

**STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawai'i**

November 14, 2014

**Board of Land and
Natural Resources
State of Hawai'i
Honolulu, Hawai'i**

REGARDING: Conservation District Enforcement File OA-15-3
Alleged Unauthorized Excavation and Installation of an Erosion Control
Structure in the Conservation District

BY: Glenn M. Wachtel
59-165 Ke Nui Road
Haleiwa, Hawai'i 96712

**LOCATION/
Tax Map Key:** Sunset Beach, Koolauloa, Island of Oahu
(1) 5-9-002:017 (Seaward)

SUBZONE: Resource

DESCRIPTION OF AREA:

The subject area is located on the north shore of the Island of Oahu, west of Sunset Beach, and seaward of TMK: (1) 5-9-002:017 (**Exhibits 1, 2 & 3**). The private property is located in the State Land Use Urban District up to the highest wash of the waves. Lands seaward of the shoreline are located in the Conservation District, Resource subzone. The beach area is set aside to the City and County of Honolulu, Department of Parks and Recreation as the Pupukea to Paumalu (Sunset) Beach Park, under Governor's Executive Order # 2598 (**See Exhibit 3**).

The beach is exposed to swells from the north Pacific in winter months and easterly trade wind waves year-round. The beach is composed of carbonate coarse sand, and characterized by occasional outcrops of limestone that may be intermittently buried or exposed by shifting sand.

Long term shoreline change rates in the vicinity of the subject property have trended towards chronic recession (~0.5-1.0 ft/yr) (**Exhibit 4**), although the long-term rate calculations are complicated by shorter-term, seasonal variations in shoreline position. Northeast tradewind waves, predominant in summer, tend to drive sand from this area (erosion) and west to northwest swell, predominant in winter, tends to move sand into this area (accretion) (**Exhibits 5-6**).

Short-term (episodic) erosion is a significant hazard to beach-front homes in the area with rapid sand loss and wave run up from large waves. At least one home in this area was damaged or destroyed during a massive winter swell in 1969. Such hazards would be expected in an environment of this type because the homes are built on top of the frontal sand dune. The sand dune may be more accurately

characterized as a high wave berm because the underlying sediments appear to predominantly coarse-grained, suggesting deposition by waves, not wind.

CHRONOLOGY¹:

September-October 2013 - Trade wind driven waves and early season north-east swells strip the beach of sand (Sunset). At least seven private properties experience severe erosion and property damage at Sunset. The beach is eroded down to underlying limestone bedrock in some areas leaving a 15 to 20 -foot vertical erosion scarp in the frontal dune. Mr. Wachtel owns one of the affected properties (**Exhibit 7**).

October 16, 2013 - Verbal authorization granted to Mr. Wachtel's neighbors for sand bags and sand pushing.

October 20-30, 2013 - Heavy machinery used by affected landowners to build a protective sand berm using sand from the Puamalu Stream Mouth.

November 30, 2013 - Department of Land and Natural Resources (DLNR) Office of Conservation and Coastal Lands (OCC) site visit. Sand pushing is successful. Beach sand volumes recover at Sunset with initiation of seasonal west-northwest swell (**Exhibit 8**).

December 20, 2013 - OCCL site visit. Sand berm continues to function well as a temporary erosion control structure.

December 24, 2103 - DLNR responds to a request by Mr. Wachtel (via his consultant) for temporary shore protection using Elcorock geotextile bags. DLNR does not authorize the sandbag structure under "Emergency Permits" due to concerns about longshore public access and risk of "flanking" erosion to adjacent properties from the structure (**Exhibit 9**). OCCL also felt that the situation had been alleviated by an earlier sand push.

The letter stated as follows: "DLNR does not authorize the placement of ELCOROCK sandbags fronting the subject property, as described above, under Hawaii Administrative Rules §13-5-35, Emergency Permits due to the following:

The subject property fronts Pupukea Paumalu (Sunset) Beach Park, an area renowned for its natural environment and public beach and surfing resources. The beach in this area is used by thousands of residents and visitors each year. The temporary erosion control structure, as proposed by the applicant, would extend 20 to 30 feet horizontally into the State Conservation District beach and City-managed Beach Park [due to the 15-20 ft height of the proposed structure]. During seasonal erosion (summer - early fall), alongshore public access is restricted along the narrowed beach by coastal armoring on neighboring properties to the west. DLNR is concerned that the proposed temporary structure could further limit alongshore public access in this area.

¹ The chronology is based on three memorandum written by OCCL between October 2103 and February 2014 summarizing the situation at Sunset beach and Rock Point.

Though the structure is intended as temporary erosion control, it would effectively function as hardened shoreline armoring while installed. Shoreline protective structures can lead to exacerbated erosion on adjacent unprotected properties, through a process known as “flanking erosion” or “end effects.” DLNR is particularly concerned about flanking erosion to the adjacent (east) properties, which were also affected by erosion this fall. DLNR would prefer a temporary solution that also addresses erosion at the adjoining properties while limiting environmental impacts. In October, DLNR authorized a group of neighboring property owners to use sand (“sand pushing”) from nearby Paumalu Stream mouth to build a sand berm fronting the erosion scarp (including at the subject property) as temporary erosion protection. DLNR is willing to discuss further sand pushing efforts as a temporary solution, until a longer-term plan is agreed upon.”

DLNR recommends that landowner apply for a regular Conservation District Use Permit (CDUP) for the erosion control structure.

December 24, 2013 - Severe erosion affects an adjacent beach area to the west (Rocky Point). At least eight (8) properties affected with substantial damage² (**Exhibit 10**).

December 26-31 and January 4, 7, 11, 14 and 15 - OCCL staff monitors deteriorating situation at Rocky Point.

December 30-31, 2103 - OCCL/DOCARE coordinates response efforts with City and State Civil Defense to prepare for evacuations and beach clean-up at Rocky Point.

December 27, 2013 - Emergency authorization (via e-mail) granted to affected property owners at Rocky Point to install biodegradable coconut fiber bags and tarps to protect the remaining sand berm.

January 10, 2014 - Written authorization provided to affected homeowners to push sand and build sand berm to protect homes at Rocky Point (**Exhibit 11**).

January 14-15 - Sand berm completed by the affected landowners at Rocky Point using an excavator and bulldozer.

January 22, 2014 - The largest winter swell in a decade arrives (40-feet). The Rocky Point and Sunset sand berms survive the swell with some sand loss, but no substantial damage to properties.

February 4, 2014 - Second written authorization granted to Sunset and Rocky Point property owners to push more sand. Work completed during the week of February 10, 2014 (**Exhibit 12**).

February 6, 2014 - DLNR responds to Mr. Wachtel’s second request (via his consultant) to install Elcorock geotextile bags (**Exhibit 13**). In that letter, DLNR notes that the need for sandbags has been alleviated due to the sand pushing efforts. DLNR also re-iterates that a Conservation District use Application may be submitted and considered by the Board of Land and Natural Resources.

² The Sunset properties (including Mr. Wachtel’s property) continue to accrete sand during this time and suffer no immediate erosion threat.

June 12, 2014 – DLNR responds to Mr. Wachtel's third request (via his attorney) to install Elcorock geotextile sandbags (**Exhibit 14, letter from attorney, and DLNR response Exhibit 15**).

Relevant sections of the DLNR letter are quoted herein.

"As stated in the DLNR's February 6, 2014 letter to Mr. Little (Re: Emergency OA-14-07), the DLNR considers the need for Temporary Shore Protection to be alleviated at the present time, following completion of two sand pushing (dune restoration) projects at the subject property. DLNR respectfully disagrees with your opinion that "Mr. Wachtel's house presently qualifies as 'Imminently Threatened'" as defined in HAR §13-5-2, "For coastal erosion, 'imminently threatened' shall mean a distance of twenty feet or less from an actively eroding shoreline or erosion that will threaten the structure in less than six months." According to a property survey map provided by Mr. Little in his December 10, 2013 request letter (Appendix A. Pre-Erosion Survey and Little Environments LLC Erosion Notes), the top of the erosion scarp is within 30 feet of the west seaward corner and 19 feet of the east seaward corner of the single family residence on the seaward property. The scarp has been buried and stabilized following the two sand pushing efforts alleviating the "imminent threat." Whether an "Imminent Threat" existed at the subject property prior to the sand pushing is questionable, considering the distance between the house and the erosion scarp is greater than 20 feet along all but the east seaward corner of the house.

Authorizations for emergency erosion control from DLNR are temporary and intended to provide the applicant with time to develop a longer-term erosion management plan. Emergency permits for erosion control typically require the applicant to remove the structure within a few years. We note in the "Environmental and Geosynthetic Design for Erosion Abatement and Coastal Restoration" by Little Environments LLC (dated December 8, 2013) that "The design life of the project is expected to be 30 years with reasonable maintenance and upkeep." This statement indicates that the proposed structure is not intended to be "temporary in nature" as required for Emergency Permits under HAR §13-5-35.

DLNR respectfully disagrees with your assertion that "Allowing emergency protection [with the proposed geotextile sand bag structure] will also protect the natural resources of the beach and ocean." The Department's experience with these types of structures has shown that the impacts to the beach environment from these temporary structures are often similar to impacts from permanent shoreline armoring (seawalls, revetments), including encroachment (placement loss) on the beach from the footprint of the structure, beach narrowing through "passive erosion" (retreat of the water line toward the structure), and "flanking erosion" or "end effects" causing accelerated erosion on adjacent shorelines. As a result, the Department no longer wishes to allow these types of sandbags for emergency shore protection and is actually working to have these types of structures removed where the emergency has passed or the authorization time frame has expired. These types of structures are more properly considered within the normal Conservation District Use Application process "Shoreline Erosion Control" Section 13-5-22 (P-5)(D-1), Hawaii Revised Statutes.

Your letter asks, "What modifications could be made to the proposed shoreline protection to satisfy the Department?" The Department is preparing to address erosion emergencies that may arise in the coming winter high wave season, including working closely with county and

federal regulatory agencies. Specifically, the DLNR will continue to monitor the performance of the sand bank at Ke Nui Road and remains available to discuss future sand pushing efforts."

July 8, 2014 – Mr. Wachtel is included in DLNR authorization to push more sand from Paumalu Stream mouth (**Exhibit 16**).

August 25, 2014 – OCCL Administrator (accompanied by OCCL staff) see a large excavator on the beach in the area between Rocky Point and Sunset Beach prior to the commencement of authorized sand pushing operations. The excavator is witnessed digging a hole at the base of the sand berm in front of Mr. Wachtel's property. OCCL photographs the scene (**Exhibit 17**). Mr. Wachtel greets OCCL staff on the beach and states that he intends to construct a jute bag (coconut fiber) erosion prevention structure. OCCL staff informs Mr. Wachtel that he has not received DLNR authorization for the work. OCCL Administrator tells Mr. Wachtel that he should discontinue work, and that if he does not discontinue work, he may be subject fines of up to \$15,000 per day.

August 26, 2014 - DLNR issues a Notice and Order of Alleged Violation to Mr. Wachtel (**Exhibit 18**). Letter mailed to Mr. Wachtel's North Shore Address (site of unauthorized work). The notice is hand delivered to the site by a Division of Conservation and Resources Enforcement (DOCARE) officer who indicates that work continues (**Exhibit 19**). The letter is given to the onsite contractor. A copy of the notice is also e-mailed to Mr. Wachtel (**Exhibit 20**).

August 27, 2014 - OCCL Administrator visits site. Contractor is witnessed placing forms and pieces of rebar in the bottom of the trench. The purpose of the form is to hold the structure in place while it is being laid out and filled with sand. Work on the structure continues despite the presence of the OCCL Administrator who is standing and watching (**Exhibit 21**). Contractor states that Mr. Wachtel has gone to town.

August 28, 2014 - OCCL staff visits site. Work continues on foundation of erosion protection structure (**Exhibit 22**).

August 29, 2014 - Meeting with Mr. Wachtel and City and County of Honolulu, Department of Parks and Recreation (County) staff. County orders Mr. Wachtel's workers to stop work and vacate the premises or face citation and/or possible incarceration (Note: area is within County Park EO). By this time the foundation (bottom layer) of the erosion prevention structure has been covered with sand (**Exhibit 23**).

During the meeting, OCCL Administrator suggests that prior to exiting the beach Mr. Wachtel remove the erosion prevention structure and remediate the area. Mr. Wachtel initially denied having any knowledge of the footing. He noted that he hadn't been there for two days and was not aware of a structure. OCCL Administrator reminded Mr. Wachtel that DLNR had been documenting excavation and construction activities throughout the week. OCCL Administrator suggested that he (Wachtel) could face a \$50,000 fine by the Land Board for continuing to work under a verbal and written Notice and Order. OCCL Administrator offered to close the matter if Mr. Wachtel is willing to remove the structure.

September 2, 2014 - OCCL staff visits the site. The hole has been filled and sand has been pushed back to form the sand dune. The excavator is not present (**Exhibit 24**).

ALLEGED UNAUTHORIZED LAND USE IN THE CONSERVATION DISTRICT:

The Department and Board of Land and Natural Resources has jurisdiction over land lying makai of the shoreline as evidenced by the upper reaches of the wash of the waves other than storm and seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth, or the upper limits of debris left by the wash of the waves, pursuant to §205A-1, Hawai'i Revised Statutes (HRS).

Staff believes the unauthorized land uses occurred within the Conservation District based upon the location of the work seaward of Mr. Wachtel's property. The OCCL believes there is sufficient cause to bring this matter to the Board since it is evident that the unauthorized land uses are within the Conservation District pursuant to the Hawai'i Administrative Rules (HAR), §15-15-20 Standards for determining "C" conservation district boundaries:

It shall include lands having an elevation below the shoreline as stated by §205A-1, HRS, marine waters, fishponds, and tidepools of the State, and accreted portions of lands pursuant to §501-33, HRS, unless otherwise designated on the district maps. All offshore and outlying islands of the State are classified conservation unless otherwise designated on the land use district maps.

Chapter 13-5, HAR and Chapter 183C, HRS, regulate land uses in the Conservation District by identifying a list of uses that may be allowed by a Conservation District Use Permit (CDUP). The chapters also provide for penalties, collection of administrative costs and damages to state land for uses that are not allowed or for which no permit has been obtained. HAR §13-5-2 defines "land use" as follows:

The placement or erection of any solid material on land if that material remains on the land more than fourteen days, or which causes a permanent change in the land area on which it occurs.

The grading, removing, harvesting, dredging, mining, or extraction of any material or natural resource on land.

The work that was conducted consisted of excavation (grading) and placement of materials. Since the work would normally qualify as a land use under the Conservation District definition (HAR §13-5-2), some type of permit or approval should have been obtained by the alleged.

Pursuant to Chapter 183C-7, HRS, the maximum fine for a Conservation District violation is \$15,000.00 per violation, and \$15,000.00 per day for failure to stop work.

Under the Penalty Guideline Framework that was approved by the BLNR (**Exhibit 25**) this action is considered "Major" since the identified land use would require a Board Permit under the permit prefix "D". This violation follows a penalty range of \$10,000 to \$15,000. The comparable identified use in the Hawaii Administrative Rules (HAR-13-5) would be "Shoreline Erosion Control" for which a Board Permit is normally required³.

³ Mr. Wachtel's representatives were informed in writing three times that a CDUP would be required for erosion control.

Therefore, under the Penalty Guideline Framework this unauthorized land use is considered:

1. Major harm to resource or potential harm to resource; and
2. Major comparable harm to resource.
3. Continuing violations.

Under the penalty guidelines, examples of “major harm(s) to the resource” may include actions that cause substantial adverse impact to existing natural resources within the surrounding area, community, ecosystem or region, or damage to the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics. Such actions may include, but are not limited to, unauthorized single-family residences or unauthorized structures, **grading or alteration of topographic features**, aquaculture, major marine construction or dredging, **unauthorized shoreline structures**, major projects of any kind, mining and extraction, etc.”

In addition, under the “Containing Violations” guideline, “Each day during which a party continues to work or otherwise continues to violate conservation district laws, and after the Department has informed the violator of the offense by verbal or written notification, the party may be penalized up to \$15,000 per day (penalties for every day illegal actions continue) by the Department for each separate offense.”

DISCUSSION:

Coastal erosion occurs as a result of the following phenomena: 1) Seasonal changes in waves and currents that move sand alongshore or across the shore, adjusting the beach profile; 2) Long-term (chronic) deficiencies in natural sand supply and/or fluctuations in meteorological or oceanographic processes such as storms and sea level rise; and 3) Human impacts to sand availability through sand impoundment and supply disruption from development and coastal engineering.

Development on beaches and dunes has contributed to narrowing and loss of beaches in Hawaii, degrading recreational areas, habitat, and natural storm protection that “healthy” beaches and dunes can provide. Beach narrowing and loss fronting shoreline armoring (the construction of vertical seawalls or sloping stone revetments along a shoreline to protect coastal lands from marine erosion) also severely restricts public access to State Conservation land and the natural resources. Seawalls impound natural sand supplies that would otherwise be available to nourish an eroding beach, increasing rates of beach narrowing and loss (**Exhibit 26**).

Unfortunately, many of Hawai‘i’s beaches have been degraded or lost from a combination of natural erosion and inappropriate coastal development including inappropriate shoreline armoring, shallow lot shoreline subdivisions, and development built too close to the shoreline.

Many beaches in Hawaii have already been lost due to these factors. In a 2012 study by University of Hawaii and U.S. Geological Survey researchers, 70 percent of all beaches measured in the Hawaiian Islands indicated an erosion trend. More than 21 km or 9 percent of the total length of the beaches studied were lost to erosion. In nearly all cases of beach loss, the beaches were replaced with seawalls or other coastal armoring structures.

The beaches of the North Shore of Oahu (also referred to as the “Seven Mile Miracle”), are some of Hawaii’s most unique and valued natural resources. The North Shore is famous for world-class big

wave surfing and hosts a series of top-level surfing contest each winter, attracting thousands of international contestants and spectators. Beaches are an essential natural resource and economic engine for the North Shore community. Most of the beaches along the "Seven Mile Miracle" are still healthy because of the abundance of sand, but some sandy areas are at risk due to chronic and seasonal erosion, shallow lot shoreline subdivisions, and development built too close to erosion and inundation-prone shorelines. Increasing sea level rise will increase risks to beaches and shore-front development in the coming decades.

The erosion that occurred at Sunset Beach and Rocky Point this past winter was an extreme case of the normal cycle of seasonal change for North Shore Beaches, which may have been worsened by unusual successions of wave events and/or longer-term deficiencies in sand supply. The situation quickly turned into a crisis because multi-million dollar residences (many of them vacation rentals) became threatened. This is not the first time that this has occurred. This area has experienced severe erosion events ever since homes were developed along the shoreline. Local residents noted a similar erosion episode in the mid-1990s. In some places seawalls were installed (usually without permits), but much of the area remains unarmored. The State and City should resist the temptation to allow further shoreline armoring in this area; *as such actions will ultimately degrade the sandy beach.*

The portion of the unauthorized structure that was installed by Mr. Wachtel does not pose a significant long-term threat to the beach system. The material is biodegradable so it will eventually succumb to the elements. However, OCCL is particularly concerned about this case because of the willfulness, boldness, and recklessness of Mr. Wachtel's actions. The beaches of Hawaii are held in trust by the State for the benefit of present and future generations. The State should be involved when individuals need to temporarily use beach areas for construction staging or other purposes; and there should be consequences when an individual unilaterally and willfully acts in such a way that endangers a public trust resource.

Staff believes that the landowner should be fined the maximum penalty in three instances (\$15,000 x 3 = \$45,000) for the unauthorized land use. DLNR documented the (3) days of continuing work despite verbal and written orders to cease work. In addition, Staff will recommend administrative penalties. Staff is not recommending removal at this time since the structure will naturally degrade over the next few years, and re-excavation of the site would be risky. However, should the structure become uncovered, the landowner will be required to remediate the site and dispose of any remaining materials or debris.

This submittal and notice of the Board's meeting shall be sent to the landowner by certified mail to the address on record.

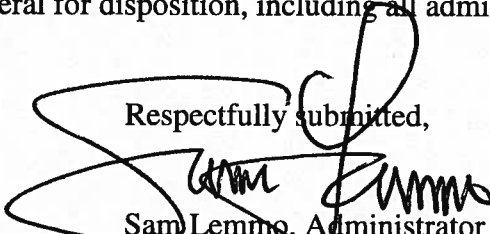
AS SUCH, STAFF RECOMMENDS:

That pursuant to Chapter 183C, HRS, the Board finds the Landowner of TMK: (1) 5-9-002:017 at Sunset Beach, Koolauloa, Oahu, in violation of Chapter 183C-7, HRS and Chapter 13-5-6, HAR, subject to the following:


1. The Landowner is fined \$15,000.00 in three (3) instances for continuing unauthorized work despite verbal and written warning, pursuant to Chapter 183C-7, HRS;

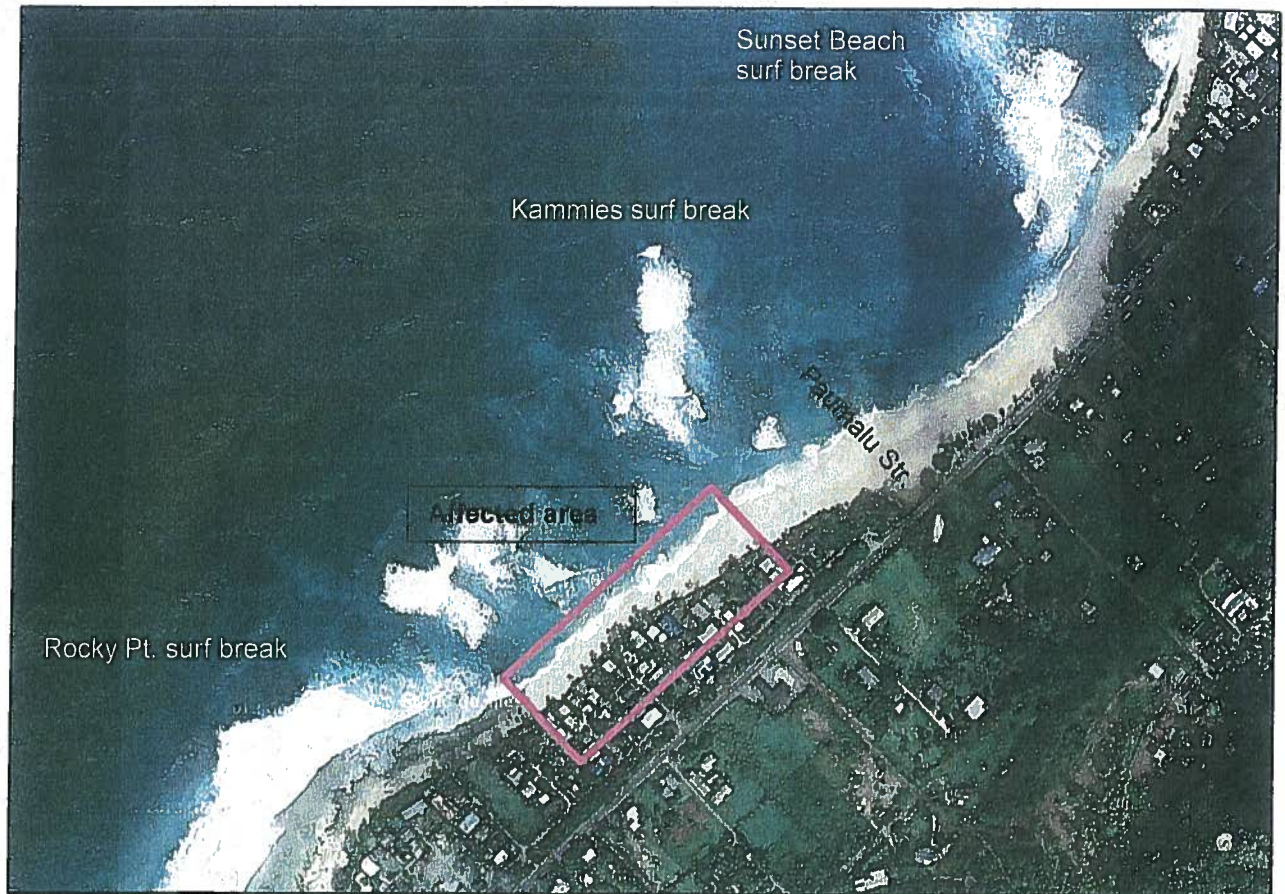
2. The Landowner is fined an additional \$2,500.00 for administrative costs associated with the subject violation;
3. The Landowner shall pay all fines (total \$47,500.00) within thirty (30) days of the date of the Board's action;
4. If the shoreline protection structure becomes uncovered, the landowner shall be required to remove the materials and debris and clean the site to the satisfaction of the Department;
5. That in the event of failure of the landowners to comply with any order herein, the landowner shall be fined an additional \$15,000.00 per day until the order is complied with; and
6. That in the event of failure of the landowners to comply with any order herein, the matter shall be turned over to the Attorney General for disposition, including all administrative costs.

