge
Pres. Exec. Ord. 5119
KEKEPUHI NEW

K E A A U
SEC. 3

M A K U A
SEC. 2

KEPUU KEAAU

KEAAU — MAKAHA

Forest Reserve Boundary

S E A

01 18 08 27 28 07 26 17 06 25 05 16 15 24 14 JADE STREET 04 13 12 22 23 21 01 03 11 01 19 20

ROAD

Makaha Stream

02

ALA HOLO LOOP

1052

CT. 29 APP. VALLEY

LD.

Stream

MAKAHA

MAHILAHILA

MAKAHA VALLEY ROAD

MAHIU ROAD

To Waianae Town

MT. MAKAHA

W A I A N A E K A I
SEC. 5

M O K U L E I A
ZONE 6 SEC. 8

D I S T R I C T

KAALA

TRUE NORTH
1"=1000'

WAHIAWA DIST.
WAIANAE UKA
ZONE 7 SEC. 2.

FIRST DIVISION	
ZONE	SEC.
8	4
CONTAINING	PLATS
Scale 1in.= 1000 ft.	

ADVANCE SHEET
SUBJECT TO CHANGE

MAKAHA, WAIANAE.

Revised By: C.K. - July 1956

Dwg. No. 339
By: P.K. April. 1932.
Source: Survey Dept.

PRINTED

PLAT 17 — PLAT 16

← To Makua — FARRINGTON HIGHWAY — To Waianae →

UPENA ST. — WIDEMANN ST. — FRICKE ST. — MOUA ST. — PLAT — UPENA ST. — S E A

John M. Hinkle

Jeffrey H. Cutrer — Leo A. Palasco, Jr. & Leo A. Palasco, Sr. -Jr (1600 ft²) Leo A. Palasco, Jr. (8931 ft²) — Martha L.K. Opunui — Patrick G. Lowry & wf. Cynthia A. -T/E — Julia Y. Gerardo S/P — George Lindo & wf. Bernalda P. -T/E — Vincent Souza Jr. & wf. Eva -T/E

Various Owners 5,821 ft² — Kazumi Muranaka (Robert C. Svihus & wf. Karen L. -T/E) A/a — Carlton E. Beal & wf. Kelsen M. -T/E — Joseph F.Y. Lau & wf. Harriet P. -T/E — George H. Yim & wf. Josephine L. T/E — Edgar J. Tabernigg & wf. Barbara Y. -T/E — Harry Y. Maeda & wf. Bernice -T/E — Various Owners 4,787 ft² — Glenn N. Yanagi Est. — Joseph Marques & wf. Mary A. -T/E — John K. Kapuniai & John K. Kapuniai, Jr. -J/T — Hirotoshi Takahashi & wf. Bessie A. -T/E — Walter D. Aki & wf. Lillian U. -T/E — Edgar S. Childs & wf. Louise S. T/E — Hazel H. McNamara — Louis H. Peterson & wf. Katherine I. T/E — Julius K. Jensen & wf. Clementine K. -T/E

Jane S. League -S/P — Harriet G. Dickinson -S/P — William Kawaiaea & wf. Katherine -T/E — Delvin F. Mong & wf. Madeline J. -T/E — Benedict A. Awana & wf. Louisa P. -T/E — Arthur L. Vasconcellos & wf. Madalin O. -T/E — Conrad Sanico & wf. Consuelo F. T/E (John Joseph, Jr. & wf. Alice -T/E) A/a — Harris K.C. Haole, Sr. — Wladyslaw J. Rzorica & wf. Veronica J. T/E — John L. Yakich & wf. Doreen M. -T/E — Harold R. Nauge & wf. Billie J. -T/E (Lic/P Cir. 7053 to C & C of Hon.) — Albert K. Akana & wf. Rita P. -T/E — Florence T. K. Chong S/P — Ah But Mau & wf. Yuk Yeen -T/E — Martha M. Paul — Alvin M. Sears — Barnice K. Awana — Gertrude Y. Stephens

Various Owners 770 ft²

Masanobu Kawate & wf. Shizuko O. T/E — Walter T. Matsumoto & wf. Hazel J. -T/E — Richard S. Ishimitsu & wf. Nancy S. -T/E — Kenneth Y. Matsuyoshi — Hisaichi Nakamura & wf. Shizuko -T/E (John A. Holland & wf. Judith Jane -T/E) A/a — Felimon Umeres & Clara C. Cadera -J/T

Dropped Parcel (55-in road) 57

Por. MAKAHA, WAIANAE, OAHU, T.H. LD. CT. APP. 1052 Map-5.

Boundary follows along highwater mark

SUBJECT TO CHANGE

True North Scale: 1 in. = 50 ft.

Dwg. No.: 3601 — Ld. Ct. App. 1052 — Map-5 — H.N. & R.Y.T. — Date: August 1967

Source: — By:

6 1977 — 1982

TAXATION MAPS BUREAU
TERRITORY OF HAWAII
TAX MAP

FIRST	DIVISION	
ZONE	SEC.	PLAT
8	4	06

CONTAINING PARCELS

SCALE: 1 IN. = 50 FT.

OA-1132

STATE OF HAWAII
DEPARTMENT OF LAND & NATURAL RESOURCES

SHORELINE CERTIFICATION
APPLICATION FORM

For DLNR use only:
Case file no.: _____
Date application recvd: _____
Date applic. complete: _____
Completion date (+90): _____
1st OEQC notice: _____
2nd OEQC notice: _____
Date appeals due (+20): _____
Date briefs due: _____
Date of decision (+60): _____

I. APPLICANT/AGENT

Applicant means the person submitting an application for shoreline certification.

Applicant name: WESLEY T. TENGAN

Applicant address: P.O. BOX 240953
HONOLULU, HI 96824

Phone numbers: (808) 735-4207 (808) 735-6037 WES.TENGAN @
Phone Fax E-mail HAWAIIANTEL.NET

II. PROPERTY OWNER

Property owner means the equitable or legal holder of interest in, or the lessee holding under a recorded lease for the property for which a shoreline certification is requested, or the authorized agent.

Owner name: PATTY OCHI

Owner address: 2845 VIA VICTORIA
PALOS VERDES ESTATES, CA 90274

Signature: _____ Date: 10/31/06

III. LOCATION AND ADDRESS

Island: (✓) Oahu ( ) Kauai ( ) Molokai
( ) Hawaii ( ) Maui ( ) Lanai

Town, District: MAKAHA, WAIANAE Tax Map Key: 8-4-06:7

Address: 84-771 MOUA ST.
WAIANAE, HI 96792

IV. PURPOSE

State the purpose for which the certification is being applied:
TO CALCULATE BUILDING POTENTIAL AND OBTAIN A BUILDING PERMIT.

V. CHECKLIST OF ENCLOSURES

( ) At least three (3) sets of color photographs of the shoreline, in accordance with §13-222-8, HAR:

- ( ) Shoreline, as delineated on the map, is indicated on each photograph.
- ( ) Permanent markings on the ground or flaggings are indicated on the photographs.
- ( ) Each photograph is labeled by number or alphabet to coincide with the map showing the direction the photograph was taken.
- ( ) Photographs provide accurate perspectives of the shoreline in relation to permanent markings or other land features.
- ( ) Each photograph is marked with the date and time taken.

( ) At least seven (7) maps of the shoreline, in accordance with §13-222-9, HAR:

- ( ) Maps are on whiteprints and are one of the following sizes (in inches): 8.5 x 13, 10 x 15, 13 x 23, 15 x 21, 21 x 32, 22 x 36, 24 x 36, 30 x 36, 36 x 42, 42 x 42-72.
- ( ) Maps are drawn using an engineer or architect scale, in units of feet. Scale is clearly noted on the map. No reduced or enlarged maps allowed.
- ( ) Maps are based on an actual field survey conducted within the prior 90 days.
- ( ) Maps have the licensed surveyor's seal and testament indicating the work was done by the surveyor or under the surveyor's supervision.
- ( ) Maps indicate true north pointing towards the top.
- ( ) Map title and reference to location include the original source of title and name of awardee, patentee, or grantee and the ili, ahupuaa, and the TMK and the property owner's name and address.
- ( ) Maps show all permanent identification marks established on the ground and all pertinent azimuths and distances.
- ( ) Maps indicate the type of shoreline being determined (i.e., vegetation line, debris line, upper reaches of the wash of waves, face of artificial structure, or combination).
- ( ) At least two (2) of the maps show the direction the photographs were taken and the point or shoreline depicted in the photographs.

( ) Field survey was conducted on Oct. 16, 2006 (date of field survey) by GRANT FUJISHIGE (name of person who conducted field survey).

( ) The licensed land surveyor who made or supervised the field survey was:

Name WESLEY T. TENGAN
Address P.O. BOX 240953, HONOLULU, HI 96824
Phone no. 808-735-4201

( ) Application fee of $75 is enclosed.

( ) Statement signed by property owner granting the State of Hawaii the right to enter the property.

( ) Statement(s) signed by applicable owners granting the State of Hawaii the right to enter land not owned by the property owner necessary for access.

( ) Copy of any federal, State or county enforcement or other legal action involving the subject shoreline.

( ) If shoreline is being located at the base of a manmade structure, copy of all documents supporting that the structure has been approved by the appropriate government agencies or is exempt from such approval.