Respectfully submitted,


Sam Lemmo, Administrator
Office of Conservation and Coastal Lands

Approved for submittal:


William J. Aila, Jr., Chairperson
Board of Land and Natural Resources



• Figure 1: Aerial view of the affected erosion area (red box) at Rocky Point - Sunset Beach, Oahu.

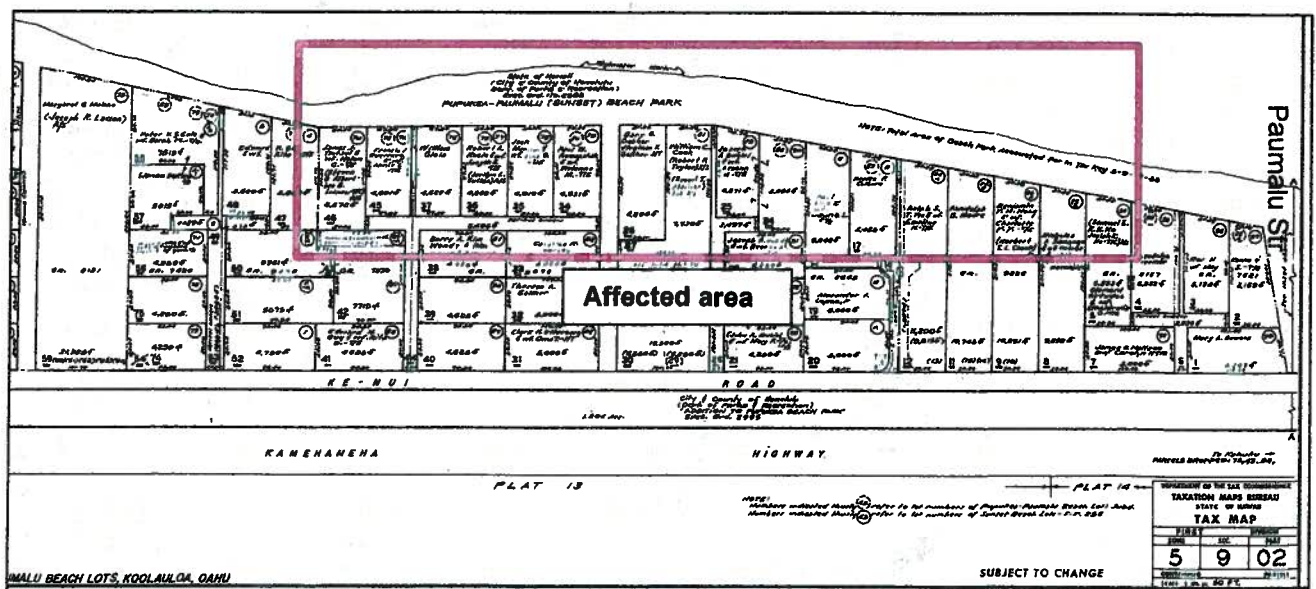
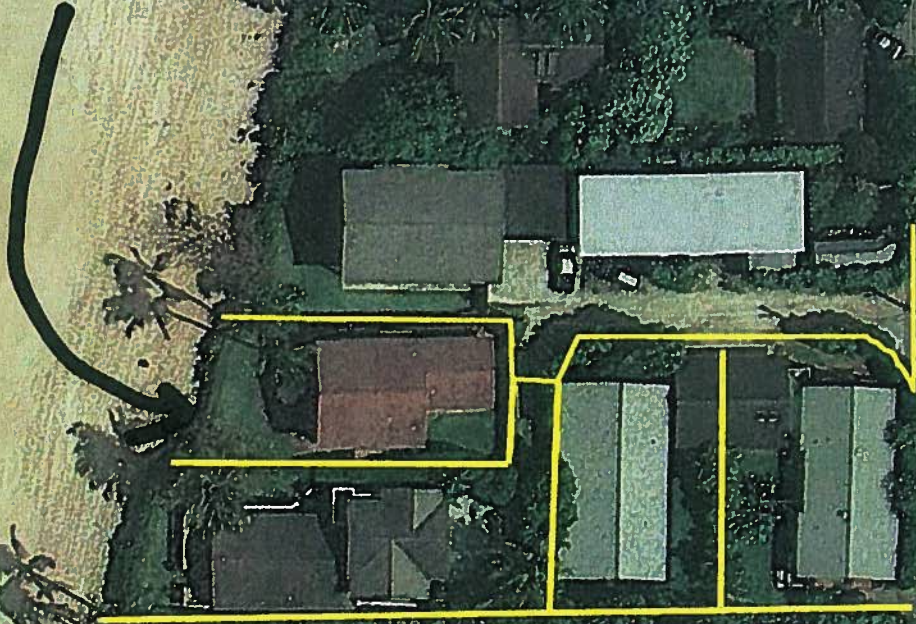


Figure 2. TMK map of the affected erosion area at Sunset Beach, Oahu. Location of the red box corresponds to the map, above.

Ke Nui Rd

5-9-002:017
WACHTEL



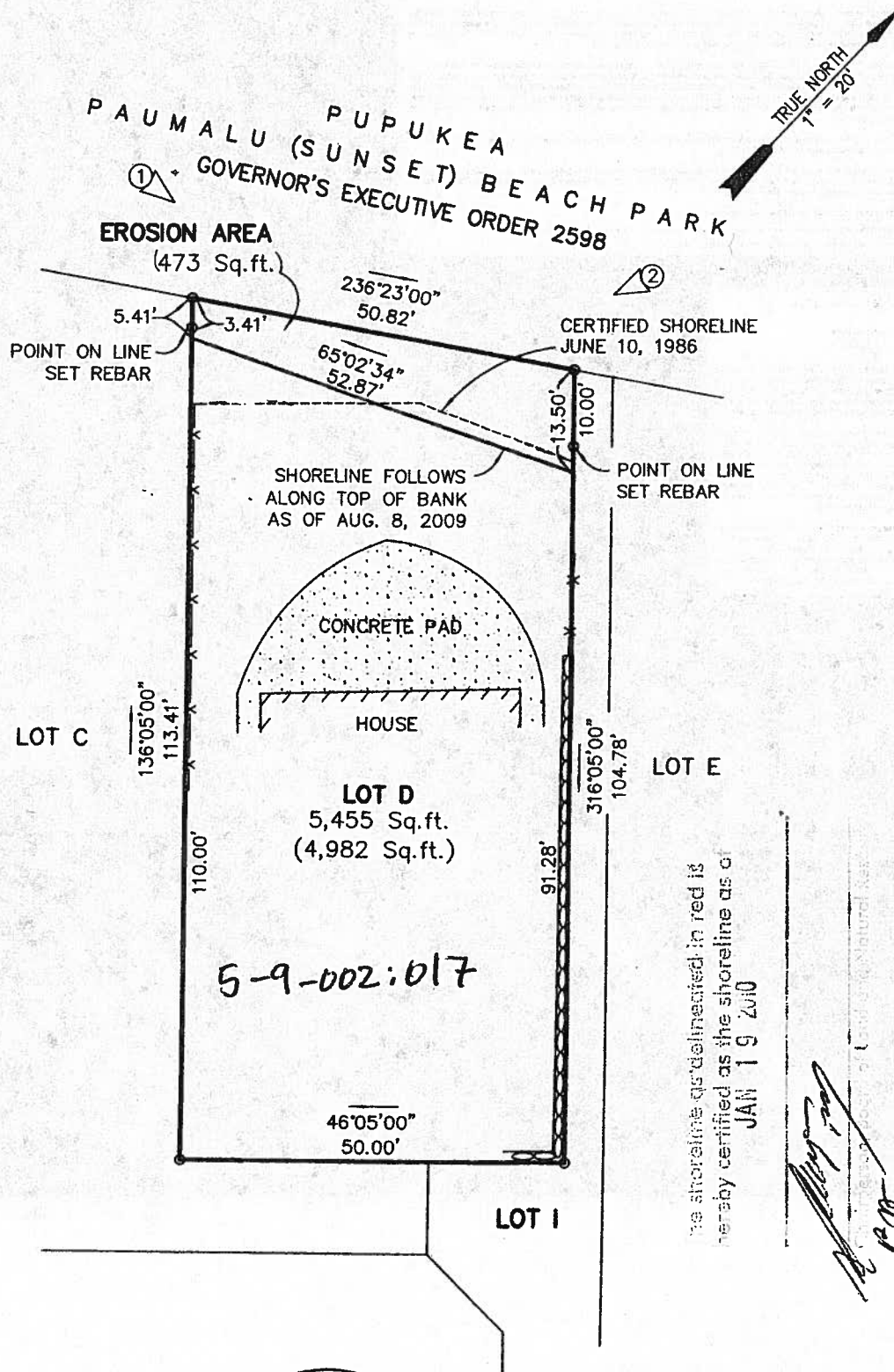


EXHIBIT 3

SHORELINE SURVEY
LOT D "KIMO SUBDIVISION"
BEING A POR. OF LOT 83 OF
PUPUKEA-PAUMALU BEACH LOTS AND
BEING ALSO A POR. OF GRANT 8645
TO JOSEPH B. LIGHTFOOT

, Koolauloa, Oahu, Hawaii

lap Key: 5-9-02:17

e: August 6, 2009

Sunset Beach, Oahu, Hawaii

AREA DESCRIPTION

The shoreline bordering the community of Sunset Beach (transects 119–269) on the north shore of Oahu is the site of world famous big wave surf breaks including Sunset and Vabysland. The area is exposed to swells from the north Pacific in winter months and easterly tradeswind waves year-round. Sunset Beach is the central portion of a continuous 4 mi long beach composed of carbonate sand, and characterized by occasional outcrops of limestone that may be intermittently buried or exposed by shifting sand.

Shoreline change rates at Sunset Beach (1928–2000) are mostly low (<1 ft/yr). Large winter swells causes dramatic changes in shoreline position that largely recover the following season. Because of this, shoreline change rates at Sunset Beach have high uncertainty due to short-term variations in shoreline position. Despite wide variations in beach width, the vegetation line has remained approximately stable since 1928. The high rate uncertainty and stable vegetation line suggest that the shoreline has remained approximately stable over the long-term or that seasonal variations are masking the true long-term change. These characteristics may also reflect shoreline stabilization by armoring that holds the vegetation line in place.

Short-term erosion is a significant hazard to beach-front homes, especially in winter with run-up from large waves. A number of beach-front homes were destroyed during a massive winter 1999 swell.

Previous studies by Hwang (1981) and Sea Engineering (1989) found little net change or small seaward growth of the vegetation line at Sunset Beach 1949–1989, except at Sunset Beach Park and at the west end of Kaunala Beach where the vegetation line eroded. The vegetation line has since recovered at Kaunala Beach (1985–2000).

For more information see: <http://www.soest.hawaii.edu/spcoasts/oahu/>

Hwang, D. (1981). "Beach changes on Oahu as revealed by aerial photographs." State of Hawaii, Department of Planning and Economic Development.

Sea Engineering (1989). "Oahu shoreline study." City and County of Honolulu, Dept of Land Utilization.

SHORELINE CHANGE RATES

- Accretion Rate
- Erosion Rate

Historical shoreline positions are measured every 66 ft along the shoreline. These sites are denoted by yellow shore-perpendicular transects. Changes in the position of the shorelines through time are used to calculate shoreline change rates (ft/yr) at each transect location.

Annual shoreline change rates are shown on the shore-parallel graph. Red bars on the graph indicate a trend of beach erosion, while blue bars indicate a trend of accretion. Approximately every 5th transect and bar of the graph is numbered. Where necessary, transects have been purposely deleted to maintain consistent along-shore spacing. As a result transect numbering is not consecutive everywhere.

The ST method is used to calculate shoreline change rates for the study area. The rates are smoothed along shore using a 1-3-5-3-1 technique to normalize rate differences on adjacent transects. For more information on erosion rate methods and results see: <http://www.soest.hawaii.edu/spcoasts/behrindex.asp>

HISTORICAL SHORELINES

- 1928
- T-sheet 1932
- May 1949
- Sep 1961
- Apr 1967
- Jan 1971
- Apr 1975
- Jun 1975
- Feb 1986
- Jul 1986
- Jul 2000

Erosion rate measurement locations (shore-normal transects)

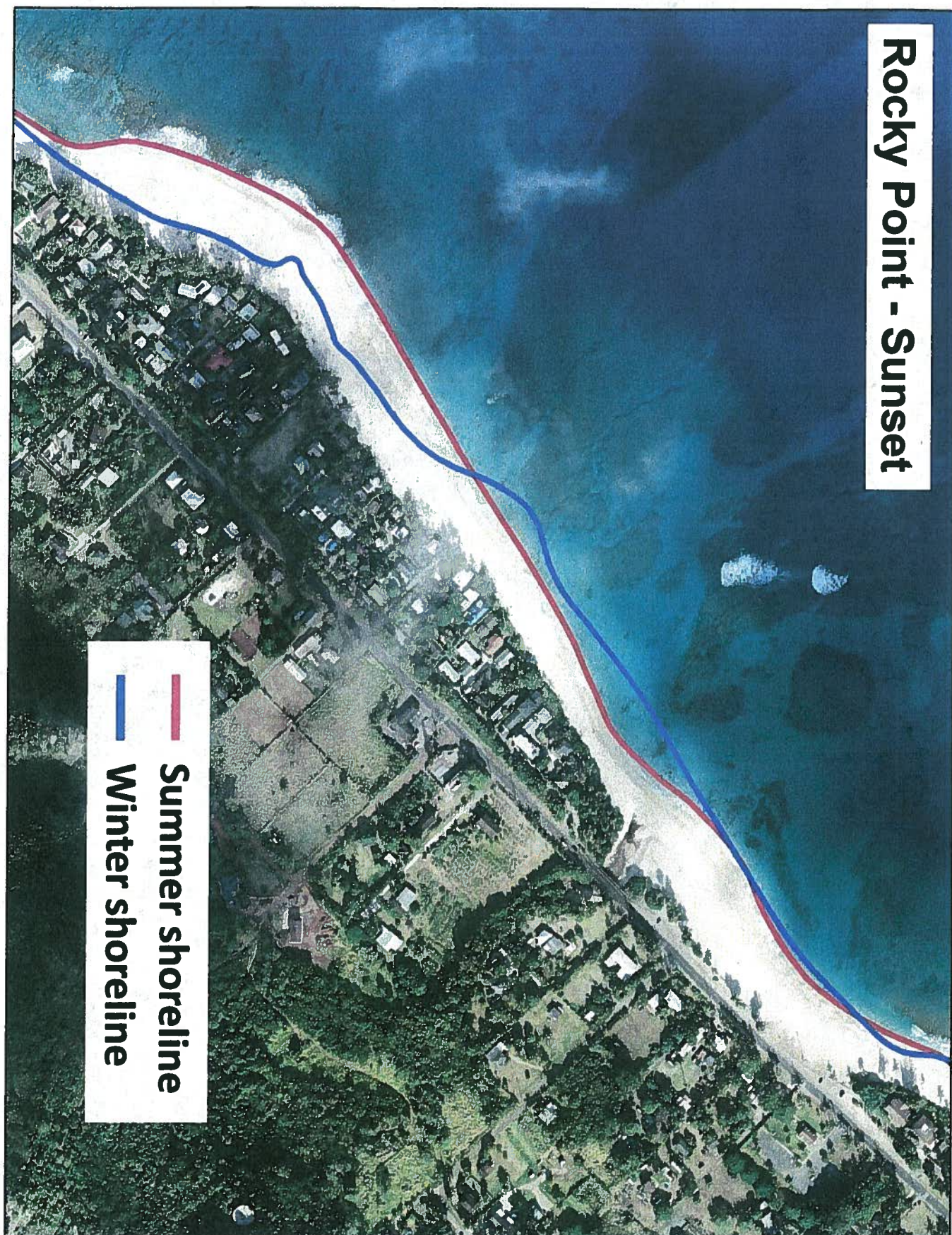
Historical beach positions, color coded by year, are determined using orthorectified and georeferenced aerial photographs and National Ocean Survey (NOS) topographic survey charts. The low water mark is used as the historical shoreline, or shoreline change reference feature (SCRPF).

Movement of the SCRPF along shore-normal transects (spaced every 66 ft) is used to calculate erosion rates.

Oahu



Rocky Point - Sunset



— Summer shoreline
— Winter shoreline

Rocky Point – Sunset Beach Erosion

Summer - Fall:
NE tradewind waves,
N swell

Winter:
W – NW swell





Figure 1: Aerial view of the survey area at Sunset Beach, Oahu.

Figure 2. TMK map of Pupukea-Paumalu Beach Lots survey area, Sunset Beach, Oahu.

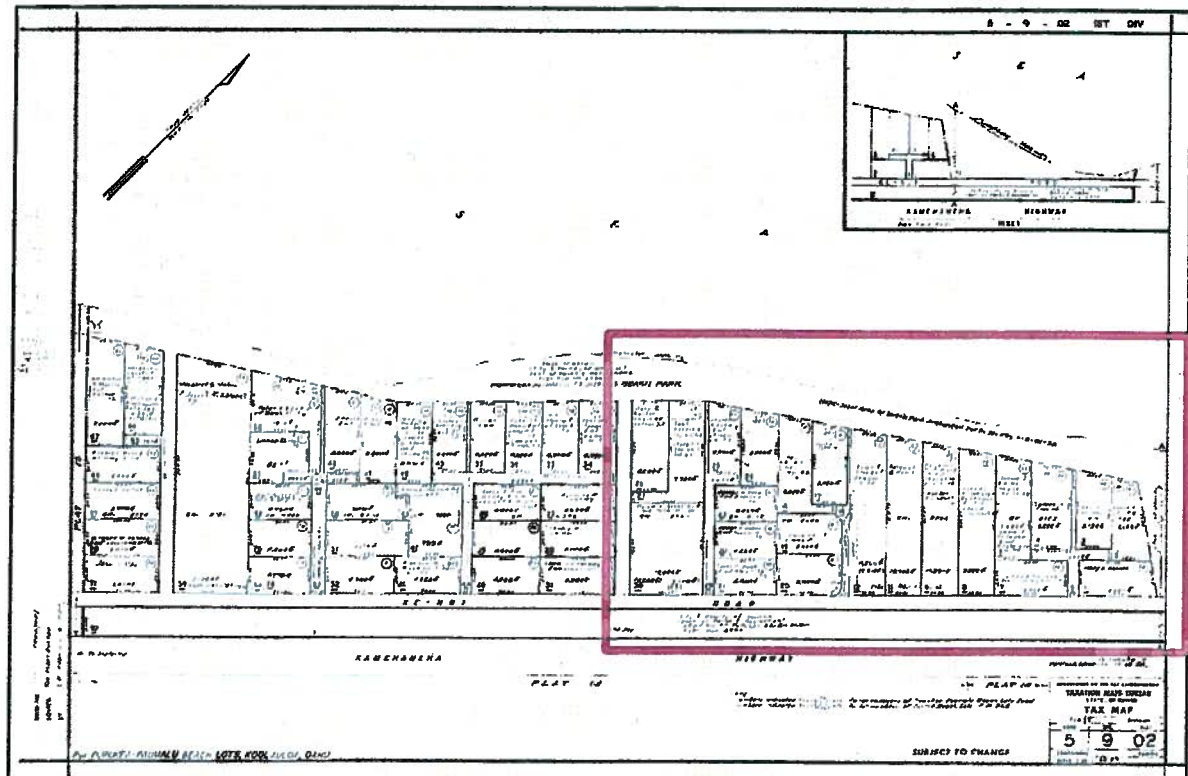


EXHIBIT 7



EXHIBIT 7 10/22/13

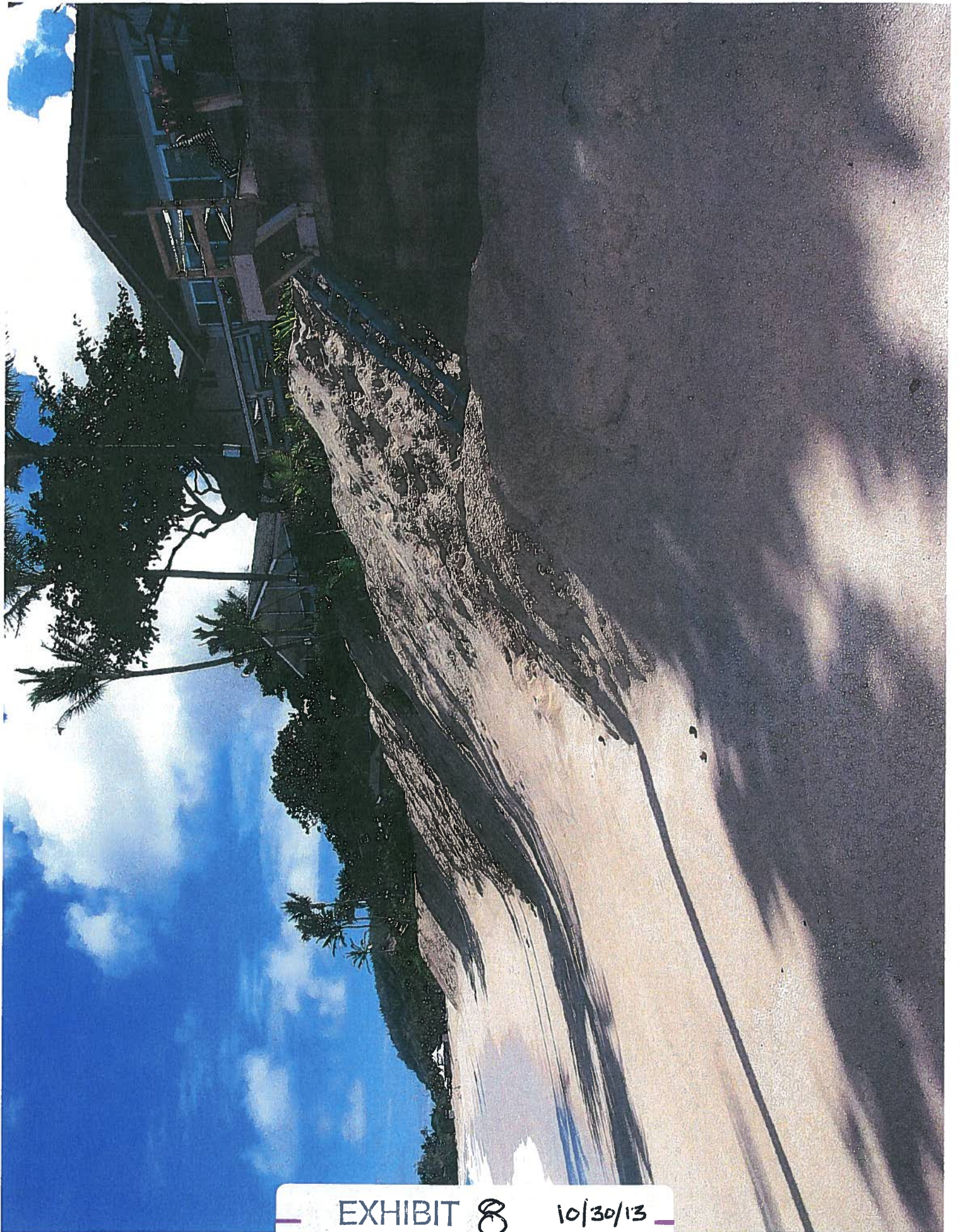


EXHIBIT 8

10/30/13

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

WILLIAM M. TAM
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

DLNR:OCCL:SL

Emergency OA-14-07

DEC 24 2013

Joseph Little
Little Environments LLC
303 W. Whitaker Mill Road
Raleigh, NC 27608

Dear Mr. Little,

SUBJECT: RE: Request for Emergency Temporary Shore Protection at
59-165 Ke Nui Road, Apt. D, Sunset Beach, Oahu, Hawaii;
TMK (1) 5-9-02:017 (Owner: Glenn Wachtel).