VI. CERTIFICATION

I hereby certify that the statements and information contained in this application, including all attachments, are true and accurate to the best of my knowledge and understand that if any statements are shown to be false or misrepresented, this application may be rejected. Further, I understand that the Department may review any shoreline certification during its 12-month validity period and may rescind the certification where there is substantial misrepresentation or material fact in the application, whether intentional or unintentional, as determined by the State Land Surveyor or the Department.

WESLEY T. TENGAN
Printed Name

10/31/06
Date

X
Signature

Survey Job No. _____ Ld. Div. No. OA-1132 T(1) 8-4-06:07

No.		Shoreline Application Contents	LD ✓	DAGS ✓
1		Purpose of certification [§13-222-7(b)(1)]	✓	
2		Location (District, Island & TMK) [§13-222-7(b)(2)]	✓	
3		Name & mailing address of property owner (and representative if applicable) [§13-222-7(b)(3)]	✓	
4		Address of property involved [§13-222-7(b)(4)]	✓	
5		Minimum of three (3) sets of color photographs [§13-222-8(a)]	✓	
PHOTOS		Indication of shoreline as delineated on map [§13-222-8(b)]		✓
PHOTOS		Labeled by number/alphabet coincide with map showing direction [§13-222-8(c)]		✓
PHOTOS		Accurate perspectives in relation to permanent markings or land features [§13-222-8(d)]		✓
PHOTOS		Date and time photos taken [§13-222-8(e)]	✓	
6		Minimum of seven (7) maps of the shoreline [§13-222-7(c)]	✓	
MAPS		Size (8-1/2x13, 10x15, 13x23, 15x21, 21x32, 22x36, 24x36, 30x36, 36x42, 42x42-72) [§13-222-9(a)]	✓	
MAPS		Engineer/Architect scale, unit of feet, scale indicated on map [§13-222-9(b)]		✓
MAPS		Field survey within 90 days prior to filing [§13-222-9(c)]	✓	
MAPS		Licensed Land Surveyor's seal, testament that work done by or under supervision [§13-222-9(d)]	✓	
MAPS		True north pointing towards top [§13-222-9(e)(1)]	✓	
MAPS		Title of map/reference to locality (ili, and ahupuaa, district and island, together with the TMK no.), original source of title (name of awardee, patentee or grantee), and the property owner's name and address [§13-222-9(e)(2)]	✓	✓
MAPS		Permanent identification markings, azimuths and distances [§13-222-9(e)(3)]		✓
MAPS		Type of shoreline [§13-222-9(e)(4)]		✓
MAPS		Minimum two (2) photo index maps [§13-222-9(f)]	✓	
MAPS		All artificial structures [§13-222-17(2)] Proper documentation if the structure is makai of legal seaward boundary [§13-222-17(2)(i)]	✓	
MAPS	EROSION	New and old distances of the property along its side boundaries [§13-222-17(3)(i)] ✓ Metes and bounds along the shoreline & legal seaward boundary [§13-222-17(3)(ii)] ✓ New area of property as well as of the eroded area [§13-222-17(3)(iii)] ✓ Prior shoreline certification and date [§13-222-17(3)(iv)]		
MAPS	ACCRETION	Old distances of the property and area [§13-222-17(4)(i)] N/A Distance from the legal seaward boundary to the shoreline along the extension of the side property boundaries ✓ [§13-222-17(4)(ii)] Prior shoreline certification and date [§13-222-17(4)(iii)]		
MAPS	FILLED LAND	Old metes and bounds of the property and area [§13-222-17(5)(i)] Distance from the legal seaward boundary to the shoreline along the extension of the side property boundaries [§13-222-17(5)(ii)] Prior shoreline certification and date [§13-222-17(5)(iii)] If no prior shoreline certification, shoreline as it may have existed prior to the fill [§13-222-17(5)(iv)] "State of Hawaii" as owner and treated as an encroachment unless legal title shown [§13-222-17(5)(v)]		N/A
MAPS		For fishponds, loss of property by subsidence and new land created by lava flow see §13-222-17(6-8)		N/A
7		Statement of Date of field survey and by whom [§13-222-7(b)(7)]	✓	
8		Name, address, telephone no., of land surveyor [§13-222-7(b)(8)]	✓	
9		List of all enclosures [§13-222-7(b)(9)]	ok	
10		Signature of property owner [§13-222-7(b)(10)]	✓	
11		$75.00 Application fee [§13-222-7(d)]	✓	
12		Right-of-Entry signed by property owner [§13-222-7(b)(12)]	✓	
13		Federal, State or County enforcement or other legal action involving subject shoreline [§13-222-7(b)(13)]	NA	
14		If shoreline located at base of manmade structure(s), documents supporting structure(s) approved by government agencies or exemption. [§13-222-7(b)(14)]	NA	

COMMENCE: __/__/__ COMPLETE: __/__/__ ISLAND: Oahu OEQC: __/__/__ SURVEYOR: _____

PHONE: _____

REMARKS

- NO PREVIOUS SHORELINE
- NEED SITE INSPECTION. LOT 84 had cert. shoreline 2-7-90 at face of wall. Lot 86 had cert. shoreline July 11, 96 at edge of ledge.