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) has received your December 10, 2013 letter requesting to place geotextile (ELCOROCK[®]) sandbags along approximately 50 feet of the shoreline as temporary erosion control at TMK (1) 5-9-02:017 on behalf of the property owner Glenn Wachtel.

Seasonal beach erosion combined with a possible long-term trend of chronic erosion¹ has resulted in erosion of the frontal dune leaving a steep scarp (bank) fronting the subject property. Historical shoreline positions from aerial photographs from the University of Hawaii Coastal Geology Group¹ and observations from OCCL coastal geologist, local lifeguards, and residents indicate that the beach fronting the subject property typically erodes (narrows) during summer months and accretes (widens) during winter months. A property map provided by the applicant indicates that the top of the scarp is within about 30 feet of the west seaward corner and about 19 feet of the east seaward corner of the single family residence on the subject property.

The request is to place ELCOROCK sandbags (2.5 cubic meter volume, each) stacked in an overlapping, stepped configuration against the existing scarp in an approximately 1 to 1 slope. The upper beach area fronting the property will be excavated (approximately 7 to 10 feet below existing beach grade) and the bottom layer of bags will be placed on a rock-filled Triton[®] Tensar Mattress on the underlying limestone substrate. The total height of the proposed structure will be approximately 15 to 20 feet above the limestone substrate based on the applicant's cross-sectional design plan; though, a lower portion of the structure is expected to be buried during periods of beach accretion. The sandbags will be filled using sand from the existing beach.

¹ University of Hawaii Coastal Geology Group (2011), Oahu Shoreline Study Erosion Maps,
<http://www.soest.hawaii.edu/coasts/erosion/oahu/>

EXHIBIT 9

Under Hawaii Administrative Rules §13-5-35, Emergency Permits (a) "Notwithstanding any provision of this chapter, the chairperson or deputy director of the department in the absence of the chairperson may authorize through an emergency permit any land use deemed to be essential to alleviate any emergency that is a threat to public health, safety, and welfare, including natural resources, and for any land use that is imminently threatened by natural hazards. These actions shall be temporary in nature to the extent that the threat to public health, safety, and welfare, including natural resources, is alleviated (e.g., erosion control, rockfall mitigation). The emergency action shall include contingencies for removal methods, estimates for duration of the activity, and future response plans if required by the department."

DLNR does not authorize the placement of ELCOROCK sandbags fronting the subject property, as described above, under Hawaii Administrative Rules §13-5-35, Emergency Permits due to the following:

- The subject property fronts Pupukea Paumalu (Sunset) Beach Park, an area renowned for its natural environment and public beach and surfing resources. The beach in this area is used by thousands of residents and visitors each year. The temporary erosion control structure, as proposed by the applicant, would extend 20 to 30 feet horizontally into the State Conservation District beach and City-managed Beach Park. During seasonal erosion (summer – early fall), alongshore public access is restricted along the narrowed beach by coastal armoring on neighboring properties to the west. DLNR is concerned that the proposed temporary structure could further limit alongshore public access in this area.
- Though the structure is intended as temporary erosion control, it would effectively function as hardened shoreline armoring while installed. Shoreline protective structures can lead to exacerbated erosion on adjacent unprotected properties, through a process known as "flanking erosion" or "end effects." DLNR is particularly concerned about flanking erosion to the adjacent (east) properties, which were also affected by erosion this fall. DLNR would prefer a temporary solution that also addresses erosion at the adjoining properties while limiting environmental impacts. In October, DLNR authorized a group of neighboring property owners to use sand ("sand pushing") from nearby Paumalu Stream mouth to build a sand berm fronting the erosion scarp (including at the subject property) as temporary erosion protection. DLNR is willing to discuss further sand pushing efforts as a temporary solution, until a longer-term plan is agreed upon.

If you choose, you may submit a Conservation District Use Application (CDUA) to DLNR for the proposed shoreline protection under Hawaii Administrative Rules §13-5-22, Shoreline Erosion Control, "Seawall, revetment, groin, or other coastal erosion control structure or device, including sand placement, to control erosion of land or inland area by coastal waters, provided that the applicant shows that (1) the applicant would be deprived of all reasonable use of the land or building without the permit; (2) the use would not adversely affect beach processes or lateral public access along the shoreline, without adequately compensating the State for its loss; or (3) public facilities (e.g., public roads) critical to public health, safety, and welfare would be severely damaged or destroyed without a shoreline erosion control structure, and there are no reasonable alternatives (e.g., relocation). Requires a shoreline certification." The decision

whether to issue a Conservation District Use Permit (CDUP) is at the discretion of the Board of Land and Natural Resources. The CDUA must be accompanied by an Environmental Assessment document giving full evaluation of the environmental effects of the structure, alternatives, and mitigation measures, and will be made available for public review.

Should you have any questions, please contact Sam Lemmo, Administrator of the DLNR Office of Conservation and Coastal Lands at 587-0377 or Samuel.J.Lemmo@hawaii.gov.

Sincerely,



William J Aila, Jr, CHAIRPERSON
Board of Land and Natural Resources

CC: Glenn Wachtel (owner)
US Army Corps, Regulatory
Hon Parks

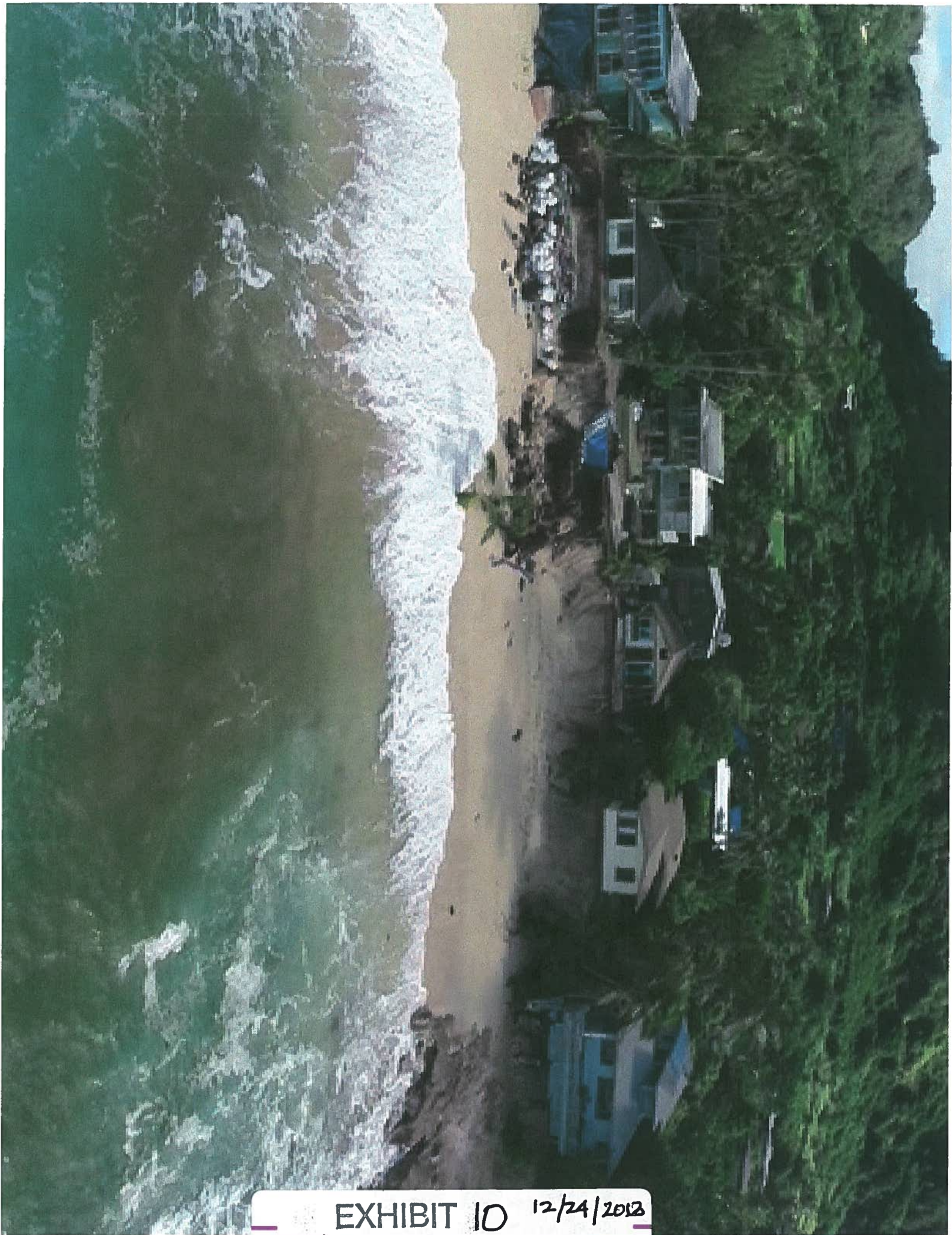




EXHIBIT 10 12/24/13

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

WILLIAM M. TAM
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

DLNR:OCCL:SL

Emergency OA-14-53

Alice Lunt
3665 Tantalus Drive
Honolulu, HI 96822

JAN 10 2014

Dear Mrs. Lunt,

SUBJECT: RE: Request for Emergency Temporary Shore Protection at 59-175 B and C and 59-181 D, E, F, G, H, and J Ke Nui Road, Haleiwa (Sunset Beach; TMKs (1) 5-9-002:026, 27, 34, 35, 36, 37, 45, and 46; Alice Lunt: owner 59-181 D)

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is responding to your request at a January 9, 2014 meeting at OCCL to place a sand bank along approximately 400 feet of the shoreline at 59-175 B and C and 59-181 D, E, F, G, H, and J Ke Nui Road, Haleiwa (Sunset Beach, TMKs (1) 5-9-002:026, 27, 34, 35, 36, 37, 45, and 46) as temporary erosion control.

Recent erosion from seasonal waves, possibly combined with a long-term trend of beach erosion, has created an erosion scarp approximately 15 feet high, in some locations undermining the shorefront foundations of single-family residences on the subject properties.

The request is to place a sand berm (bank) fronting the existing erosion scarp using clean locally-sourced beach sand from an area of seasonal beach accretion fronting Paumalu Stream mouth and, if necessary, from the beach fronting the subject property. Sand will be scraped (removed) from the dry beach area fronting Pupukea Stream mouth to a maximum depth of 3 feet using heavy machinery (e.g., excavator or front loader) and transported along the beach to the subject properties. If needed, additional sand may be scraped from the beach fronting the subject properties to a maximum depth of 2 feet. No sand will be removed nor will any work be done below the high water line. The temporary sand berm will have similar dimensions to the one constructed fronting nearby properties in late October / early November with an approximately 1:1 slope and flat upper cap not more than 10 feet wide (maximum total footprint/base of about 25 feet).

DLNR authorizes the placement of a sand berm, fronting the subject property, as described above for temporary erosion protection. Additional authorization, including Right of Entry, is required from Honolulu City and County Department of Parks and Recreation before you may proceed.

EXHIBIT II

DLNR authorizes the placement of a sand berm fronting the subject properties in an effort to protect public health, welfare, and safety on the subject property under Hawaii Administrative Rules §13-5-35, Emergency Permits (a) "Notwithstanding any provision of this chapter, the chairperson or deputy director of the department in the absence of the chairperson may authorize through an emergency permit any land use deemed to be essential to alleviate any emergency that is a threat to public health, safety, and welfare, including natural resources, and for any land use that is imminently threatened by natural hazards. These actions shall be temporary in nature to the extent that the threat to public health, safety, and welfare, including natural resources, is alleviated (e.g., erosion control, rockfall mitigation). The emergency action shall include contingencies for removal methods, estimates for duration of the activity, and future response plans if required by the department."

In addition, the proposed project is minor in scope and may be considered an exempt action under State environmental laws under Section 11-200-8(A)(1), Hawaii Administrative Rules (HAR) "Operations, repairs, or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing."

Terms and Conditions

The DLNR has no objections to the placement of a sand berm along the erosion scarp fronting the subject properties at TMKs (1) 5-9-002:026, 27, 34, 35, 36, 37, 45, and 46 as temporary erosion protection, provided that you adhere to the following terms and conditions:

1. That in issuing this letter, the Department and Board has relied on the information and data that the applicant has provided in connection with this letter. If, subsequent to this letter, such information and data prove to be false, incomplete or inaccurate, this letter may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
2. It is understood that the sand berm is a temporary response to prevent the loss of the existing residences, which are threatened by both chronic and seasonal wave run-up and erosion. Subsequent erosion control efforts will require a new application;
3. It is understood that the terms of this authorization may be modified by the Department prior to and during construction, if beach conditions change;
4. The applicant will notify the Department no less than 24 hours prior to beginning construction operations;
5. The Contractor shall perform the work in a manner that minimizes environmental pollution and damage as a result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of the construction period;
6. The applicants or their contractor will remove any dangerous debris from the erosion area prior to placing sand, including any loose construction debris and fallen trees. In

addition, the applicants or their contractor will remove any dangerous debris encountered while excavating and transporting sand;


7. At the conclusion of work, the area shall be cleaned of all construction material and the site shall be restored to a condition acceptable to the Chairperson;
8. The Applicant will prepare a completion report for the project. It will summarize the construction and detail any deviation from the proposed plans;
9. The activity/use shall not adversely affect a Federally listed threatened or endangered species or a species proposed for such designation, or destroy or adversely modify its designated critical habitat;
10. The activity/use shall not substantially disrupt the movement of those species of aquatic life indigenous to the area, including those species, which normally migrate through the area;
11. When the Chairperson is notified by the applicant or the public that an individual activity deviates from the scope of the activity/uses, or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the applicant to undertake corrective measures to address the condition affecting these resources. The applicant must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
12. When the Chairperson is notified by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the State Department of Land and Natural Resources that an individual activity/use or activities conducted under this letter is adversely affecting fish or wildlife resources or the their harvest, the Chairperson will direct the applicant to undertake corrective measures to address the condition affecting these resources. The applicant must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
13. Where any interference, nuisance, or harm may be caused, or hazard established by the authorized activities/uses, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm or hazard;
14. No contamination of the marine or coastal environment (trash or debris) shall result from project-related authorized activities/uses;
15. No motorized construction equipment is to be operated in the water at any time;
16. In the event there is a petroleum spill on the sand, the operator shall promptly remove the contaminated sand from the beach;
17. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its

successors, assigns, officers, employees, contractors, and agents under projects authorized under this letter;

18. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments for authorized projects;
19. In the event that historic sites, including human burials are uncovered during construction activities, all work in the vicinity must stop and the State Historic Preservation Division contacted at (808) 692-8015;
20. The applicant shall take measures to ensure that the public is adequately informed of the project activities/work once it is initiated and the need to avoid the project area during the operation;
21. Public access along the shoreline during construction shall be maintained so far as practicable and within the limitations necessary to ensure safety;
22. All construction material including sand shall be free of contaminants of any kind including: excessive silt, sludge, anoxic or decaying organic matter, turbidity, temperature or abnormal water chemistry, clay, dirt, organic material, oil, floating debris, grease or foam or any other pollutant that would produce an undesirable condition to the beach or water quality; and
23. The applicant shall implement standard Best Management Practices (BMPs), such as daily inspection of equipment for conditions that could cause spills or leaks; cleaning of equipment prior to operation near the water; the ability to contain and clean up fuel; fluid or oil spills immediately for activities/uses; and implementation of adequate spill response procedures, stormy weather preparation plans, and the use of silt curtains and other containment devices. Equipment must not be refueled in the shoreline area. If visible petroleum, persistent turbidity or other unusual substances are observed in the water as a result of the proposed operation, all work must cease immediately to ascertain the source of the substance. The DLNR/OCCL staff shall be contacted immediately at 587-0381, to conduct a visual inspection and to provide appropriate guidance.

Should you have any questions, please contact OCCL Administrator, Sam Lemmo at 587-0377 or Samuel.J.Lemmo@hawaii.gov.

Sincerely,



William J Aila, Jr, CHAIRPERSON
Board of Land and Natural Resources

CC: DLNR Land (Barry Cheung)
Hon DPP
Hon Parks & Rec, Toni Robinson
ACOE, George Young

I concur with the conditions of this letter:

Applicant

Date

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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FORESTRY AND WILDLIFE
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

DLNR:OCCL:SL

Emergency OA-14-54

Alice Lunt
3665 Tantalus Drive
Honolulu, HI 96822

FEB - 3 2014

Dear Mrs. Lunt,

SUBJECT: RE: Request for Emergency Temporary Shore Protection at 59-149, 59-151 A, 59-155, 59-157, 59-161, 59-163, 59-165, 59-165 B, 59-171 C, 59-175 B and C and 59-181 D, E, F, G, H, and J Ke Nui Road, Haleiwa (Sunset Beach; TMKs (1) 5-9-002:004, 5, 8, 9, 11, 12, 17, 18, 24, 26, 27, 34, 35, 36, 37, 45, and 46; Alice Lunt: owner 59-181 D)

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is responding to your request, following a January 30, 2014 meeting at the Hawaii State Archives Building, to place a sand bank (protective sand pile or berm) as temporary erosion control along approximately 1,000 feet of the shoreline fronting 59-149, 59-151 A, 59-155, 59-157, 59-161, 59-163, 59-165, 59-165 B, 59-171 C, 59-175 B and C and 59-181 D, E, F, G, H, and J Ke Nui Road, Haleiwa (Sunset Beach; TMKs (1) 5-9-002:004, 5, 8, 9, 11, 12, 17, 18, 24, 26, 27, 34, 35, 36, 37, 45, and 46).

Recent erosion from seasonal waves, possibly combined with a long-term trend of beach erosion, created erosion scarps approximately 15 feet high, in some locations undermining the shorefront foundations of single-family residences on the subject properties. The erosion occurred in two episodes over this fall and winter: 1) In September – October of 2013, properties fronting “Kammies” surf break were affected; and 2) In December of 2013, properties adjacent to “Rocky Point” surf break were affected. In response, sand pushing (sand scraping and movement by mechanical means) projects were given emergency authorization by DLNR and conducted by the property owners in the Kammies area in October, 2013 and in the Rocky Point area in January, 2014.

The request is to push additional sand to replace sand lost from the existed sand banks from recent high wave events and improve seasonal erosion protection. The project will use clean locally-sourced sand pushed from the dry beach area fronting the subject properties, scraped (excavated) to a maximum depth of 2 feet using heavy machinery (e.g., bulldozer). No sand will be removed nor will any work be done below the high water line. The temporary sand berm will have an approximately 1:1 slope and flat upper cap not more than 10 feet wide.

EXHIBIT 12

DLNR authorizes the placement of a protective sand bank, fronting the subject property, as described above for temporary erosion protection. Additional authorization, including Right of Entry, is required from Honolulu City and County Department of Parks and Recreation before you may proceed.

DLNR authorizes the placement of a sand berm fronting the subject properties in an effort to protect public health, welfare, and safety on the subject property under Hawaii Administrative Rules §13-5-35, Emergency Permits (a) "Notwithstanding any provision of this chapter, the chairperson or deputy director of the department in the absence of the chairperson may authorize through an emergency permit any land use deemed to be essential to alleviate any emergency that is a threat to public health, safety, and welfare, including natural resources, and for any land use that is imminently threatened by natural hazards. These actions shall be temporary in nature to the extent that the threat to public health, safety, and welfare, including natural resources, is alleviated (e.g., erosion control, rockfall mitigation). The emergency action shall include contingencies for removal methods, estimates for duration of the activity, and future response plans if required by the department."

In addition, the proposed project is minor in scope and may be considered an exempt action under State environmental laws under Section 11-200-8(A)(1), Hawaii Administrative Rules (HAR) "Operations, repairs, or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing."