KT 1-12-07 - Site visit, need rev. move shoreline to face of wall & face of 3rd step.

KT 1-22-06 - called Wes, left message.

KT 1-22-06 called Wes told him shoreline is at wall & to get docs for wall.

KT 2-7-06 Wes called, owner says no docs for wall, ask Chris for advice.

KT 2-9-06 called Wes and on advice from Chris C., informed him this shoreline will be rejected

APPLICATION REVIEWED BY: MORRIS_____ DOLAN _____ CHRIS_____ ~~NICK~~ RI _____ DATE 12/8/06 PRIOR CERT __/__/__

SEA

TRUE NORTH
Scale: 1/8 in. = 1 ft.

Top bank outer coral

Bottom bank coral

Top bank coral

153.07

164°05'

Anticipated Certified Shoreline

LOT 85

23,620 SQ. FT.

Rock wall

Rock slope

Concrete

Porch

Concrete driveway

House

Carport

Storage

Concrete walkway

281.00

259°00'

211.00

86°00'

14°53'

R=150.00

50.03

BENCHMARK
"□" CUT
EL.=12.66

GRAPHIC SCALE

(IN FEET)
1 inch = 8 ft.

MOUA STREET

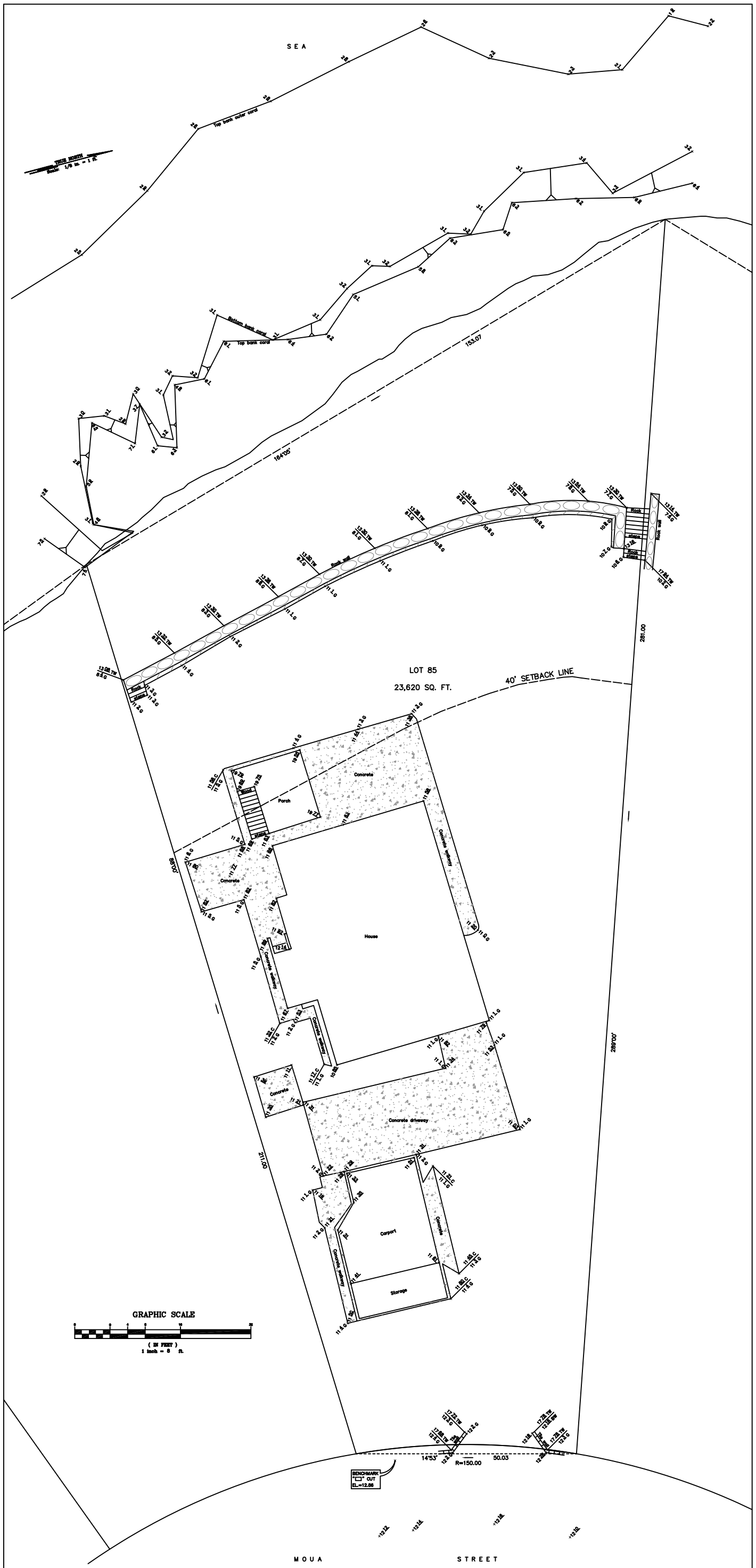
Legend:

TW	Top wall
BW	Bottom wall
C	Concrete
G	Ground
FF	Finish floor
D	Diameter
H	Height
S	Spread
TC	Top curb
BC	Bottom curb
TF	Top footing
BF	Bottom footing

Notes:
1. Origin of elevation is referred to TU0597
2. Spreads of trees are not shown
3. All easements may not be shown

TOPOGRAPHIC MAP
LOT 85
LAND COURT APPLICATION 1052
AS SHOWN ON MAP 5
Makaha, Waianae, Oahu, Hawaii
Tax Map Key: 8-4-06:7
Date: September 7, 2010
Scale: 1/8 inch = 1 foot

84-771 MOUA STREET



Legend:

TW	Top wall
BW	Bottom wall
C	Concrete
G	Ground
FF	Finish floor
D	Diameter
H	Height
S	Spread
TC	Top curb
BC	Bottom curb
TF	Top footing
BF	Bottom footing

Notes:

1. Origin of elevation is referred to TU0597
2. Spreads of trees are not shown
3. All easements may not be shown

TOPOGRAPHIC MAP

LOT 85

LAND COURT APPLICATION 1052

AS SHOWN ON MAP 5

Makaha, Waianae, Oahu, Hawaii

Tax Map Key: 8-4-06: 7

Date: September 7, 2010

Scale: 1/8 inch = 1 foot

84-771 MOUA STREET

Appendix C

Permit and Parcel Information

(from DPP Records)

FORM BD-35

PERMIT NUMBER

SEE INSTRUCTIONS BELOW 126437

DEPARTMENT OF BUILDINGS
CITY AND COUNTY OF HONOLULU

APPLICATION AND BUILDING PERMIT

Fee Received

WRITE IN ALL INFORMATION	EST. VALUE	PERM'T FEE	CLASS OF CONSTRUCTION	NO. OF STORIES	ZONE	SEC.	PLAT.	PARCEL	LOT NO.	DISTRICT
	3000.00	12.00	320	(1)	8	4	06	7	25	MAKAHA

CHECK BOX OR WRITE IN IF NECESSARY	NEW BLDG.	EXISTING BLDG.	FENCE WALL	OTHER STRUCTURES	ADDITION	ALTERATION	REPAIR	OTHER WORK
	✓							
	SIGN	RETAINING WALL			RECONSTR.	DEMOLITION	RELOCATION	

APPLICATION IS HEREBY MADE FOR PERMIT TO DO WORK AS FOLLOWS:

CLASSIFICATION OF OCCUPANCIES

SHOW NUMBER OF UNITS	SINGLE FAMILY DWELLING	DUPLEX	APARTMENT	BUSINESS	INDUSTRIAL	PUBLIC	INSTITUTIONAL	STORAGE	MIXED
	✓								

CLASSIFICATION OF CONSTRUCTION

CHECK PROPER BOX	FIRE PROOF	SEMI FIRE PROOF	HEAVY TIMBER	ORDINARY MASONRY	NON COMBUSTIBLE	WOOD FRAME	UNPROTECTED METAL
						✓	

FILL IN REQUIRED INFORMATION

LOCATED AT 87 (NO.) Mauu (STREET) STREET LOT AREA 23,620 SQ. FT. USED DISTRICT AA

OVERALL DIMENSIONS 24'X40' FLOOR AREA _____ SQ. FT. NO. OF STORIES 1

BASEMENT None SQ. FT. TYPE OF FOUNDATION Conc. Conc. TYPE OF FLOOR Wood New & Conc.

TYPE OF EXTERNAL WALLS Wood TYPE OF INTERNAL PARTITIONS Wood TYPE OF ROOF Mtl Surface

CONNECTION TO SEWER _____ CONNECTION TO CESSPOOL YES

NO PART OF THIS BUILDING WILL BE NEARER THAN 30 FT. 0 INCHES TO NEAREST ADJOINING PROPERTY LINE AND

NO PART OF THIS BUILDING WILL BE NEARER THAN _____ FT. _____ INCHES FROM 1ST STORY, NOR _____ FT.