Terms and Conditions

The DLNR has no objections to the placement of a sand berm along the erosion scarp fronting the subject properties at TMKs (1) 5-9-002:004, 5, 8, 9, 11, 12, 17, 18, 24, 26, 27, 34, 35, 36, 37, 45, and 46 as temporary erosion protection, provided that you adhere to the following terms and conditions:

1. That in issuing this letter, the Department and Board has relied on the information and data that the applicant has provided in connection with this letter. If, subsequent to this letter, such information and data prove to be false, incomplete or inaccurate, this letter may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
2. It is understood that the sand berm is a temporary response to prevent the loss of the existing residences, which are threatened by both chronic and seasonal wave run-up and erosion. Subsequent erosion control efforts will require a new application;
3. It is understood that the terms of this authorization may be modified by the Department prior to and during construction, if beach conditions change;
4. The applicant will notify the Department no less than 24 hours prior to beginning construction operations;

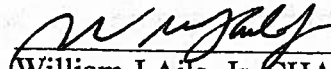
5. The Contractor shall perform the work in a manner that minimizes environmental pollution and damage as a result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of the construction period;
6. The applicants or their contractor will remove any tarps, sandbags, or other materials placed on the existing scarp, prior to placing sand. In addition, the applicants or their contractor will remove any dangerous debris encountered while excavating or transporting sand;
7. No materials shall be placed on the newly constructed sand bank, including, but not limited, to tarps and sandbags without prior authorization from DLNR;
8. The applicants shall not induce, plant, or cultivate vegetation atop the protective sand bank;
9. At the conclusion of work, the area shall be cleaned of all construction material and the site shall be restored to a condition acceptable to the Chairperson;
10. The Applicant will prepare a completion report for the project. It will summarize the construction and detail any deviation from the proposed plans;
11. The activity/use shall not adversely affect a Federally listed threatened or endangered species or a species proposed for such designation, or destroy or adversely modify its designated critical habitat;
12. The activity/use shall not substantially disrupt the movement of those species of aquatic life indigenous to the area, including those species, which normally migrate through the area;
13. When the Chairperson is notified by the applicant or the public that an individual activity deviates from the scope of the activity/uses, or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the applicant to undertake corrective measures to address the condition affecting these resources. The applicant must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
14. When the Chairperson is notified by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the State Department of Land and Natural Resources that an individual activity/use or activities conducted under this letter is adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the applicant to undertake corrective measures to address the condition affecting these resources. The applicant must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;

15. Where any interference, nuisance, or harm may be caused, or hazard established by the authorized activities/uses, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm or hazard;
16. No contamination of the marine or coastal environment (trash or debris) shall result from project-related authorized activities/uses;
17. No motorized construction equipment is to be operated in the water at any time;
18. In the event there is a petroleum spill on the sand, the operator shall promptly remove the contaminated sand from the beach;
19. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under projects authorized under this letter;
20. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments for authorized projects;
21. In the event that historic sites, including human burials are uncovered during construction activities, all work in the vicinity must stop and the State Historic Preservation Division contacted at (808) 692-8015;
22. The applicant shall take measures to ensure that the public is adequately informed of the project activities/work once it is initiated and the need to avoid the project area during the operation;
23. Public access along the shoreline during construction shall be maintained so far as practicable and within the limitations necessary to ensure safety;
24. All construction material including sand shall be free of contaminants of any kind including: excessive silt, sludge, anoxic or decaying organic matter, turbidity, temperature or abnormal water chemistry, clay, dirt, organic material, oil, floating debris, grease or foam or any other pollutant that would produce an undesirable condition to the beach or water quality; and
25. The applicant shall implement standard Best Management Practices (BMPs), such as daily inspection of equipment for conditions that could cause spills or leaks; cleaning of equipment prior to operation near the water; the ability to contain and clean up fuel; fluid or oil spills immediately for activities/uses; and implementation of adequate spill response procedures, stormy weather preparation plans, and the use of silt curtains and other containment devices. Equipment must not be refueled in the shoreline area. If visible petroleum, persistent turbidity or other unusual substances are observed in the water as a result of the proposed operation, all work must cease immediately to ascertain

the source of the substance. The DLNR/OCCL staff shall be contacted immediately at 587-0381, to conduct a visual inspection and to provide appropriate guidance.

Should you have any questions, please contact OCCL Administrator, Sam Lemmo at 587-0377 or Samuel.J.Lemmo@hawaii.gov.

Sincerely,



William J Aila, Jr, CHAIRPERSON
Board of Land and Natural Resources

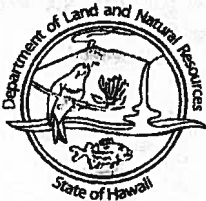
CC: Hon Parks & Rec, Toni Robinson
DLNR Land, Barry Cheung
Hon DPP, Arthur Challacombe
ACOE, George Young

I concur with the conditions of this letter:

Applicant

Date _____

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

DLNR:OCCL:SL

Re: Emergency OA-14-07

Joseph Little
Little Environments LLC
303 W. Whitaker Mill Road
Raleigh, NC 27608

FEB - 6 2014

Dear Mr. Little,

**SUBJECT: RE: Request for Emergency Temporary Shore Protection at
59-165 Ke Nui Road, Apt. D, Sunset Beach, Oahu, Hawaii;
TMK (1) 5-9-02:017 (Owner: Glenn Wachtel).**

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is responding to your letter received on January 22, 2014 requesting further information related to OCCL's response to your request for emergency temporary shore protection to place geotextile (ELCOROCK®) sandbags along approximately 50 feet of the shoreline as temporary erosion control at TMK (1) 5-9-02:017, Sunset Beach, Oahu on behalf of the property owner Glenn Wachtel.

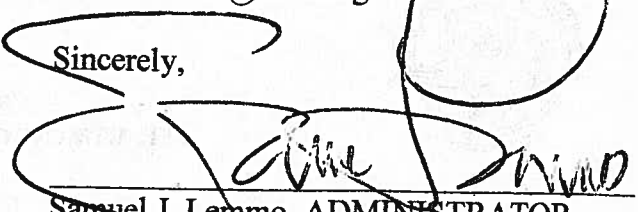
A meeting was held on January 30, 2014 in Honolulu with a group of homeowners from the affected erosion area at Sunset Beach, including your client Mr. Wachtel. Immediately following the meeting, OCCL received a request from a representative of the homeowners for emergency authorization to push additional sand onto the protective bank to replace sand lost from recent high wave events and improve seasonal erosion protection. Your client's property (59-165 Ke Nui Road, TMK (1) 5-9-002:17) is included in the Authorization for Emergency Temporary Shore Protection (DLNR Ref. Emergency OA-14-54). A copy of the Authorization letter is enclosed for your reference. This is the second authorization that DLNR has provided for emergency erosion control fronting your client's property and the Department understands that sand pushing operations will begin this week.

At this time, DLNR considers the need for Temporary Shore Protection to be alleviated following the two authorizations for sand pushing. DLNR will continue to monitor the performance of the sand bank and remains available to discuss longer-term solutions. As stated in DLNR's December 24, 2013 letter (DLNR Ref. Emergency OA-14-07), you may submit a Conservation District Use Application (CDUA) to DLNR for the proposed shoreline protection (geotextile sand bags), if you would like the Board of Land and Natural Resources to consider the geotextile sand bags as a longer-term erosion management solution for your client.

EXHIBIT 13

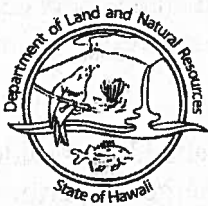
Should you have any questions, please contact Sam Lemmo, Administrator of the DLNR Office of Conservation and Coastal Lands at 587-0377 or Sam.J.Lemmo@hawaii.gov.

Sincerely,


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

CC: Glenn Wachtel (owner)

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
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AQUATIC RESOURCES
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

DLNR:OCCL:SL

Re: Emergency OA-14-07

JUN 12 2014

Gregory W. Kugle
Damon Key Leong Kupchak Haster
1003 Bishop Street, Suite 1600
Honolulu, Hawaii 96813-6452

Dear Mr. Kugle,

SUBJECT: RE: Request for Emergency Temporary Shore Protection at
59-165 Ke Nui Road, Apt. D, Sunset Beach, Oahu, Hawaii;
TMK (1) 5-9-02:017 (Owner: Glenn Wachtel).

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is responding to your May 30, 2014 letter providing additional information in connection with the request for emergency shore protection that was previously submitted by Mr. Wachtel and his engineer, Mr. Joseph Little (DLNR Ref. Emergency OA-14-07). The request is for emergency temporary shore protection to place geotextile (ELCOROCK®) sandbags along approximately 50 feet of the shoreline as temporary erosion control at TMK (1) 5-9-02:017, Sunset Beach, Oahu on behalf of the property owner Glenn Wachtel.

The request is for an Emergency Permit under Hawaii Administrative Rules (HAR) §13-5-35, Emergency Permits. Please note that HAR §13-5-35 specifically states that the permitted actions "shall be temporary in nature to the extent that the threat to public health, safety, and welfare, including natural resources, is alleviated (e.g., erosion control, rockfall mitigation). The emergency action shall include contingencies for removal methods, estimates for duration of the activity, and future response plans if required by the department."

As stated in the DLNR's February 6, 2014 letter to Mr. Little (Re: Emergency OA-14-07), the DLNR considers the need for Temporary Shore Protection to be alleviated at the present time, following completion of two sand pushing (dune restoration) projects at the subject property. DLNR respectfully disagrees with your opinion that "Mr. Wachtel's house presently qualifies as 'Imminently Threatened'" as defined in HAR §13-5-2, "For coastal erosion, 'imminently threatened' shall mean a distance of twenty feet or less from an actively eroding shoreline or erosion that will threaten the structure in less than six months." According to a property survey map provided by Mr. Little in his December 10, 2013 request letter (Appendix A. Pre-Erosion Survey and Little Environments LLC Erosion Notes), the top of the erosion scarp is within 30 feet of the west seaward corner and 19 feet of the east seaward corner of the single family residence on the seaward property. The scarp has been buried and stabilized following the two sand pushing efforts alleviating the "imminent threat." Whether an "Imminent Threat" existed at

the subject property prior to the sand pushing is questionable, considering the distance between the house and the erosion scarp is greater than 20 feet along all but the east seaward corner of the house.

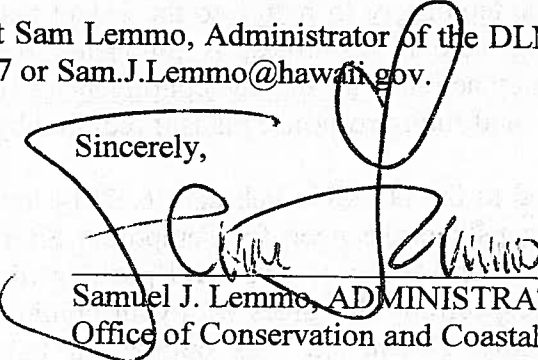
Authorizations for emergency erosion control from DLNR are temporary and intended to provide the applicant with time to develop a longer-term erosion management plan. Emergency permits for erosion control typically require the applicant to remove the structure within a few years. We note in the "Environmental and Geosynthetic Design for Erosion Abatement and Coastal Restoration" by Little Environments LLC (dated December 8, 2013) that "The design life of the project is expected to be 30 years with reasonable maintenance and upkeep." This statement indicates that the proposed structure is not intended to be "temporary in nature" as required for Emergency Permits under HAR §13-5-35.

DLNR respectfully disagrees with your assertion that "Allowing emergency protection [with the proposed geotextile sand bag structure] will also protect the natural resources of the beach and ocean." The Department's experience with these types of structures has shown that the impacts to the beach environment from these temporary structures are often similar to impacts from permanent shoreline armoring (seawalls, revetments), including encroachment (placement loss) on the beach from the footprint of the structure, beach narrowing through "passive erosion" (retreat of the water line toward the structure), and "flanking erosion" or "end effects" causing accelerated erosion on adjacent shorelines. As a result, the Department no longer wishes to allow these types of sandbags for emergency shore protection and is actually working to have these types of structures removed where the emergency has passed or the authorization time frame has expired. These types of structures are more properly considered within the normal Conservation District Use Application process "Shoreline Erosion Control" Section 13-5-22 (P-5)(D-1), Hawaii Revised Statutes.

Your letter asks, "What modifications could be made to the proposed shoreline protection to satisfy the Department?" The Department is preparing to address erosion emergencies that may arise in the coming winter high wave season, including working closely with county and federal regulatory agencies. Specifically, the DLNR will continue to monitor the performance of the sand bank at Ke Nui Road and remains available to discuss future sand pushing efforts.

Should you have any questions, please contact Sam Lemmo, Administrator of the DLNR Office of Conservation and Coastal Lands at 587-0377 or Sam.J.Lemmo@hawaii.gov.

Sincerely,



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

CC: Mr. Glenn Wachtel (owner)
Mr. Joseph Little
BLNR Chairperson
Director, Honolulu DPP

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VED
CONSERVATION
LANDS

DAMON KEY LEONG KUPCHAK HASTERT

A LAW CORPORATION
DEPT. OF LAND & NATURAL RESOURCES
May 30, 2014 OF HAWAII

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Mr. Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
Dept. of Land and Natural Resources
State of Hawaii
1151 Punchbowl St., Room 131
Honolulu HI 96813

Re: Request for Emergency Temporary Shore Protection at
59-165 Ke Nui Road, Apt. D, Sunset Beach, Oahu, Hawaii;
TMK (1) 5-9-02:017 (Owner: Glenn Wachtel)

Dear Mr. Lemmo:

As you may be aware, we represent Mr. Glenn Wachtel in connection with the severe beach loss that occurred at his property, and others, at Sunset Beach a few months ago. Mr. Wachtel has asked that we provide you with some additional information in connection with the request for emergency temporary shore protection that was previously submitted by Mr. Wachtel and his engineer, Mr. Joseph Little. Enclosed please find Mr. Little's renewed submission as well.

By way of background, in October 2013, the Island of Oahu experienced unusually high tides (3 to 6 inches higher than normal) which caused a 20-foot beach "cliff" at Sunset Beach, as well as severe erosion on Kuhio Beach in Waikiki. Dolan Eversole described the cause as a regional "mesoscale eddy" effect. This avulsive event resulted in the loss of approximately 10 feet of Mr. Wachtel's property. The top edge of the 20-foot escarpment is now located approximately 18-feet from the foundation and makai wall of Mr. Wachtel's home.

This request is for an emergency permit pursuant to Haw. Admin. R. § 13-5-35, which allows the department to authorize any land use deemed to be essential to alleviate any emergency that is a threat to public health, safety and welfare, including natural resources, and for any land use that is imminently

EXHIBIT 14

DAMON KEY LEONG KUPCHAK HASTERT

Mr. Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
May 30, 2014
Page 2

threatened by natural hazards. Mr. Wachtel's house qualifies as "imminently threatened" under the Department's regulations, because it is an inhabited structure that is in danger of destruction or severe damage and it is twenty feet or less from an actively eroding shoreline or erosion that will threaten the structure in less than six months. *See* Haw. Admin. R. § 13-5-2. There is an extremely narrow window of opportunity during the upcoming summer months before Mr. Wachtel's property and the North Shore are again exposed to significant surf and possible severe erosion. Allowing emergency protection will also protect the natural resources of the beach and ocean by preventing the collapse of homes and debris into these resources.

The temporary emergency protection being proposed by Messrs. Wachtel and Little involves the placement of geotextile ELCOROCK sandbags. The Department has approved the use of similar heavy-duty bags in many other locations, including in Mokuleia, Kaaawa, Hawaii Kai, Lanikai, and Kaanapali on Maui. Why is the Department treating Mr. Wachtel and the other Ke Nui Street owners differently than these other locations? Moreover, much, if not all of Mr. Little's design would be below grade and therefore invisible below the sand berm 85% - 90% of the time, until and unless a severe event such as last year's event were to again threaten these homes, which have now been left with significantly less property as a buffer following the 2013 event.

We respectfully disagree with the notion that the emergency no longer exists because the property owners, at significant expense, were permitted to undertake a sand push. The sand that was pushed is not compacted to the degree that the naturally occurring beach sand was, meaning it is more susceptible to being washed away. Further, after the events of October and January, Mr. Wachtel has significantly less property to serve as a natural buffer to protect the structure from erosion. This yard is critical because the 20 foot escarpment will jeopardize the support for the home's foundation.

Lastly, what modifications could be made to the proposed shoreline protection to satisfy the Department? Could geotextile bags be used to protect the tow of the escarpment, transitioning to smaller, biodegradable bags up to grade?

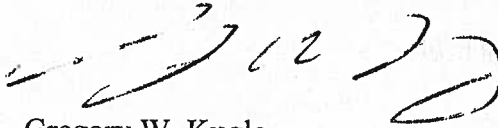
DAMON KEY LEONG KUPCHAK HASTERT

Mr. Samuel J. Lemmo, Administrator
Office of Conservation and Coastal Lands
May 30, 2014
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Thank you in advance for your prompt attention to this matter.
Should you have any questions or comments, please do not hesitate to contact the undersigned.

Very truly yours,

DAMON KEY LEONG KUPCHAK HASTERT



Gregory W. Kugle

GWK:kynf
241762

Enclosure

cc: Mr. Glenn Wachtel
Mr. Joseph Little

26 February 2014

To:
Samuel J. Lemmo
Post Office Box 621
Honolulu, Hawaii 96809, USA
sam.j.lemmo@hawaii.gov
808-587-0377

From:
Joseph Little
Little Environments LLC
3814 Cobb St.
Garner NC 27529
(919) 916-9061
Joseph.little@littleenvironments.com

and:

William J. Alia, Jr.
Chairperson
Post Office Box 621
Honolulu, Hawaii 96809, USA

Old Address(DO NOT USE)
303 W. Whitaker Mill Rd
Raleigh, NC, 27608, USA

CC: Glenn Wachtel
Owner
808-382-1655
59-165 #D Ke Nui Rd.
Sunset Beach, HI. 96712 USA
<gwachtel@hotmail.com>

*Submitted by both mail and electronic
e-mail for diligence.*

Date: Feb 26, 2014

RE:RE: Request for Emergency Temporary Shore Protection at 59-165 Ke Nui Road, Apt. D, Sunset beach, Oahu, Hawaii; TMK (1) 5-9-02:017(Owner: Glenn Wachtel) – *Dated February 6 2014*

RE:RE: Request for Emergency Temporary Shore Protection at 59-165 Ke Nui Road, Apt. D, Sunset beach, Oahu, Hawaii; TMK (1) 5-9-02:017(Owner: Glenn Wachtel) - *Dated 24 December 2013*

Subsequent to:

Notice of Property Emergency Shoreline Erosion Control Works at:
59-165 ke Nui Rd, Apt. D. Sunset Beach Oahu, HI. 96712, USA
Tax Map Key, Zone 5, Section 9, Plat 02 – *Dated 10 December 2013*

Mr. Lemmo,

I have received you letter dated 6 February 2014 and the attached letter to an Alice Lunt (not my client/not my clients property) and provide the following response.

I note the following:

- 1- I did not request any information from you. I was requesting approval, re my initial letter and my second letter that addressed your concerns in your first letter.
- 2- You did not answer any of my specific questions or respond to any of my blanket concerns.
- 3- More specifically the person you copied in on the last e-mail that you sent to me is the author of the erosion study I cited. I am unsure why you copied her in and did not provide



26 February 2014

a response to the specific matter of the erosion rate being significantly greater than her cited erosion rate of approximately 1 ft per year.

- 4- Your claim that the emergency event is over is incorrect. I assume that you have deemed this based on the fact that it has died out of the news. This is incorrect. I reaffirm that the emergency is outstanding as there has been a 10 year and 30 year event in the last six months. This is indicative that another event of the 10- 30-year magnitude is imminent. Emergency protection is still deemed necessary. What scientific basis have you based your claim on?
- 5- I appreciate that you have approved Alice Lunt's property and associated properties on her behalf for a sand push but this will not sufficiently work for my clients property. In the last event, the previous sand push was completely ineffective in safeguarding my clients well being. Are you willing to certify that the sand push will protect my clients property during critical erosion events?
- 6- In your second letter you incorrectly cite your first letter saying, "you may" versus "you may choose" to proceed with a CDUA. My client has advised does not have time/resources to proceed with a lengthy CDUA permit and is not looking for anything-long term/permanent. He did not choose this based on your first letter and alternately choose to try to seek a solution with DLNR.
- 7- Please do not venture out of the scope of the property 59-165 Ke Nui Road, Apt D in regards to future correspondence with the property as the titled subject.

Going forward

- 1- Accompanying this document is a copy of the full design, which you did not request to see, but I am now providing.
- 2- The attached design is for temporary protection.
- 3- The lifetime of the project is 3-5 years for review later at DLNR discretion along with continuous monitoring.
- 4- The DLNR emergency checklist is satisfied by the current design.
- 5- My client is willing to accept a design that is only as high as the height of the sand push for the purpose of temporary protection when the sand is washed away. It will not be visible to beach goers.

Alternately

I ask for your facilitative comment on what you will approve and approval on the above and attached design as you deem necessary in order to achieve a solution as CDUA is not an option.



26 February 2014

Conclusion

In lack of response, this document is a notice of intent to proceed with emergency protection works.

Joseph Little PE/MIEAust

Managing Director/ Engineer/ Environmental Consultant

Little Environments LLC

3814 Cobb St., Garner, NC 27529

(919) 916 9061

USA

Dec, 8 2013

***Environmental and Geosynthetic Design for
Emergency Erosion Abatement and Coastal Restoration at:***

***59-165 Ke Nui Rd, Apt. D
Sunset Beach, Oahu, HI. 96712, USA
Tax Map Key, Zone 5, Section 9, Plat 02***

**Prepared by : Joseph Little
Environmental Consultant/Managing Director
Little Environments LLC
303 W. Whitaker Mill Rd
Raleigh, NC 27608, USA**

Dec 8, 2013

**For Design and Build only by Little Environments LLC
Not to be installed by Others**

Introduction

The site is located on the North West side of the Island of Oahu, in the state of Hawaii. To the northeast, along the coast, is Kawela Bay and to the south-southwest, along the coast is Waimea Bay, followed by the town of Haleiwa.

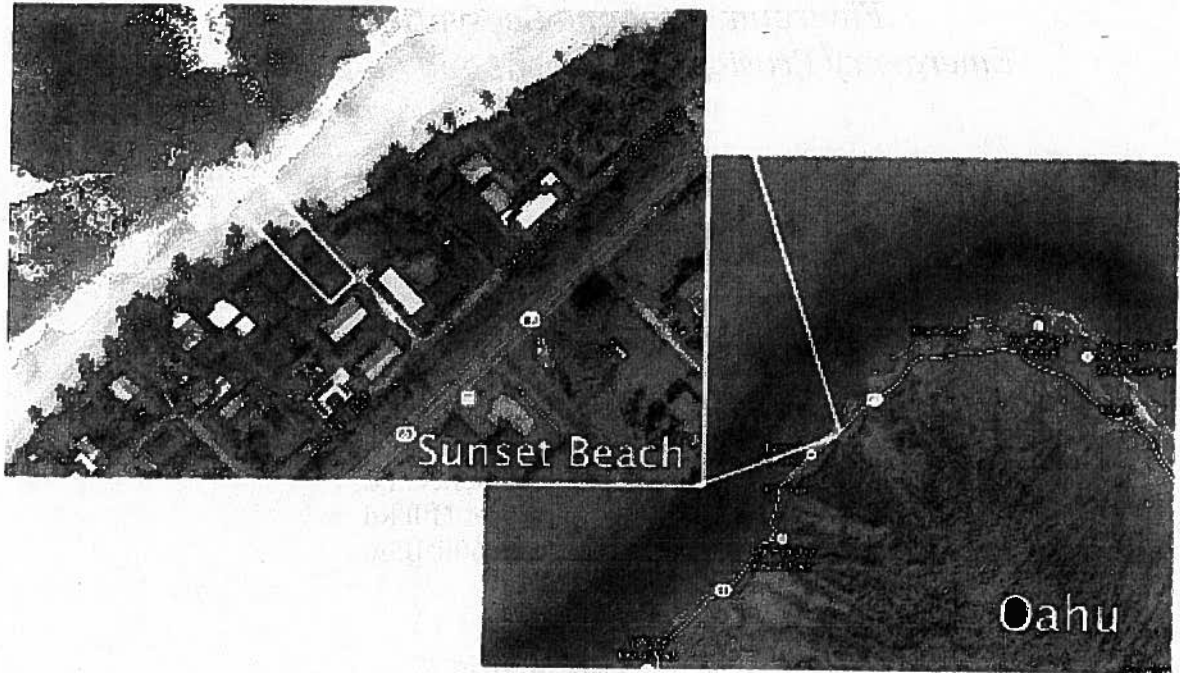


Figure __. Site Vacinity

Project Objective/Design Objective

The objective of this project is stabilize the eroded property line at the following residence, also shown in the vicinity map above:

*59-165 Ke Nui Rd, Apt. D
Sunset Beach, Oahu, HI. 96712, USA
Tax-Map Key, Zone 5, Section 9, Plat 02*

In the recent past, the area has experienced abnormal erosion rates associated with a 30-year occurring event. The objective is to quickly install measures that will provide temporary protection until natural vegetation can re-establish and provide on-going additional protection. The current erosion rate has outset the natural erosion rat by more than 100% in the past year. The baseline rate is <1 ft per year. A containerized bag approach will be utilized with pumping equipment to reduce impact on the beach and reduce impact on beach amenity.

Design Life

The design Life of the project is expected to be 30 years with reasonable maintenance and upkeep. Via establishment of containerized hydraulically compacted sand in the short term, it will allow for re-vegetation and natural protection in the long term. The hydraulically compacted sand is similar to that in the natural onshore zone and local sand will be used.

Monitoring Plan

After installation, The project shall be inspected on regular intervals, and especially after non-normal or extreme wave events. Some movement of the sand containers shall be expected due to natural settlement. 1-2% movement is natural for the containers. Should extreme events occur where 15% or more movement is experienced, the owner shall photograph immediately and submit via e-mail to the designing consultant. The outer layer of the revetment or the outer slope shall be vegetated with native plants as specified below. Loss of significant amounts of vegetation on the outer side of the containers shall also require photo documentation and shall be submitted via e-mail to the designing consultant. If there is any doubt as to whether a photo should be taken and submitted, a photo shall be taken and submitted to the designing consultant. The owner should keep aware of the following variables in figure 1, from USACE manual.

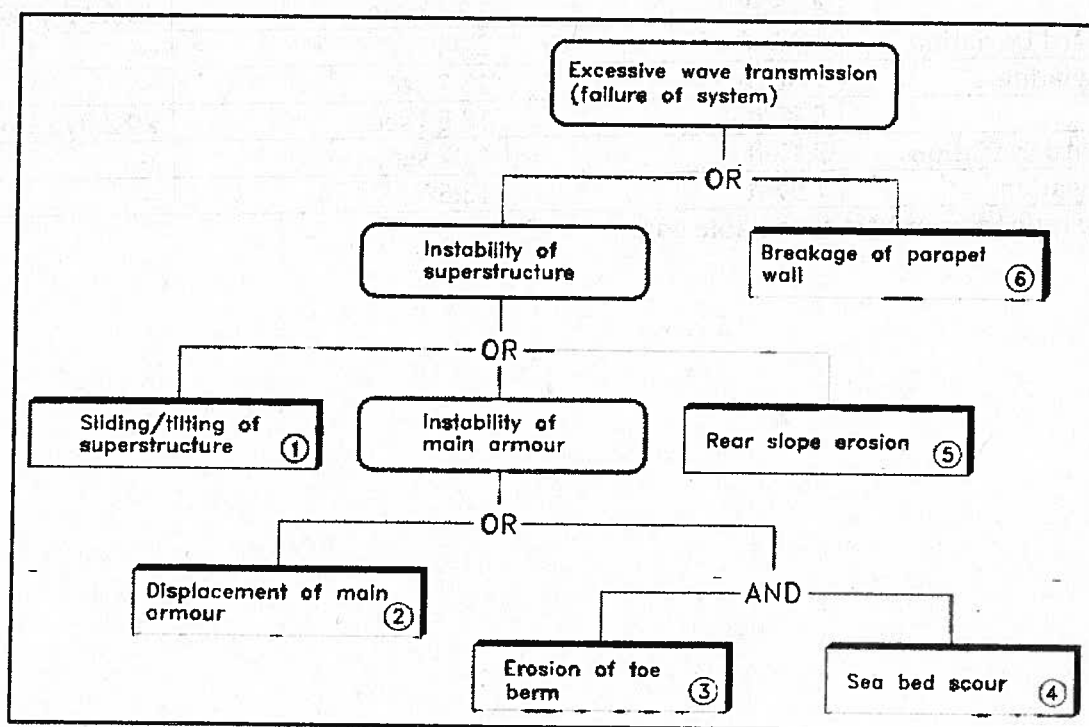


Figure VI-6-7. Example of simplified fault tree for a breakwater

Figure 1. Variables to be Aware of for on-going monitoring

Table 2. Calculated Baseline Run-up for Sunset Beach to USACE method

2012 Maximum Event Runup Model

Lo	756.06 M	Deepwaterwavelength
g	9.81 m/s ²	gravity
T	22.00	period

Surf Similarity Parameter

sigma	1.09 unitless	surf similarity parameter
tanb	0.10 m/m	beach slope
Ho	6.31 m	offshorewaveheight

Maximum Runup

Rmax	15.69 m
	50.22 ft

Signifiacnt runup

9.28 m
29.69 ft

Fist Deviation 2004/2008 Model

Note: 2004/2008 Results are similar and greater than 2012

Lo	293.19 M	Deepwaterwavelength
g	9.81 m/s ²	gravity
T	13.70	period

Surf Similarity Parameter

sigma	1.09 unitless	surf similarity parameter
tanb	0.10 m/m	beach slope
Ho	2.49 m	offshorewaveheight

Maximum Runup

Rmax	6.15 m
	19.69 ft

Signifiacnt runup

3.64 m
11.64 ft



Table 3. Qualitative Evaluation of Factors/Non-Quantifiable variables

Contributing Factors	Comment of effect from Baseline Values
Refraction	The nearshore area of the property
Shoaling	Shoaling is slightly expected. The main shoaling will occur from waves from the northerly direction. Waves from the Northern direction do not approach the property perpendicularly, reducing the runup variable. Drop-off from the back side of the igneous extrusions will aid in dissipating energy.
Diffraction	Diffraction in the area is expected to be significant. Wave runup analysis was carried out assuming no shoals. Diffraction is expected mainly from the igneous outcroppings due north, but still in the local sunset beach bay. Diffraction will cause additional energy dissipation and reduce run-up from the events modelled above.
Friction Dissipation	The incongruity of the bottom of the nearshore and offshore areas will dissipate additional energy from the offshore waves during propagation. Intrusions into the rock and predominance of outcroppings will reduce run-up via energy dissipation.
Percolation Dissipation	This variable is non-relevant as the majority of the sea-bottom is igneous and impermeable.
Breaking/Pre-breaking	Pre-breaking and offshore breaking is a significant energy dissipater. Near shore brakes on igneous outcroppings will dissipate significant amounts of energy. This is typically where the depth of still water is equal to or greater than the depth of the wave as this point is indicative of where the wave loses stability. Inspection provided that depths went from 6+ feet back to 1 foot with wave action, just entering the near shore and going 100' to 200' offshore.
Wind Growth	Considering the predominance of large rolling waves, wind-waves are considered negligible in this analysis.
Wave Current Interactions	The alongshore current, while not always existent, will aid in energy dissipation that is translated to the revetment. This is due to (a) deflection of wave direction into the shore and (b) energy dissipation due to conflicting flow or velocity vectors.
Wave-Wave Interaction	Many wave-wave interactions exist due to ramping and falloff from behind igneous rock structures. This results in additional energy dissipation and less run-up. Wave intersection and interaction is positive for the purposes of this model. Wave-wave interaction includes stacking waves, colliding waves, and diffracted waves intersecting with oncoming waves.



Dec, 8 2013

Sink Mechanisms	Off shore from the site there are significant amount of sink mechanisms associated with varied bottom contours and non-continuously grade slopes.
Approach direction	The majority of waves included in the wave climate at this location are not perpendicular to the shoreline. Runup probability with a large event is further abated due to the approach direction.

****No CFD has been carried out. Generation of a CFD model would not encapsulate all sand mobility variable and parameters.**

Table 4. Predominant Wave Direction

Direction	Samples	Direction	Percent of Year	Design Applicability
0-45 deg	6394	N-NE	38%	Significant
46-90 deg	1799	NE-E	11%	Frequent
90-135 deg	0	E-SE	0%	No occurrence
135-180 deg	0	SE-S	0%	No occurrence
180-225 deg	0	S-SW	0%	No occurrence
225 -270 deg	5	SW-W	nil	nil occurrence
270-315 deg	1970	W-NW	12%	Frequent
315-360 deg	6447	NW-N	39%	Significant

***Samples are evenly distributed over 1 years time(2012)**

Dec, 8 2013

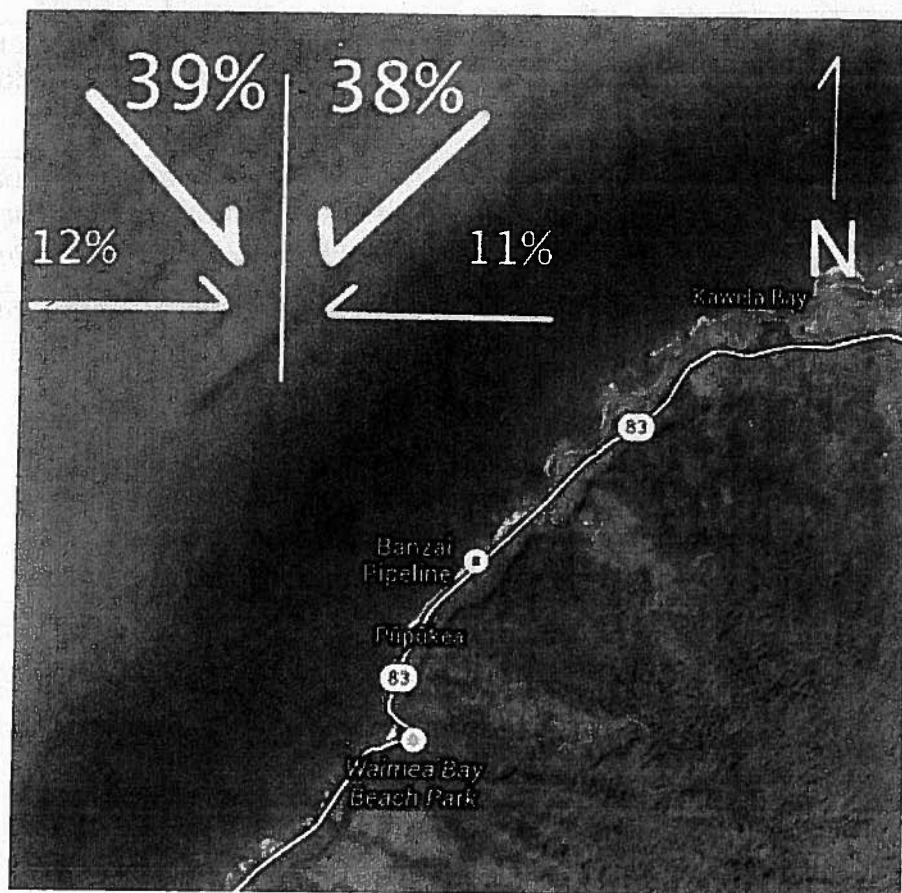


Figure __. Wave Direction on Satellite Photo
 Background from Google

Dec, 8 2013

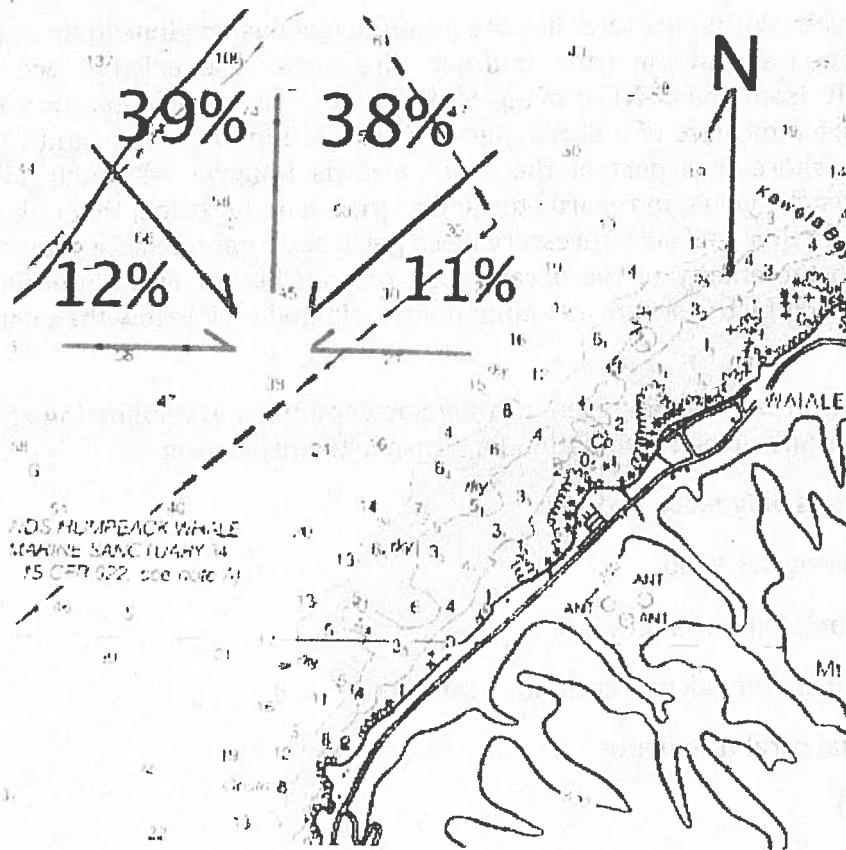


Figure __. Bathymetry with Predominant Wave Directions
 on NOAA Charts

Geomorphology Analysis

The local on land area is characterised by a calcium carbonate sand that is mixed with a silty organic based material. This soil is visually classified as a silty sand. It is unique to other silty sands, as the sand component is large grained sand. Moving towards the water, the sand becomes solely large grained sand, and once in the up shore area is all large grained calcium carbonate sand. The lack grading in the sand contributes to high mobility and difficult natural compaction by waves. When compared to the rest of the island, the sand here is uniformly graded. The local sand available on the beach is suitable for gravity pumping and can be used to fill containers. Moving into the nearshore, below the mean waterline, the slope drops off quickly to the extrusive, igneous and metamorphic rock. The rock is generally eroded to a semi smooth surface, yet is rather hard. This rock layer continues under the nearshore sand deposit and under the silty sand deposit, which the existing house is built upon. Depths from grade down to the igneous and metamorphic rock are reported to be 10' on the beach at the toe of the remaining berm/eroded slope. No investigation has been carried out for confirmation. Further offshore, at approximately 1 nautical mile the water depth is approximately 16-20' in depth. At approximately 2 nautical miles off shore, the water depth is approximately 35' to 45' feet in depth, and at 3 nautical miles the depth drops off faster to approximately 100' in depth. The local bay on which the property is located, has a point to the north and a point to the south. The sand in this area highly mobile and accretes and disperses on



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regular intervals. Within the local bay are multiple igneous and limestone formations that generate and propagate wave action from multiple directions. Also existent are along shore currents, predominately from the N-NE moving S-SW. This creates a combination of micro-currents and eddies that are indicative of a stirring action. This action mobilizes sand regularly and allows for further along-shore transport of the sand towards Haleiwa. Although some trends have been witnessed over the years, in regards to sand accretion and erosion, the ad-hoc existence of igneous extrusions and other reef structures, creates a generally unpredictable geomorphologic and oceanic interface with the energy of the ocean being responsible for existing erosion. The igneous rock, where not eroded by the ocean, including the anticipated rock below the onshore area, is sharp due to air voids.

As a result of the above geomorphologic conditions, the following shall be considered as a design variable and during installation for constructability reasons:

1. Sharpness of igneous bedrock
2. Mobility of free sand
3. Cohesion of inland sandy silt
4. Large diameter calcium carbonate sand
5. Potential coral fragments

Global Design

1. Site Preparation

- a. The site is to be kept in a neat and tidy manner for the duration of works. Areas requiring protection from machinery shall be demarcated and protected with a heavy fabric material where machinery is to operate.
- b. Excavation is to occur down to bedrock. Should violent or heavy wave event make excavation dangerous or impossible, the largest depth possible shall be achieved and a scour toe applied as per standard procedures. Methodology shall be approved by the project consultant.

2. Site Restoration/Demobilization

- a. Upon completion of works, the site shall be cleaned and all scrap materials disposed of or taken from site. The site shall then be revegetated as per approved vegetation requirements. Following installation the vegetation shall be watered on a regular interval and fertilized to ensure initial plant establishment.

3. Foundation/Prepared Platform

- a. At the commencement of works, a foundation or prepared platform layer shall be prepared for placement of the first layer of containers or bags and intermediate transition layer. All sticks, stones, and other abrasive or sharp materials, including rocks, shall be removed from this area. Options for the intermediate layer are provided in the material specifications.



4. Backfill

- a. The backfill material shall be local calcium carbonate sand. All sharp objects shall be removed or screen from this material. Where this material interacts with the naturally occurring sandy silt, Bentonite clay or other cohesive soil may be mixed with the sand to improve soil quality. The consultant must approve alternates to the bentonite additive. Cohesive soil additives must not be added to the extent that it affect soil hydraulic conductivity.
- b. The backfill is to be hydraulically compacted in lifts equivalent to the container thicknesses.
- c. A getoextile separation layer is to be placed between the outer container layer and the backfill layer. This separation layer shall be placed longitudinally down the slop and stitched together with chain-loop-lock stitching. Seam strength must be equivalent to 50% strength of the specified wide width tensile strength.

5. Facing

- a. The facing of the containerised slope shall be neat and tidy. The intermediate, 1st unburied layer shall meet intimately with adjacent slopes and match the contours of the existing coastline. Where adjacent properties have been eroded and no action has been issued, a transition and deflection approach shall be used to prevent the predominantly directed waves from further eroding the property. Reference drawings for shape. Grass shall be revegetated upto and over the top layer of containers.

6. Pocketed sand/Cover Sand

- a. Following to completion of container placement, the lower have of the container slope shall be cover with sand up to the natural beach line. This is expected to be >50% of the entire slope. The remaining portion shall be covered with a veneer of sand and swept via broom into the outer layer of the container textile. Where container intersects free sand or small hessian sand bags may be placed as a temporary medium for the establishment of vegetation. The area shall be revegetated directly following the installation.

7. Revegetation

- a. No specific vegetation is specified in this design, however the consultant must approve or inspect proposed vegetation to be planted in the area. The owner to submit a vegetation list for post install works for approval by the consultant. Plants are to be perennial and hardy and maximize root structure with minimal above ground plant components. All plants shall be native and non-invasive.

8. Staging Consideration

a. *Management of Area*

During installation in, around, the eroded area, this area shall not be overly saturated with water or heavy loads shall not be burdened onto this area. Budget permitting,



Dec, 8 2013

extra containers may be placed in this area as either part of the main revetment or as a back revetment to aid in confining the area and preventing erosion of the area.

b. Prompt Protection

In case of a potential catastrophic event during installation, no vegetation shall be removed from this area until the placement of container or other sufficient stabilisation means have been carried out. In case of a threatening event during installation a container may be relocated from a different area of the installation to confine this area temporarily, understating the container will not be later moved. This area shall be addressed first in the installation phase.

c. Staging of Installation

Containers are recommended to be installed in areas of critical concern first. Installed container facing should align smoothly with the face of the neighbouring revetment. After the first layer of containers is placed, sand shall be placed behind the containers. In areas where sand, not in containers, is exposed a sandy silt with organic soil overlay is recommended to mimic the natural fill. This will help promote the establishment of vegetation and prevent mobilisation of the sand. Bentonite clay may be applied to the sand to add clay particles to the sand to promote cohesion where necessary. Ultimately the staging of the installation shall place priority on addressing the centrally eroded area that threatens the house structure.

9. Material Specifications

a. Sand Container Materials

Several different geosynthetic materials or products have been developed over the years to address coastal erosion issues. These involve containers, mattresses, tubes, and bags. The material or product strongly recommended for this project is the ELCOROCK composite non-woven, geotextile material. The non-woven geotextile material component of the product is manufactured to provide two material options. These options include (a) a geotextile with one type of PET fiber and (b) a second type of geotextile incorporating two type of fibers, both PET and PP. The exposed geotextile surface on the outside of the container shall be sand colored and shall be PP. The PP fibers shall entrap and entangle sand in a manner to give the material sufficient UV resistance to exceed 10 years while maintaining sufficient strength. The following specification shall serve as a minimum MARV basis for the container material or alternately where indicated. Additional to Table 5, the material or container product supplied must have precedence for an expected lifetime of 10+ years in proven or tracked applications. A Geosynthetic Grid Toe shall also be incorporated on this project.

Table 5. Geosynthetic Container/Bag Material

Geotextile Property	Test Method	Composite "1209RP" ELCOMAX®
Polymer Type	-	Polyester/Polypropylene
Mass	AS3706.1	1,875 g/m ² (M)
CBR Burst Strength	AS3706.4	10,700 N (M)
Toughness MD	AS3706.2	33 kJ/m ² (T)
Toughness XMD		38 kJ/m ² (T)
Abrasion	BAW Rotating Drum	32 kN/m ² (T)
Seam Strength MD	AS3706.6	45 kN/m (T)
Seam Strength XMD		50 kN/m (T)
UV Stability	ASTM D4355-500 hrs	54.5 kN/m (T)
	ASTM D4355-1000 hrs	49.8 kN/m (T)
	ASTM D4355-2000 hrs	47.0 kN/m (T)

(M) Minimum Average Roll Value MARV - 97.5% Confidence Level.