_____ INCHES FROM STORIES ABOVE THE 1ST FLOOR OF ANY BUILDING ON THE SAME LOT. NO EAVE, OVERHANG, OR OTHER PROJECTION WILL PROJECT MORE THAN 50% OF THE SPACE ADJOINING A PROPERTY LINE. UNDERSIDE OF FLOOR SILLS WILL BE AT LEAST 20 INCHES ABOVE HIGHEST PART OF GROUND. CEMENT FLOOR SLABS OF BUILDINGS SHALL HAVE MARGINAL WALLS 24 INCHES BELOW GRADE WHERE REQUIRED.

NAMES AND ADDRESSES OF:

OWNER Hazel Mc Namara ADDRESS 700 Kaua Kuu Ave

GENERAL CONTRACTOR Owner ADDRESS _____

PLAN MAKER " ADDRESS _____

PLUMBING SUB-CONTRACTOR Owner ADDRESS _____

ELECTRICAL SUB-CONTRACTOR " ADDRESS _____

DATE AND SIGN

DATE OF APPLICATION 5-23 195 6 BY Hazel Mc Namara

APPLICANTS WILL NOT WRITE IN THIS PART OF FORM

PERMISSION IS HEREBY GIVEN TO DO THE ABOVE WORK ACCORDING TO THE CONDITIONS HEREON AND ACCORDING TO THE APPROVED PLANS AND SPECIFICATIONS PERTAINING THERETO, SUBJECT TO COMPLIANCE WITH ORDINANCES OF THE CITY AND COUNTY OF HONOLULU, TERRITORY OF HAWAII. CONSTRUCTION TO BE COMPLETED ON OR ABOUT _____ 195_

DATE 5/23 195 6 APPROVED _____
AGENT, BOARD OF HEALTH

DATE _____ 195_ APPROVED _____
CHIEF ENGINEER, FIRE DEPARTMENT

DATE _____ 195_ APPROVED _____
FOR SUPERINTENDENT OF BUILDINGS

WARNING! PERMIT PLACARD MUST BE POSTED ON THE SITE OF THE WORK. BE SURE YOU ARE FULLY INFORMED ON BUILDING AND ZONING LAWS BEFORE BEGINNING YOUR WORK. PLANTING HEDGES, TREES OR CONSTRUCTING FENCES BEYOND LIMITS OF YOUR PROPERTY LINE IS FORBIDDEN BY LAW. (PENALTY OF $100.00 FINE AND/OR 30 DAYS IMPRISONMENT.)

THE CITY PLANNING COMMISSION

DATE 5-25 195 6

ZONE (USED DISTRICT) Use AA SUB-DIVISION PENDING _____

SET BACK _____ ON MASTER PLAN _____

SUB-DIVISION FILED _____ COMMISSION REPORT _____

SUB-DIVISION APPROVED _____ RECOMMENDATION _____

NOTE: PERMITS MATERIALS TO BE USED FOR CONC.

BUILDING DEPARTMENT
CITY AND COUNTY OF HONOLULU

BUILDING PERMIT APPLICATION

PERMIT NO. 839271

APPLICANT FILL INSIDE HEAVY LINES ONLY

OWNER HAZEL McNAMARA KUNAENSHAFT
ADDRESS
PLAN MAKER OWNER
ADDRESS
PROF. REG. NO. TEL. NO.
CONTRACTOR OWNER
ADDRESS
STATE LIC. NO. TEL. NO.

JOB ADDRESS 8771 MOLIA ST.
WORK TO BE DONE NEW GARAGE

ESTIMATED VALUE $ 1,000

JOB DESCRIPTION

- ☑ NEW BLDG
- ☐ FOUNDATION ONLY
- ☐ SHELL ONLY
- ☐ FENCE WALL
- ☐ RETAINING WALL
- ☐ OTHER _____
- ☐ ADD
- ☐ ALTER
- ☐ REPAIR
- ☐ DEMOLISH
- ☐ RECONSTRUCTION
- ☐ ELECTRICAL LATER
- ☐ PLUMBING LATER

METHOD OF SEWAGE DISPOSAL

- ☐ SEWER CONNECTION
- ☑ CESSPOOL
- ☐ AEROBIC UNIT
- ☐ _____

PROPOSED USE

I hereby acknowledge that I have read this application and state that the above is correct and agree to comply with all City and County ordinances and State laws regulating building construction.

SIGNATURE (OWNER OR AGENT) DATE

ZONE	SEC	PLAT	PARCEL	LOT NO.	LOT AREA	
8	4	06	7	85	23,620	SQ. FT.