(T) Typical

(MD) Machine Direction - The direction in a machine-made fabric, parallel to the direction of motion of the material through the processing machine (i.e. along the length of the roll).

(XMD) Cross Machine Direction - The direction in a machine made fabric, perpendicular to the direction of motion of the material through the processing machine (i.e. across the width of the roll).

b. Separation Textile

The separation textile shall be a staple fiber, needle punched geotextile and shall have good elongation properties.

Table 6.2. Typical Separation Geotextile Properties

Parameter	Method of Analysis	Typical Production Result	Unit of Measure
Material	UV Stabilised Polyester		
Thickness @ 2kPa pressure	AS3706.1	4.2	mm
Wide Strip Tensile Strength	AS3706.2	MD 10 XD 18	kN/m
Trapezoidal Tear Strength	AS3706.3	MD 250 XD 500	N
CBR Burst Strength	AS3706.4	2,400	N
CBR Burst Elongation	AS3706.4	70	%
Drop Cone Puncture Resistance	AS3706.5	3,500	H ₅₀ mm
Robustness	G Rating	2,900 V. Robust	AUSTROADS
Pore Size Dry Sieve EOS	AS3706.7	110	µm
Flow Rate	AS3706.9	150	L/m ² /sec
UV Resistance	AS3706.11	75	% strength retained
Abrasion Resistance	BAW Rotating Drum	75	% strength retained

c. Intermediate Transition Layer

i. Option A

The following table 1-provides a specification for the HDPE Geogrid to wrap the toe aggregate in front of the containers. This HDPE Geogrid shall extend under the containers and cover the full are of the platform. The product details shall be confirmed with and reviewed by Little Environment LLC before placing the order. An example product conforming to the intent of this project is UX Triton 200. The Triton shall be joined with a Bodkin type interlock material. Panels shall be sufficiently overlapped to prevent aggregate migration from the end of the wrapping. Refer to sketches and manufacturer recommendations for application. The Toe shall be hand filled with approximately 3"-6" aggregate from the beachfront. Aggregate from lower lying areas is preferable. The toe purpose is for scour protection and Geotextile container/rock interface protection. Thickness shall be determined on site in relevance to the largest depression in the rock layer. The thickness shall be at least the thickness of the largest depression in the aggregate platform area.

Table 6. HDPE Geogrid Wrapping Specification

Product Properties		
Load Capacity	Units	MD Values ¹
▪ True 1% Tensile Modulus in Use ²	kN/m(lb/ft)	1,650 (113,090)
Structural Integrity		
▪ Junction Strength ³	kN/m(lb/ft)	100.8 (6,910)
▪ Flexural Stiffness ⁴	X1000 mg-cm	6,500
Durability		
▪ Resistance to Long Term Degradation ⁵	%	100
▪ Ultraviolet Stability (Retained Strength at 500 hours) ⁶	%	98
Dimensions		
▪ Aperture Size (MD/XMD)	mm (in.)	142 (5.6) / 15 (0.6)
▪ Percent Open Area	%	60
▪ Minimum Thickness (any dimension)	mm (in.)	1.65 (0.065)

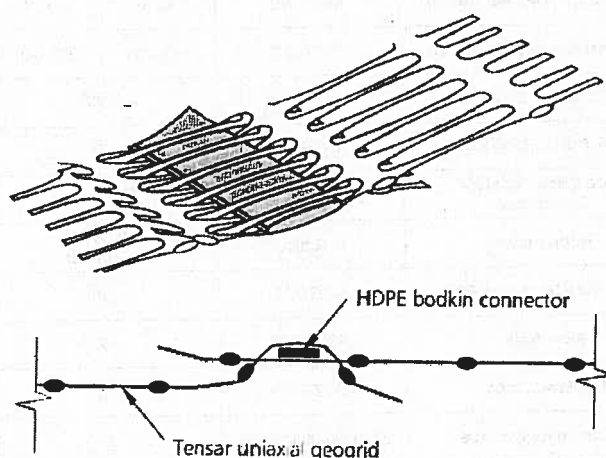


Figure 8. Bodkin Connection at Wrap Around Point

ii. Option-B

Should limestone be encountered in the foundation, alternate to igneous rock such as olivine, a heavy geotextile may be utilized with stabilized sand as an alternate. Where large voids are existent custom sand bags shall be manufactured on site and placed into these voids prior to placement of a continuous textile layer. This textile layer shall be wrapped around in front of the toe and shall have an intimate intersection where it converges with the separation textile. The textile shall be staple fiber and be compatible with salt water.

Table 7. Option B Textile Separation Layer

	Units	ASTM Test Method	Average
Weight	oz/yd ²	D5261	29.2
Grab Warp	lbs	D4632	675.0
Grab Fill	lbs	D4632	813.5
Elong Warp	%	D4632	91.5
Elong Fill	%	D4632	102.3
8mm Punct	lbs	D4833	331.8
CBR Punct	lbs	D6241	2395.5
Thickness	mils	D5199	229.3

d. Temporary Bags

Temporary bags may be of hessian material and perform for 6 months to a year in UV sunlight. Temporary bags may be place intermediate to containers to help hold sand in place until vegetation is established. Temporary bags are you typical 2 cu.ft sand bags. Stitching shall be of the same strength of the material. Bags should be removed after 6 months.

e. Bentonite

- i. Bentonite shall be calcium-based bentonite. Alternative coastal compatible clay may be considered.

f. Alternates

- i. All Alternates must be approved by the consultant in writing.

Milestones

The following milestones should be documented by photograph from 4 angles:

- i- Prior to Commencing Works
- ii- After Preliminary excavation
- iii- After placement of each row of containers and subsequent row of containers
- iv- At Completion of Project

The site shall then be immediately revegetated as per the vegetation plan, with approval granted by the consultant as to any variation from the variation plan in writing.

Machinery/Machinery Operation

The following shall dictate machinery and filling options.

1. All containers from 10' or greater below the property grade shall be hydraulically filled. Containers above this datum may be filled by free sand placement and then subsequently hydraulically compacted via pumping water into the containers. Container are to be filled to 95%+ volume and shall not have any pleats.
2. Excavators and other heavy equipment shall not be operated during dark and shall be limited to daytime hours. Other small works may proceed into the evening.
3. Pumps and slurry bin methods may be used to convey sand to the containers from the yard area. This is the preferred method as it reduces construction equipment on the beach.
4. The slope or dune slope from the foreshore to the property grade shall not be traversed w/o first ensuring stability of the slope for a machines specific ability to traverse the area.
5. All operators shall be significantly experienced in the operation of the machinery.

Variation from Design

Any variation from the design shall be approved in writing by the consultant and the owner of the property.

Quality Control

The containers supplied shall be manufactured to an ISO 9001 quality standard. Supplier shall issue certificate of ISO9001 Certification. The manufacture shall have an in house quality assurance program that evaluates and confirm the following values of their product. A statement certifying these test values shall be provided.

Manufacturing Quality Assurance (MQA) – 2.5m³ containers

Description	Units	Test Method	Test Frequency
Mass	g/m ²	AS 3706.1	1/250 cont.
Toughness	J/m ²	AS 3706.2	1/250 cont.
CBR Burst Strength	N	AS 3706.4	1/250 cont.
Seam Strength	kN/m	AS 3606.6	1/250 cont.
Through Flow	l/m ² /s	AS3706.9	Annually
UV Resistance (500hrs)	kN/m	AS3706.11	Annually
Abrasion resistance (80 000 revolutions)	kN/m	BAW Rotating Drum	Annually



Dec, 8 2013

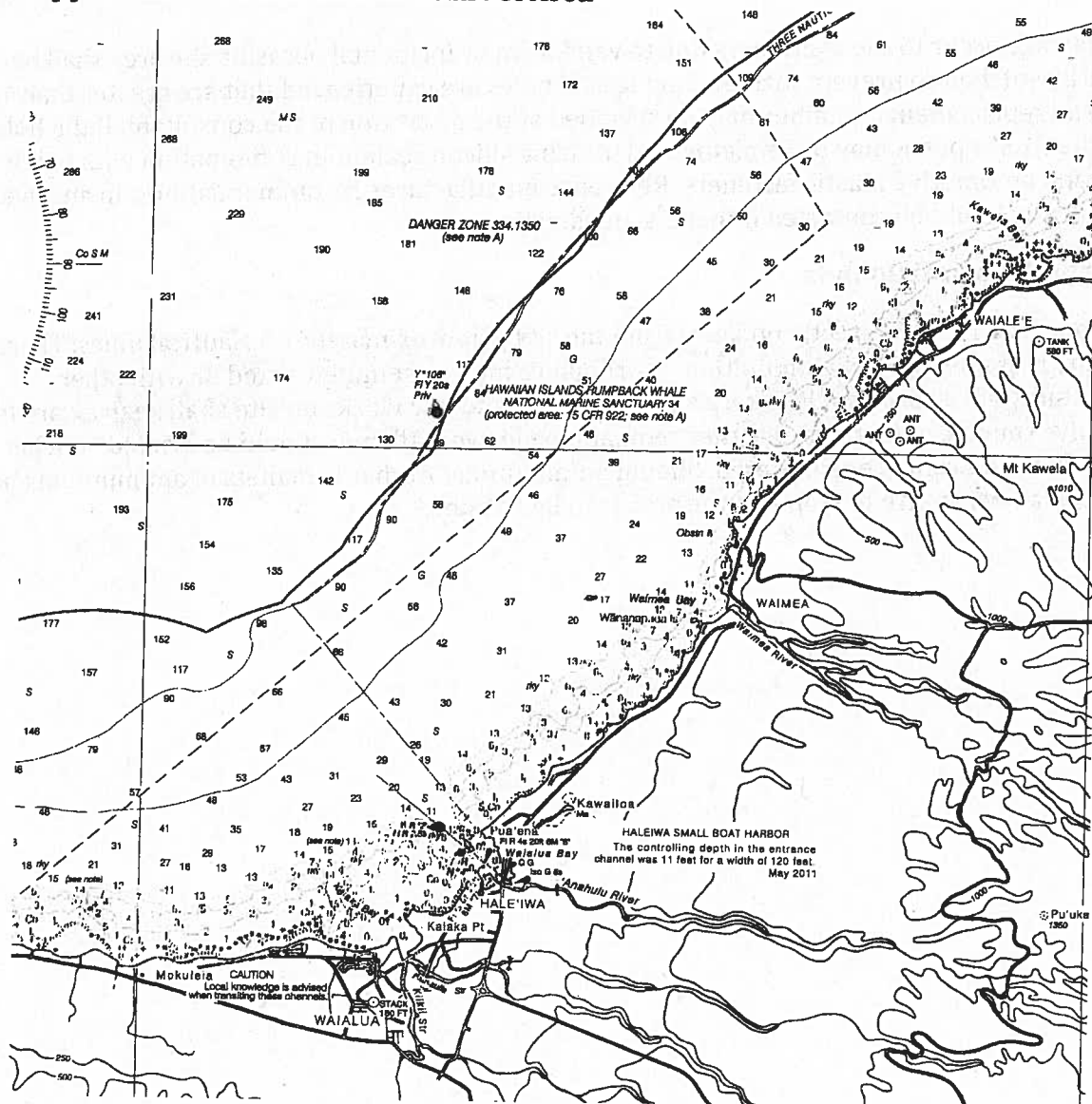
Maintenance

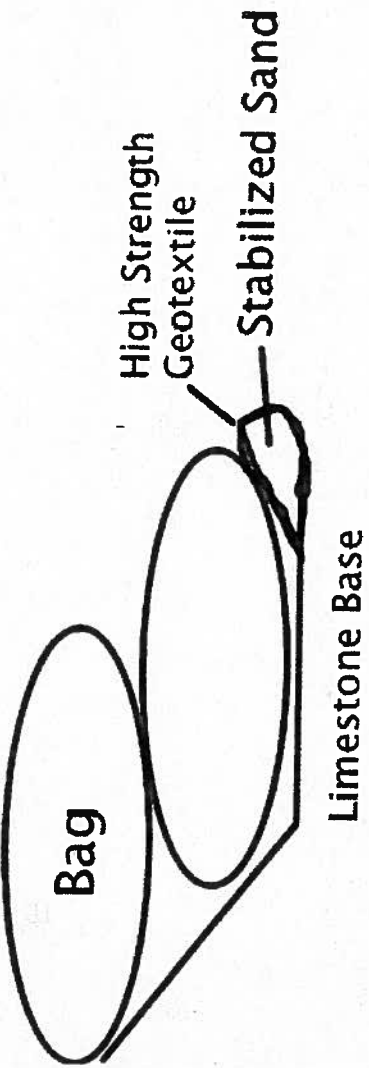
Should damage occur to the containers due to vandalism or incidental occasion the area shall be temporarily stitched to prevent further sand loss. If holes are experienced that are greater than 1.5' in length an replacement container may be specified at the discretion of the consultant. If the hole is smaller than 1.5' a patch may be implemented utilizing silicon sealant in combination with patch material and automotive plastic fasteners. Reference manufactures recommendations. In any event the consultant should be contacted if there is any doubt.

Munitions/ Historical Rounds

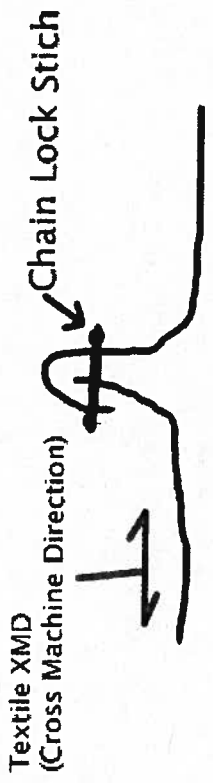
Danger Zone 334.1354 is directly offshore from the sit by approximately 1.5 Nautical miles. There is a possibility that unexploded ammunition or ordinance may exist undetonated or with other hazardous substances present. Workers and excavators and any works on site shall keep aware for potential live rounds, magazines, or other remnant explosives. All men should be briefed on what do in case such an event is encountered. Should ammunition or other remanets of ammunitions be encountered all works are to stop and the area is to be vacated.

Appendix A – NOAA Nautical Chart of Area





Toe Detail Section
Not To Scale

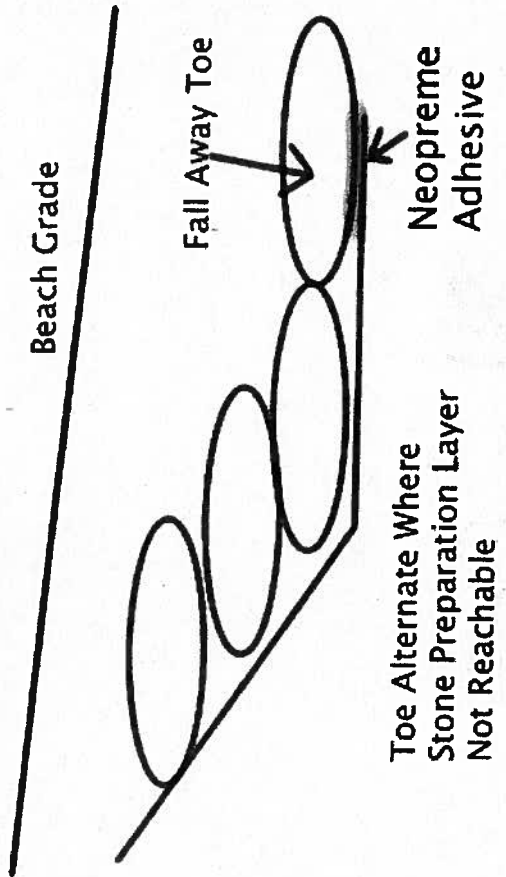


Stitching Detail for Separation Geotextile
Not to Scale

Details Drawing 1. Toe and Stiching Details

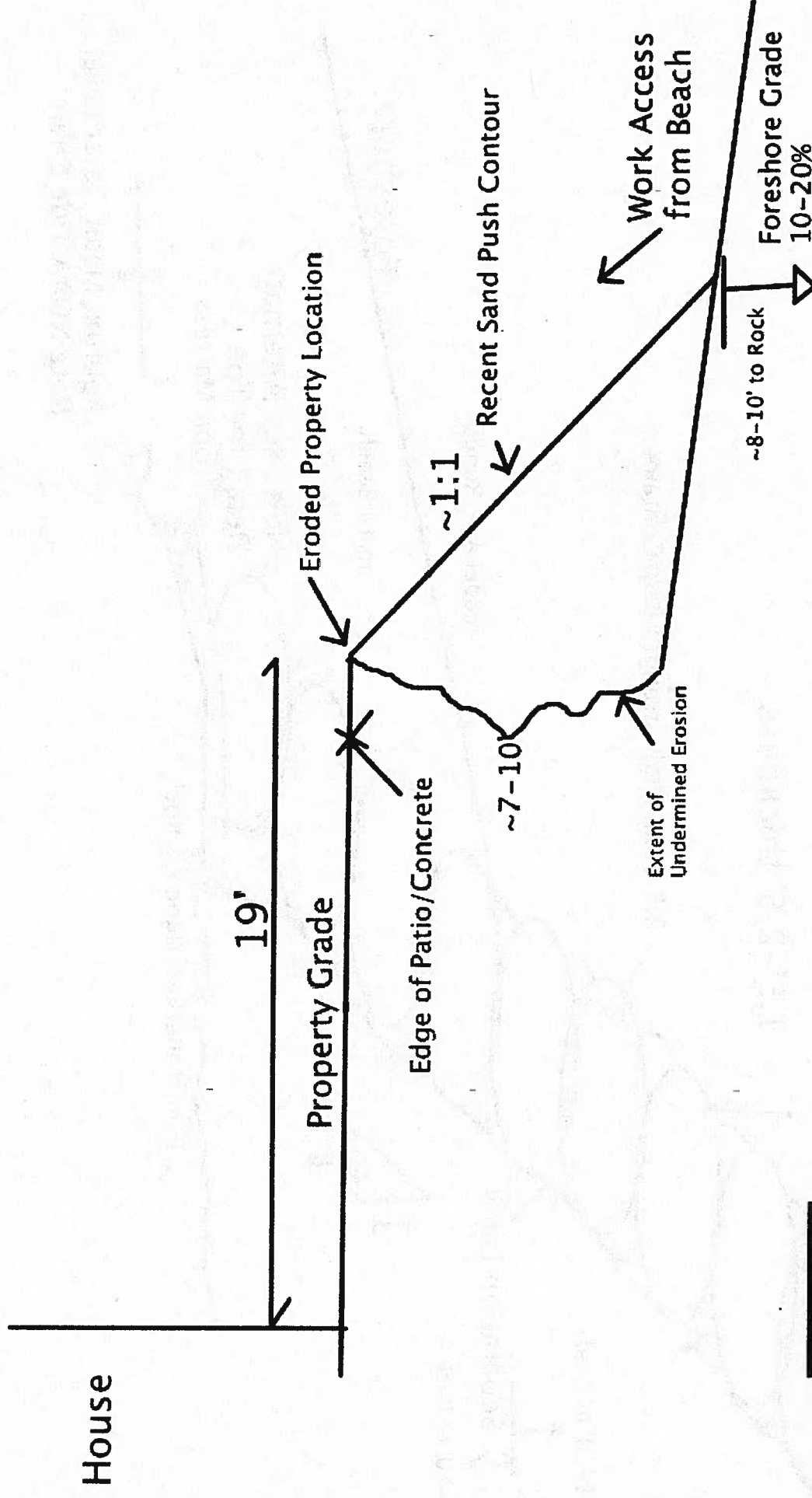
Drawn by: J. Little

Note: Separation Textile to be of Lesser Strength Than Container/Bag Textile



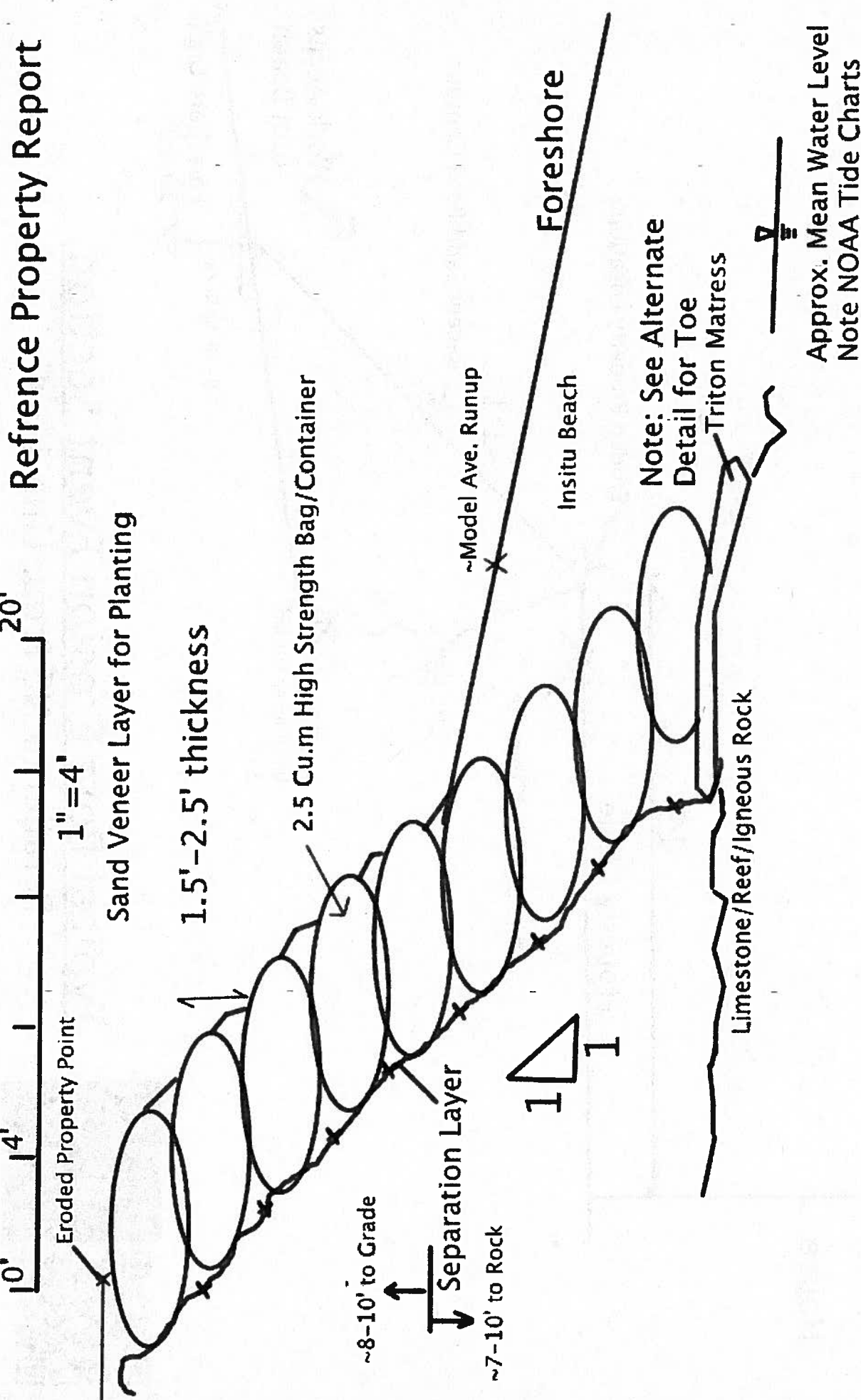
Alternate Toe Detail
Not to Sale





Typical Post Erosion Event Section Parallel to NE Prop. Line 1"=4'





Containerized Bag Slope Modular Design Section / 1"=4'

Approx. Mean Water Level
 Note NOAA Tide Charts

Little Environments LLC

Little Environments LLC

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

DLNR:OCCL:SL

Re: Emergency OA-14-07

JUN 12 2014

Gregory W. Kugle
Damon Key Leong Kupchak Haster
1003 Bishop Street, Suite 1600
Honolulu, Hawaii 96813-6452

Dear Mr. Kugle,

SUBJECT: RE: Request for Emergency Temporary Shore Protection at
59-165 Ke Nui Road, Apt. D, Sunset Beach, Oahu, Hawaii;
TMK (1) 5-9-02:017 (Owner: Glenn Wachtel).

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is responding to your May 30, 2014 letter providing additional information in connection with the request for emergency shore protection that was previously submitted by Mr. Wachtel and his engineer, Mr. Joseph Little (DLNR Ref. Emergency OA-14-07). The request is for emergency temporary shore protection to place geotextile (ELCOROCK®) sandbags along approximately 50 feet of the shoreline as temporary erosion control at TMK (1) 5-9-02:017, Sunset Beach, Oahu on behalf of the property owner Glenn Wachtel.

The request is for an Emergency Permit under Hawaii Administrative Rules (HAR) §13-5-35, Emergency Permits. Please note that HAR §13-5-35 specifically states that the permitted actions "shall be temporary in nature to the extent that the threat to public health, safety, and welfare, including natural resources, is alleviated (e.g., erosion control, rockfall mitigation). The emergency action shall include contingencies for removal methods, estimates for duration of the activity, and future response plans if required by the department."

As stated in the DLNR's February 6, 2014 letter to Mr. Little (Re: Emergency OA-14-07), the DLNR considers the need for Temporary Shore Protection to be alleviated at the present time, following completion of two sand pushing (dune restoration) projects at the subject property. DLNR respectfully disagrees with your opinion that "Mr. Wachtel's house presently qualifies as 'Imminently Threatened'" as defined in HAR §13-5-2, "For coastal erosion, 'imminently threatened' shall mean a distance of twenty feet or less from an actively eroding shoreline or erosion that will threaten the structure in less than six months." According to a property survey map provided by Mr. Little in his December 10, 2013 request letter (Appendix A. Pre-Erosion Survey and Little Environments LLC Erosion Notes), the top of the erosion scarp is within 30 feet of the west seaward corner and 19 feet of the east seaward corner of the single family residence on the seaward property. The scarp has been buried and stabilized following the two sand pushing efforts alleviating the "imminent threat." Whether an "Imminent Threat" existed at

EXHIBIT 15

the subject property prior to the sand pushing is questionable, considering the distance between the house and the erosion scarp is greater than 20 feet along all but the east seaward corner of the house.

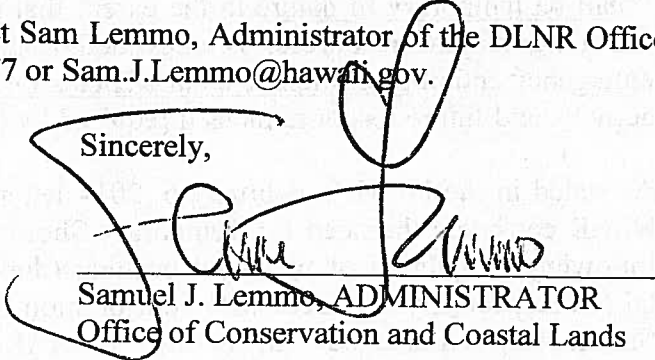
Authorizations for emergency erosion control from DLNR are temporary and intended to provide the applicant with time to develop a longer-term erosion management plan. Emergency permits for erosion control typically require the applicant to remove the structure within a few years. We note in the "Environmental and Geosynthetic Design for Erosion Abatement and Coastal Restoration" by Little Environments LLC (dated December 8, 2013) that "The design life of the project is expected to be 30 years with reasonable maintenance and upkeep." This statement indicates that the proposed structure is not intended to be "temporary in nature" as required for Emergency Permits under HAR §13-5-35.

DLNR respectfully disagrees with your assertion that "Allowing emergency protection [with the proposed geotextile sand bag structure] will also protect the natural resources of the beach and ocean." The Department's experience with these types of structures has shown that the impacts to the beach environment from these temporary structures are often similar to impacts from permanent shoreline armoring (seawalls, revetments), including encroachment (placement loss) on the beach from the footprint of the structure, beach narrowing through "passive erosion" (retreat of the water line toward the structure), and "flanking erosion" or "end effects" causing accelerated erosion on adjacent shorelines. As a result, the Department no longer wishes to allow these types of sandbags for emergency shore protection and is actually working to have these types of structures removed where the emergency has passed or the authorization time frame has expired. These types of structures are more properly considered within the normal Conservation District Use Application process "Shoreline Erosion Control" Section 13-5-22 (P-5)(D-1), Hawaii Revised Statutes.

Your letter asks, "What modifications could be made to the proposed shoreline protection to satisfy the Department?" The Department is preparing to address erosion emergencies that may arise in the coming winter high wave season, including working closely with county and federal regulatory agencies. Specifically, the DLNR will continue to monitor the performance of the sand bank at Ke Nui Road and remains available to discuss future sand pushing efforts.

Should you have any questions, please contact Sam Lemmo, Administrator of the DLNR Office of Conservation and Coastal Lands at 587-0377 or Sam.J.Lemmo@hawaii.gov.

Sincerely,



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

CC: Mr. Glenn Wachtel (owner)
Mr. Joseph Little
BLNR Chairperson
Director, Honolulu DPP

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DEPARTMENT OF LAND AND NATURAL RESOURCES**

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LAND
STATE PARKS

DLNR:OCCL:SL

Emergency OA-14-57

William Kernot
59-151A Ke Nui Road
Haleiwa, HI 96712

JUL - 8 2014

Dear Mr. Kernot,

SUBJECT: RE: Request for Emergency Temporary Shore Protection at 59-149, 59-151A, and 59-165D Ke Nui Road, Haleiwa (Sunset Beach; TMKs (1) 5-9-002:004, 005, and 017)

The Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands (OCCL) is responding to your July 2, 2014 request to place a protective sand bank (dune) as temporary erosion control along approximately 200 feet of the shoreline fronting 59-149, 59-151A, and 59-165D Ke Nui Road, Haleiwa, Oahu (Sunset Beach; TMKs (1) 5-9-002:004, 005, and 017).

Recent erosion from seasonal waves, possibly combined with a long-term trend of beach erosion, has created a steep eroded bank (scarp) that may pose a threat to single-family residences on the subject properties, if the erosion continues as likely through the summer and early fall. The present situation is similar to the beginning of the erosion problems which culminated in September - October of 2013 causing damage and land loss to the subject and neighboring properties. In response, sand pushing (sand scraping and movement by mechanical means) projects were given emergency authorization by DLNR and conducted by the property owners in October, 2013 and January, 2014. The purpose of the July, 2014 requested sand push is to provide added protection in anticipation of further beach erosion, which typically continues through the summer and into the early fall in this area.

The request is to push additional sand to supplement the existing protective sand banks to improve seasonal erosion protection using clean locally-sourced beach sand from an area of seasonal beach accretion fronting Paumalu Stream mouth. Sand will be scraped (excavated) from the dry beach area fronting Paumalu Stream mouth to a maximum depth of 4 feet (not below the grade of the existing channel, see Enclosure) using heavy machinery (e.g., excavator or front loader) and transported along the beach to the subject properties. Sand will be placed on the seaward side of the existing protective sand banks creating an approximate 1:1 slope. No sand will be removed nor will any work be done below the high water line.

EXHIBIT 16

DLNR authorizes the sand pushing and placement of a protective sand bank, fronting the subject property, as described above for temporary erosion protection. Additional authorization, including Right of Entry, is required from Honolulu City and County Department of Parks and Recreation before you may proceed.

DLNR authorizes the placement of a sand bank fronting the subject properties in an effort to protect public health, welfare, and safety on the subject property under Hawaii Administrative Rules §13-5-35, Emergency Permits (a) "Notwithstanding any provision of this chapter, the chairperson or deputy director of the department in the absence of the chairperson may authorize through an emergency permit any land use deemed to be essential to alleviate any emergency that is a threat to public health, safety, and welfare, including natural resources, and for any land use that is imminently threatened by natural hazards. These actions shall be temporary in nature to the extent that the threat to public health, safety, and welfare, including natural resources, is alleviated (e.g., erosion control, rockfall mitigation). The emergency action shall include contingencies for removal methods, estimates for duration of the activity, and future response plans if required by the department."

In addition, the proposed project is minor in scope and may be considered an exempt action under State environmental laws under Section 11-200-8(A)(1), Hawaii Administrative Rules (HAR) "Operations, repairs, or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing."

Terms and Conditions

The DLNR has no objections to the placement of a sand bank fronting the subject properties at TMKs (1) 5-9-002:004, 005, and 017 as temporary erosion protection provided that you and all participating landowners adhere to the following terms and conditions:


1. That in issuing this letter, the Department and Board has relied on the information and data that the applicant has provided in connection with this letter. If, subsequent to this letter, such information and data prove to be false, incomplete or inaccurate, this letter may be modified, suspended or revoked, in whole or in part, and/or the Department may, in addition, institute appropriate legal proceedings;
2. It is understood that the sand berm is a temporary response to prevent the loss of the existing residences, which are threatened by both chronic and seasonal wave run-up and erosion. Subsequent erosion control efforts will require a new authorization;
3. It is understood that the terms of this authorization may be modified by the Department prior to and during construction, if beach conditions change;
4. The applicant will notify the Department no less than 24 hours prior to beginning construction operations;
5. The Contractor shall perform the work in a manner that minimizes environmental pollution and damage as a result of construction operations. The environmental resources

- within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of the construction period;
6. No materials shall be placed on the sand bank, including but not limited to tarps, sandbags or fencing, without prior authorization from DLNR;
 7. The applicants shall not induce, plant, or cultivate vegetation atop the protective sand bank, without prior authorization from DLNR;
 8. At the conclusion of work, the area shall be cleaned of all construction material and the site shall be restored to a condition acceptable to the Chairperson;
 9. The Applicant will prepare a completion report for the project. It will summarize the construction and detail any deviation from the proposed plans;
 10. The activity/use shall not adversely affect a Federally listed threatened or endangered species or a species proposed for such designation, or destroy or adversely modify its designated critical habitat;
 11. The activity/use shall not substantially disrupt the movement of those species of aquatic life indigenous to the area, including those species, which normally migrate through the area;
 12. When the Chairperson is notified by the applicant or the public that an individual activity deviates from the scope of the activity/uses, or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the applicant to undertake corrective measures to address the condition affecting these resources. The applicant must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
 13. When the Chairperson is notified by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the State Department of Land and Natural Resources that an individual activity/use or activities conducted under this letter is adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the applicant to undertake corrective measures to address the condition affecting these resources. The applicant must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
 14. Where any interference, nuisance, or harm may be caused, or hazard established by the authorized activities/uses, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm or hazard;
 15. No contamination of the marine or coastal environment (trash or debris) shall result from project-related authorized activities/uses;
 16. No motorized construction equipment is to be operated in the water at any time;

17. In the event there is a petroleum spill on the sand, the operator shall promptly remove the contaminated sand from the beach;
18. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under projects authorized under this letter;
19. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments for authorized projects;
20. In the event that historic sites, including human burials are uncovered during construction activities, all work in the vicinity must stop and the State Historic Preservation Division contacted at (808) 692-8015;
21. The applicant shall take measures to ensure that the public is adequately informed of the project activities/work once it is initiated and the need to avoid the project area during the operation;
22. Public access along the shoreline during construction shall be maintained so far as practicable and within the limitations necessary to ensure safety;
23. All construction material including sand shall be free of contaminants of any kind including: excessive silt, sludge, anoxic or decaying organic matter, turbidity, temperature or abnormal water chemistry, clay, dirt, organic material, oil, floating debris, grease or foam or any other pollutant that would produce an undesirable condition to the beach or water quality; and
24. The applicant shall implement standard Best Management Practices (BMPs), such as daily inspection of equipment for conditions that could cause spills or leaks; cleaning of equipment prior to operation near the water; the ability to contain and clean up fuel; fluid or oil spills immediately for activities/uses; and implementation of adequate spill response procedures, stormy weather preparation plans, and the use of silt curtains and other containment devices. Equipment must not be refueled in the shoreline area. If visible petroleum, persistent turbidity or other unusual substances are observed in the water as a result of the proposed operation, all work must cease immediately to ascertain the source of the substance. The DLNR/OCCL staff shall be contacted immediately at 587-0381, to conduct a visual inspection and to provide appropriate guidance.

Please acknowledge receipt of this approval with a signature from each landowner in the spaces provided below. Sign two copies, retaining one and returning the other to DLNR. Should you have any questions, please contact Sea Grant Extension Agent Brad Romine at the OCCL at (808) 587-0049 or Bradley.M.Romine@hawaii.gov.

Sincerely,



William J Aila, Jr, CHAIRPERSON
Board of Land and Natural Resources

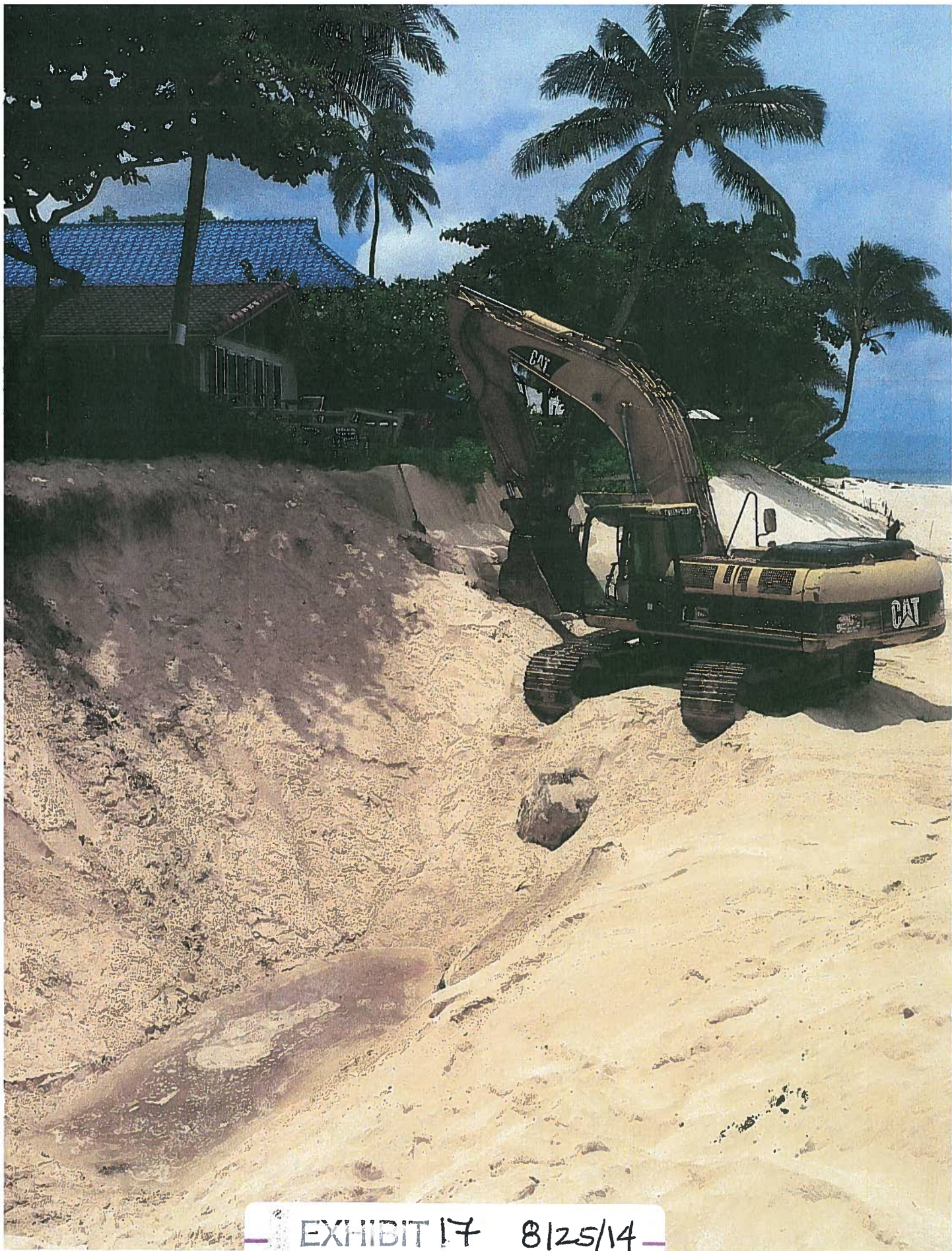
I concur with the conditions of this letter:

_____ Address (Ke Nui Rd)	_____ Permittee's Name (Print)	_____ Signature	_____ Date
_____ Address (Ke Nui Rd)	_____ Permittee's Name (Print)	_____ Signature	_____ Date
_____ Address (Ke Nui Rd)	_____ Permittee's Name (Print)	_____ Signature	_____ Date
_____ Address (Ke Nui Rd)	_____ Permittee's Name (Print)	_____ Signature	_____ Date
_____ Address (Ke Nui Rd)	_____ Permittee's Name (Print)	_____ Signature	_____ Date

CC: Hon Parks & Rec Director, Michelle Nekota
Hon Parks & Rec, Miles Hazama
DLNR Land, Barry Cheung
Hon DPP, Arthur Challacombe

OA-14-57 Emergency Authorization
Paumalu Stream Mouth, Sunset, Sand Borrow Area Limits (photo date 7/3/14, DLNR)





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**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

OFFICE OF CONSERVATION AND COASTAL LANDS
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HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

ENF: OA-15-3

AUG 26 2014

NOTICE OF ALLEGED VIOLATION AND ORDER

CERTIFIED MAIL RETURN RECEIPT

7013 0600 0001 9170 1844

Glenn M. Wachtel
59-165 Ke Nui Rd.
Haleiwa, HI 96712

**SUBJECT: ALLEGED UNAUTHORIZED EXCAVATION IN THE
CONSERVATION DISTRICT**

Sunset Beach, Ko'olaupia District, Island of Oahu
TMK: (1) 5-9-002:017

NOTICE IS HEREBY GIVEN that you may be in violation of Hawaii Administrative Rules (HAR) Title 13, Chapter 5, entitled Conservation District providing for land use within the Conservation District, enacted pursuant to Chapter 183C, Hawaii Revised Statutes (HRS).

The Department of Land and Natural Resources (DLNR) has determined that:

1. The location of the alleged unauthorized excavation occurred makai of Tax Map Key (TMK) (1) 5-9-002:017, and is located in the Conservation District Resource Subzone;
2. A site inspection by DLNR Office of Conservation and Coastal Lands staff on August 25, 2014 revealed that you have excavated the beach fronting your property. You indicated verbally that you intend to install a temporary erosion control structure.
3. This land use was not authorized by the Department of Land and Natural Resources under Chapter 13-5, HAR.

YOU ARE HEREBY ORDERED TO CEASE AND DESIST any further activities within the Conservation District. Pursuant to 183C-7, HRS, the Board of Land and Natural Resources may subject you to fines of up to \$15,000.00 per violation in addition to administrative costs. Should you fail to immediately cease such activity (alleged excavation) after written or verbal notification from the department, willful violation may incur an additional fine of up to \$15,000.00 per day per violation for each day in which the violation persists.

EXHIBIT 18

Wachtel – Unauthorized Erosion Control

To resolve this matter we urge you to immediately remediate the beach and remove the boulders from the site. The beach should be returned to its original form and grade that existed immediately prior to the work. Any work or construction, other than remediation of the natural beach, including the installation of an erosion control structure, may incur an additional fine of up to \$15,000.00 per day per violation for each day in which the violation persists.

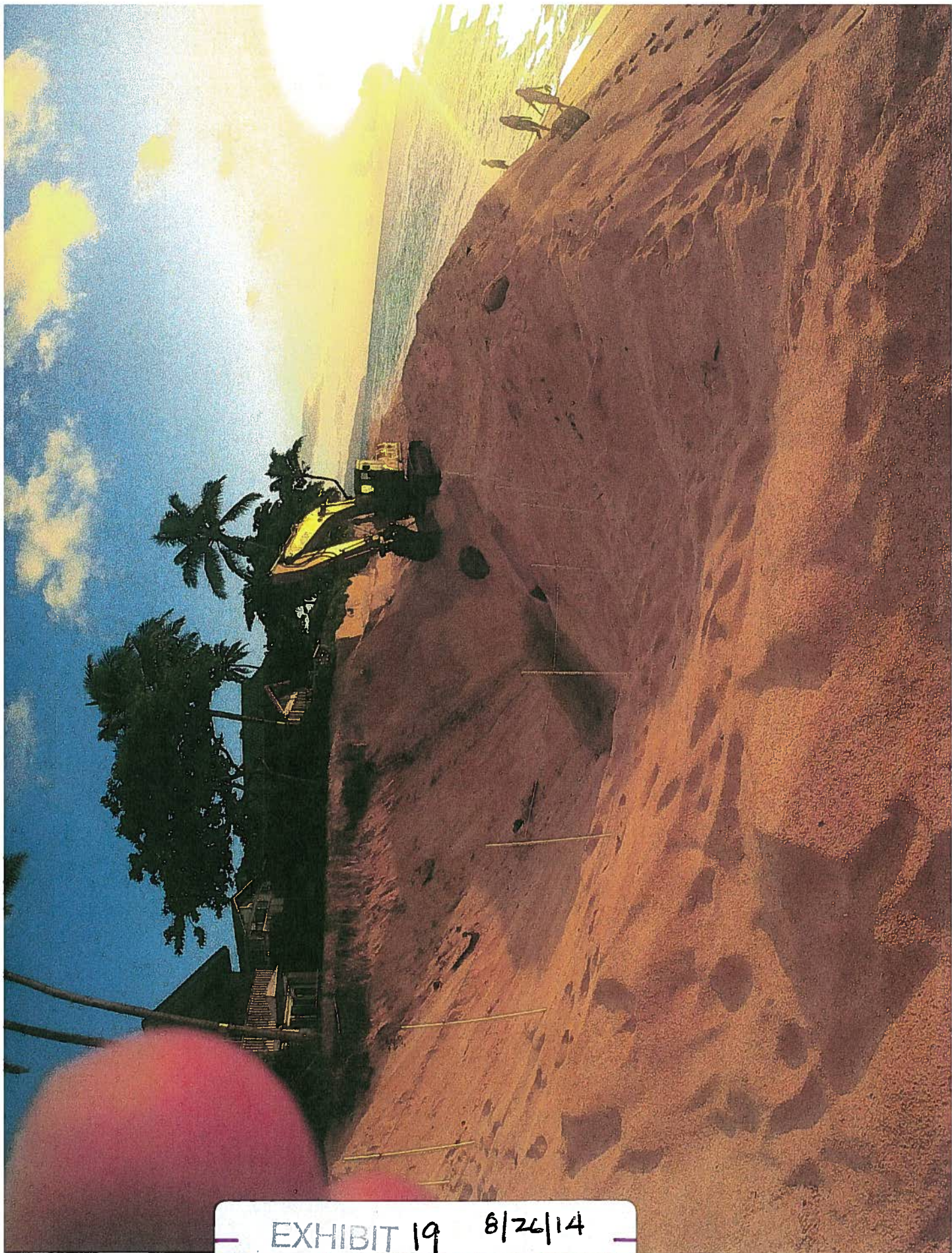
Please note any information provided may be used in civil proceedings. Should you have any questions, contact me at Office of Conservation and Coastal Lands at 808-587-0316.