DISTRICT MAKAHA

ACCEPTED VALUE $ 10,000 PERMIT FEE 6.00

TYPE OF CONSTRUCTION		NO. OF STORIES	FIRE ZONE
MINIMUM	ACTUAL V/N	1	3

OCCUPANCY GROUP J GARAGE

FLOOR AREA (SQ. FT.)
EXISTING NEW 510 ± TOTAL

REMARKS

APPROVAL OF OTHER AGENCIES (ROUTE AS INDICATED)

✓	AGENCY	SIGNATURE	DATE
	CITY AND COUNTY		
✓	PLANNING DEPT.	[signature]	4/9/70
	ZONE (USE DIST.)	R3	
	SET BACK	—	
✓	DIV. OF ENGINEERING		
	DRIVEWAY & LOT GRADING		
	HIGHWAY		
	DRAINAGE		
✓	DIVISION OF SEWERS	[signature]	4/9
	FIRE DEPT.		
	HON. REDEV. AGENCY		
✓	[illegible]	[signature]	4/9
	STATE OF HAWAII		
	HEALTH DEPT.		
	FIRE MARSHAL		
	LAND & NATURAL RESOURCES		
	HIGHWAYS DIVISION		
	DIV. OF INDUSTRIAL SAFETY		

Permission is hereby given to do above work according to conditions hereon and according to approved plans and specifications pertaining thereto, subject to compliance with ordinances and laws of City and County of Honolulu and State of Hawaii.

[signature] 4/9/70

FOR BUILDING SUPERINTENDENT DATE

NOTES TO APPLICANT:

Post permit placard on site of work.

This permit expires if work is not started within 90 days of date of issuance or if work is suspended or abandoned for 90 days. Violating any of the provisions of building code is punishable by fine of $300.00 and/or 90 day imprisonment.

Separate permits must be obtained for signs, electrical, plumbing, and gas.

☐ **This building shall not be occupied until a certificate of occupancy has been issued.**

OFFICE INDEX COPY

FORM BSD-45 (1/68)

Appendix D

Engineered Plans of the CRM retaining wall

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE "STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION OF THE CITY AND COUNTY OF HONOLULU" (LATEST).

2. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DRAWINGS AND SPECIFICATIONS.

3. PLACE BASE OF WALL ON SOLID NON-ERODABLE STRATA.

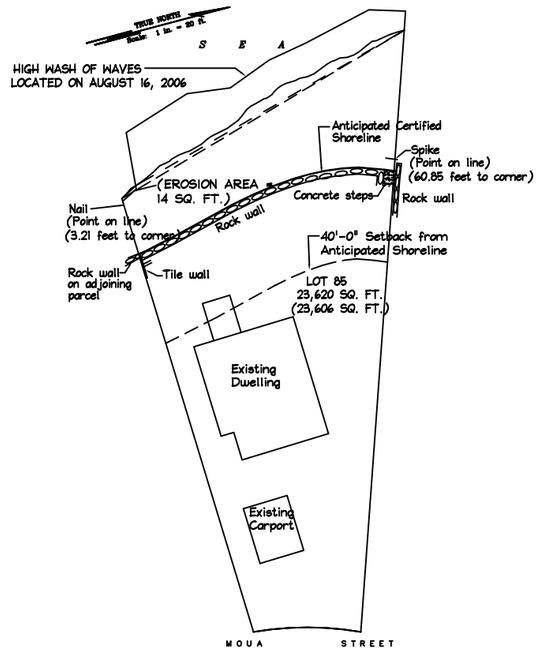
4. ALL STONES SHALL BE CLEAN AND FREE FROM DIRT OR LOOSE MATERIAL.

5. THE WALL SHALL BE GROUTED SOLID. GROUT AND MORTAR SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI AT 28 DAYS.

6. WEEPHOLES, 4 INCHES IN DIAMETER, SHALL BE SPACED NOT MORE THAN 10 FEET ON CENTER

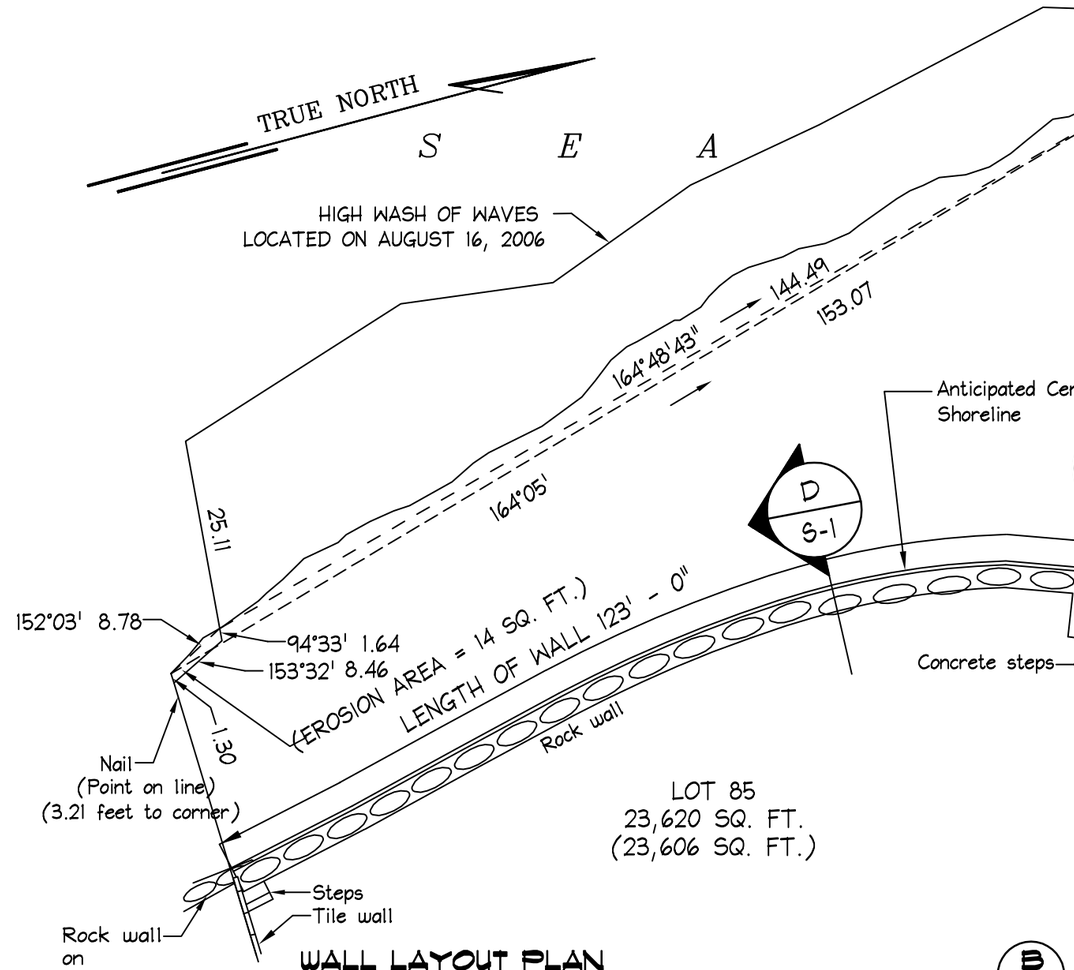
7. BACKFILL SHALL CONSIST OF A NON-EXPANSIVE GRANULAR OTHER APPROVED NON-EXPANSIVE GRANULAR MATERIAL. COMPACTION SHALL NOT EXCEED 95%.

8. ALL WORK SHALL BE PERFORMED MAUKA OF THE CERTIFIED SHORELINE.



SITE PLAN — A, S-1

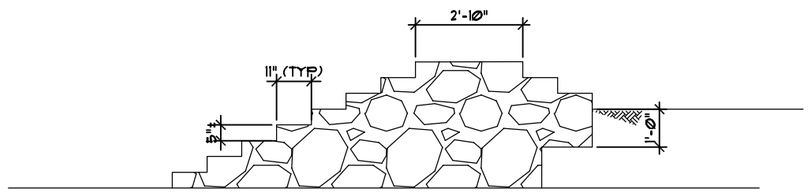
GRAPHIC SCALE 0 4 8 16 FEET



WALL LAYOUT PLAN — B, S-1

0 1 2 4 8 16 FEET

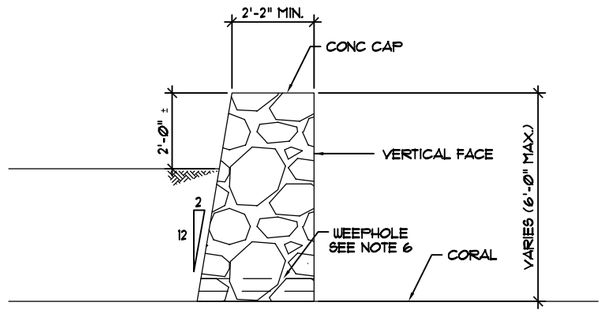
GRAPHIC SCALE



SECTION THRU STAIRS — C, S-1

0' 1' 2' 3' 4' 5' 6'

1/2" = 1'-0"



SECTION THRU CRM RETAINING WALL — D, S-1

0' 1' 2' 3' 4' 5' 6'

1/2" = 1'-0"

REVISIONS	BY

THOMAS Y. TANIMURA LICENSED PROFESSIONAL ENGINEER No. 4926-S HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

Ty Tanimura

4/5/2010

Expiration Date of the License

OCHI RETAINING WALL

TMK: (1) 8-4-006:007

TANIMURA & ASSOCIATES, INC.
CONSULTING STRUCTURAL ENGINEERS
925 Bethel Street, Suite 309 • Honolulu, Hawaii • 96813
Phone (808) 536-7692 • Fax: (808) 537-9022

SITE PLAN & SECTIONS

DRAWN EJU

DATE 10/14/09

SCALE AS NOTED

SHEET S-1