Sincerely,



WILLIAM J. AILA Jr., Chairperson
Department of Land and Natural Resources

C *DOCARE*
 ODLO
 CCH - DPP





Cease & Desist
Sam J Lemmo to: gwachtel

08/26/2014 02:29 PM

Glenn, here is the Cease and Desist letter....
Let me know if you have any questions.



DOC139.pdf

Samuel J. Lemmo, Administrator ><))))>
Office of Conservation and Coastal Lands
Department of Land and Natural Resources
1151 Punchbowl Street
Honolulu, Hawaii 96813
Phn (808) 587-0377
Fax (808) 587-0322
www.hawaii.gov/dlnr/occl

EXHIBIT 20



EXHIBIT 21 8/27/14







EXHIBIT 21 8/27/14

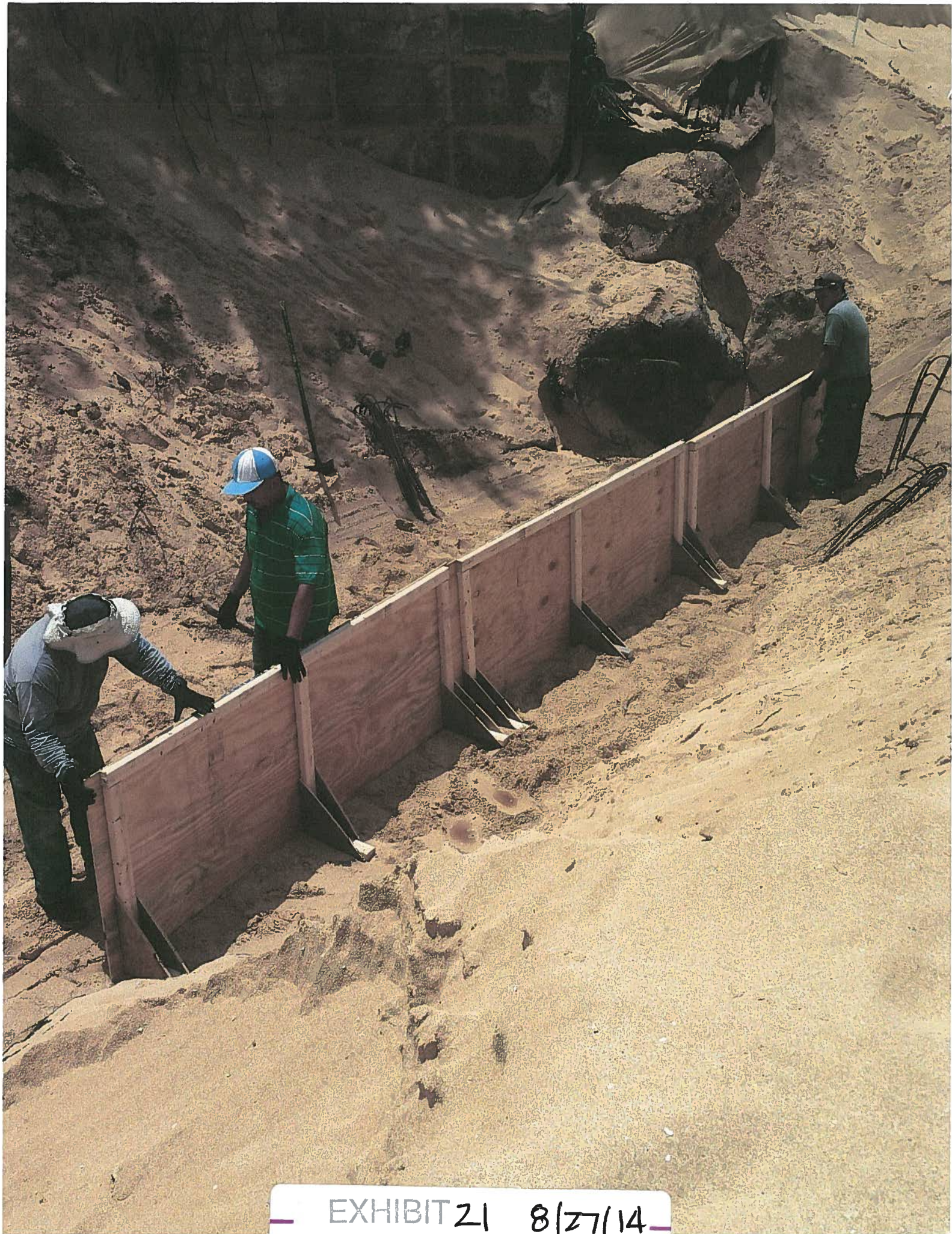


EXHIBIT 21 8/27/14

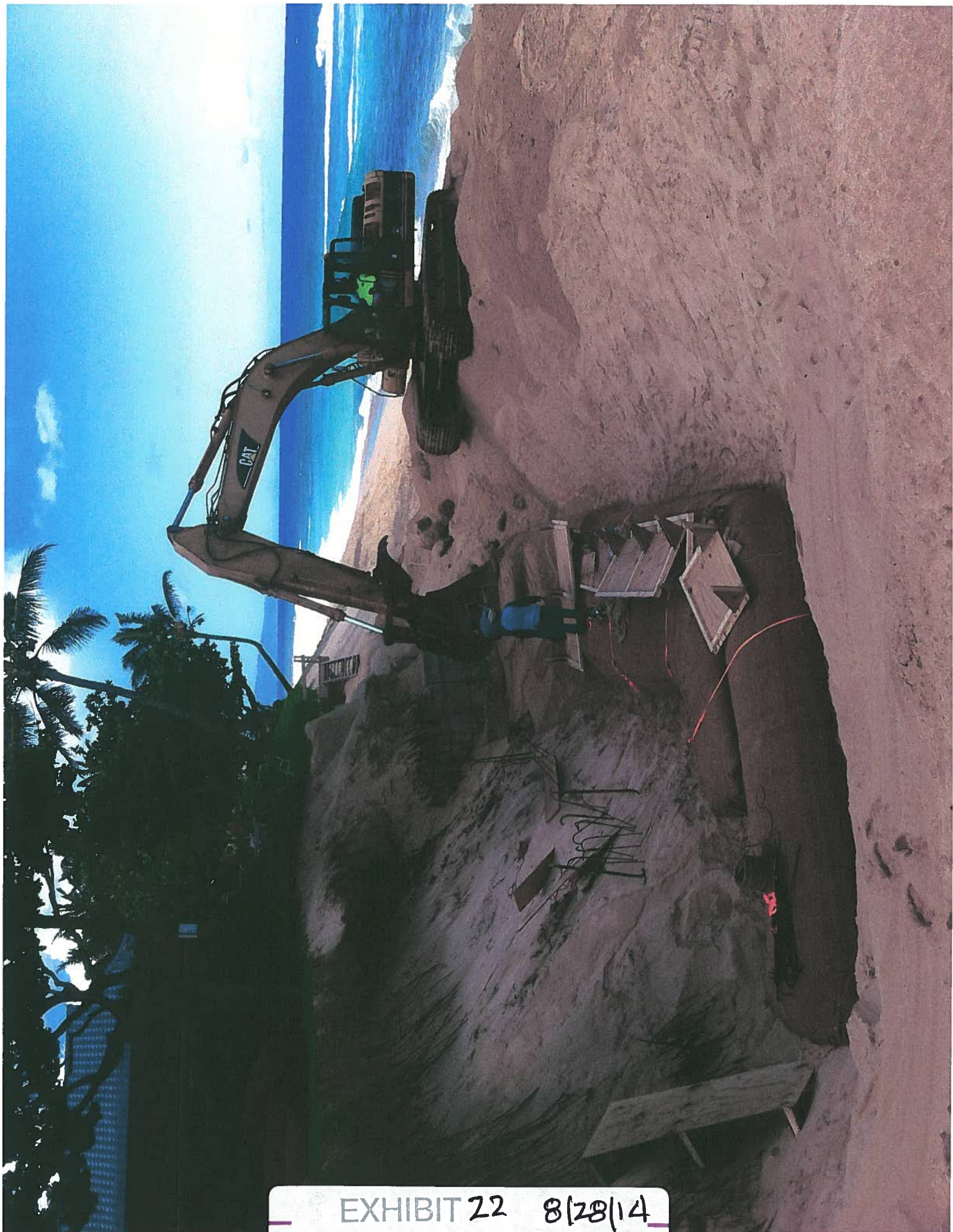


EXHIBIT 22 8/28/14



EXHIBIT 22 8/28/14



EXHIBIT 23 8/29/14

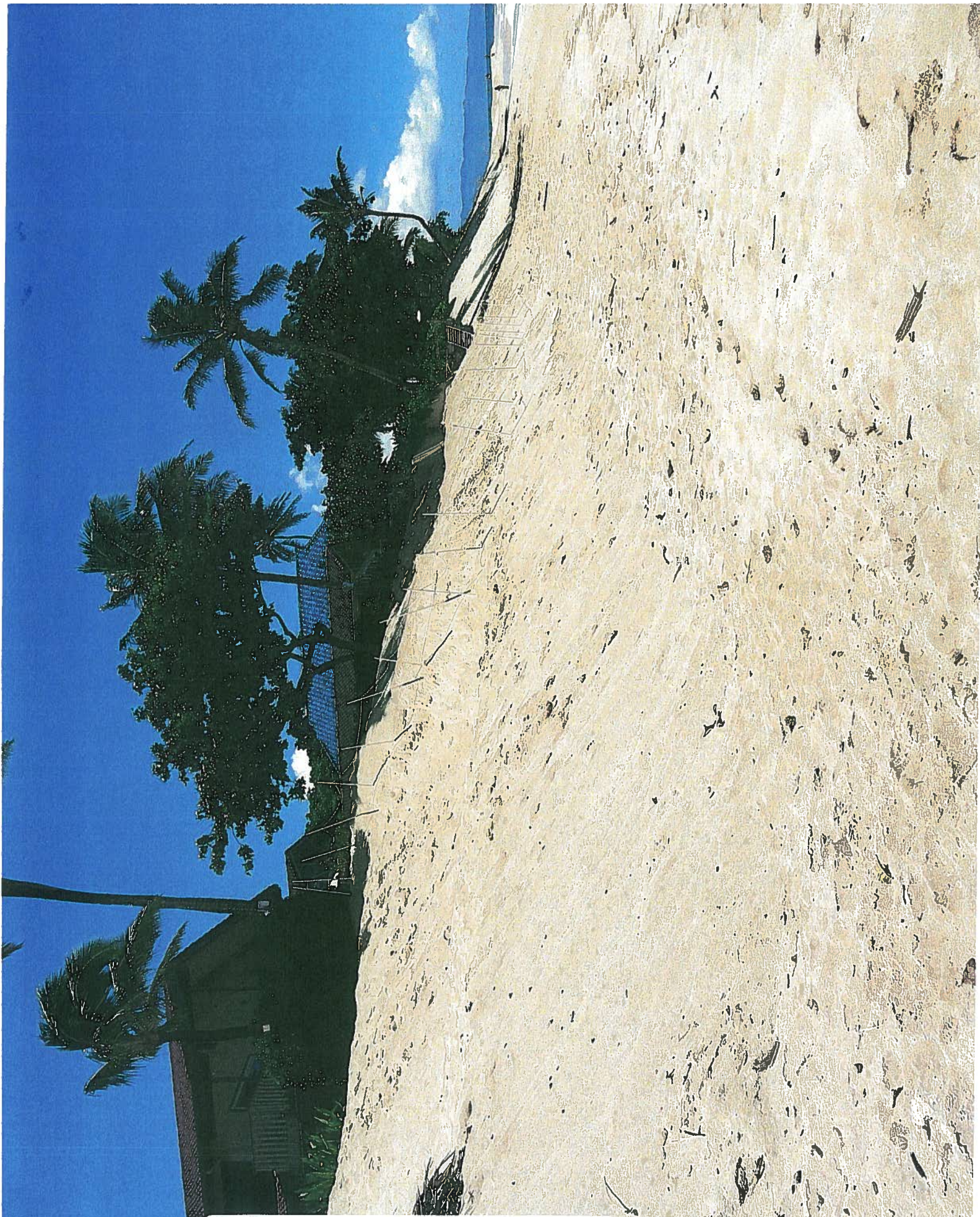


EXHIBIT 24 9/2/14

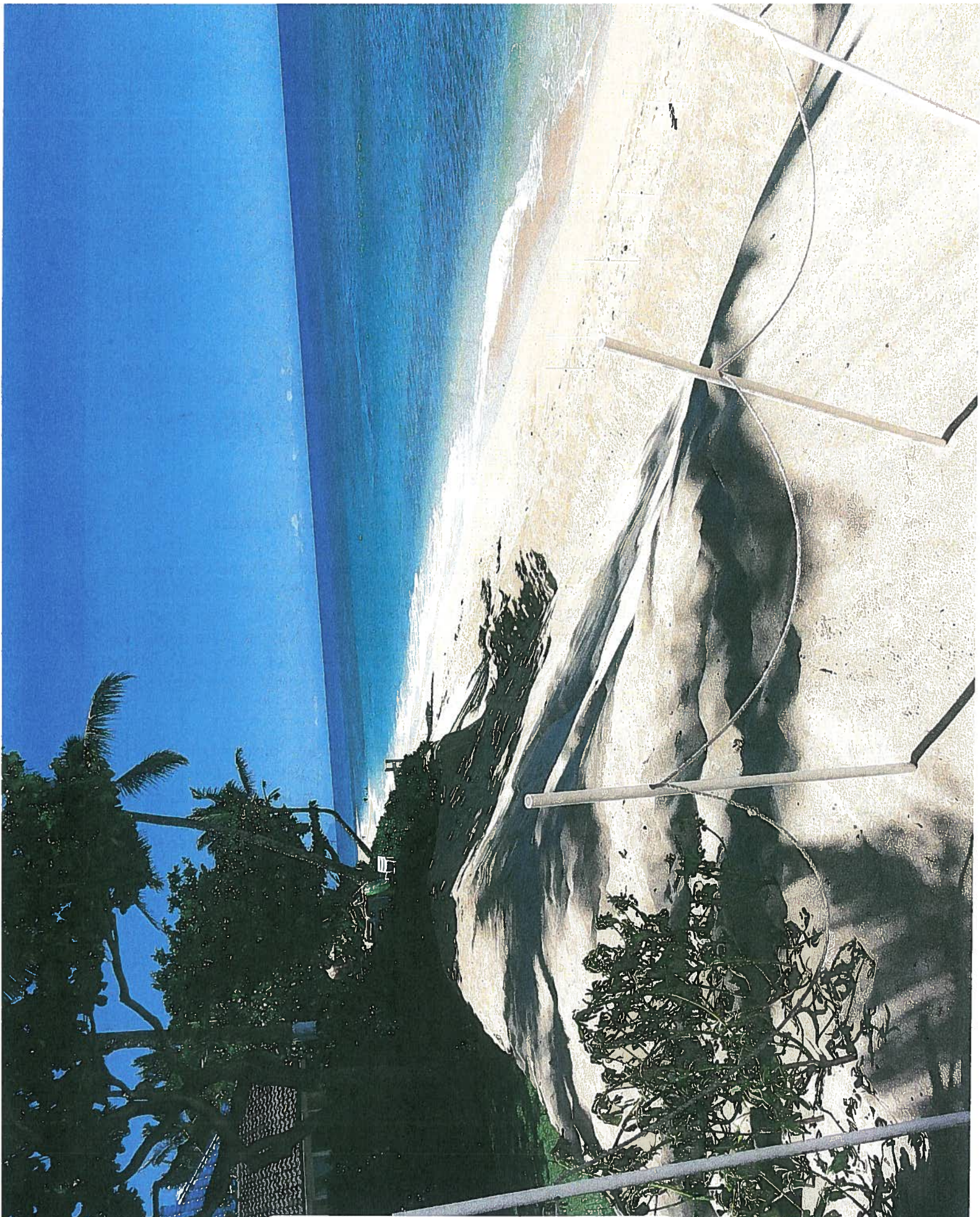


EXHIBIT 24 9/2/14



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

REF:OCCL:TM

CRVS

MEMORANDUM

TO: Note to File

THROUGH: Samuel J. Lemmo, Administrator

FROM: K. Tiger Mills, Staff Planner

SUBJECT: Civil Resource Violation System (CRVS) for the Conservation District

MAR 22 2011

On December 1, 2011, the Board of Land and Natural Resources delegated to the Chairperson the administrative processing of minor Conservation District civil resource violations in accordance with the Conservation District Administrative Sanctions Schedule. The Sanctions Schedule shall be utilized as a guideline by OCCL staff to implement Hawaii Administrative Rules §13-1, Subchapter 7, Civil Resource Violation System (CRVS) for the Conservation District in the assessment of fines and/or actions for resource violations that cause minor and very minor harm to the resource.

Attached is the staff report approved by the Board that contains the Conservation District Sanctions Schedule as **Exhibit 3**. In addition, the staff report also contains the Conservation District Violation Penalties Schedule Guidelines and Assessment of Damages to Public Lands or Natural Resources (**Exhibit 2**) that is intended to provide staff with a framework to systematically carry out enforcement powers in the determination and adjudication of civil and administrative penalties on moderate to major violations that must go before the Board.

EXHIBIT 25

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

December 1, 2010

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

REGARDING: Adoption of the Office of Conservation and Coastal Lands
Administrative Sanctions Schedule for the Processing of Minor
Conservation District Civil Resource Violations

BACKGROUND:

Civil Natural Resource Violations Act

In 2004, the Legislature established the civil natural resource violations act law under Chapter 199D, Hawaii Revised Statutes (HRS). The purpose was to provide a mechanism to process violations of the Department's regulations for which administrative penalties have been authorized by legislative act or rules adopted that could be applied by all divisions of the Department.

Civil Resource Violations System

On February 27, 2009, the Hawaii Administrative Rules (HAR), Chapter 13-1, Subchapter 7, Civil Resource Violation System (CRVS) became effective. The purpose of the CRVS was to handle the Department's minor civil violation cases and to provide guidance to staff when issuing violation notices under §13-1-54, HAR. Some of the objectives of the Civil Resource Violations System are to provide a fair, fast and cost-effective enforcement measures and to expedite administrative processes that benefits the parties, the public and the department. Matters would be processed as a civil proceeding instead of a criminal proceeding with standard fines, no court date and no criminal record.

On March 13, 2009, the Board of Land and Natural Resources adopted the Administrative Sanctions Schedule for the Department to use as a guideline to resolve civil resource violations administratively under chapter 13-1, subchapter 7, HAR (Exhibit 1). The strategy for implementing the CRVS rules is for the Department of Land and Natural Resources agencies to develop an administrative Sanction Schedule that identifies minor civil resource violations that could be processed through the CRVS. The Board has recently approved administrative Sanction Schedules for the Divisions of Aquatic Resources and Boating and Ocean Recreation.

Conservation District Violation Penalties Schedule

Act 217 passed by the 24th State of Hawaii Legislature (effective July 7, 2008) amended Hawaii Revised Statutes (HRS) to increase the maximum penalty for a conservation violation from up to \$2,000.00 per violation to up to \$15,000.00 per violation in addition

APPROVED BY THE BOARD
LAND AND NATURAL RESOURCES
AT ITS MEETING HELD
DEC - 1 2010

ITEM K-1

to administrative costs, land and habitat restoration cost, damages to public land or natural resources or any combination thereof.

With the substantial increase in fines, the Office of Conservation and Coastal Lands staff (OCCL) developed an internal penalty guideline that seeks a logical and consistent means to assess penalties and guide the settlement of Conservation District enforcement cases. Attached as **Exhibit 2** is the *Conservation District Violation Penalties Schedule Guidelines and Assessment of Damages to Public Land and Natural Resources (Guidelines and Assessments)* that is intended to provide Staff with a framework to systematically carry out its enforcement powers in the determination and adjudication of civil and administrative penalties. These guidelines are to be used for internal staff guidance, and should be periodically reviewed to determine their effectiveness, and whether refinements are needed.

For major conservation district violations, a recommendation would be reviewed by the Board at a public meeting, testimony from the parties and the public would be allowed to be presented and the Board would make a determination whether a fine is warranted and if so, the monetary amount. Should a violator wish to contest the Board findings, they may do so under Chapter 13-1, HAR and Chapter 91, HRS.

PROPOSED CONSERVATION DISTRICT SANCTION SCHEDULE

Within the developing *Guidelines and Assessments*, OCCL identified different degrees of conservation district land use violations and the recommended actions for resolution of violations. Violations that were ranked as minor and very minor harm to the resources are proposed to be processed administratively through the CRVS at a relatively low level maximum fine. Violations ranked as moderate or major would still be submitted to the Board for consideration.

The OCCL is seeking Board approval for a specific delegation of authority to the Chairperson to process minor to very minor violations as discussed in the attached penalty schedule **Exhibit 3**. This schedule would be applied by OCCL staff to assess minor violations of the Conservation District to be processed under the CRVS.

Unauthorized land uses that could be considered minor violations are:

- Identified land uses that could have been authorized under a Site Plan Approval (SPA) pursuant to 13-5, HAR;
- Non-identified land uses that are similar to an identified land use that would require a SPA;
- Vegetation removal or clearing of less than 2,000-ft² that does not include threatened, endangered, or commercially valuable flora;
- Permit non-compliance; and
- Shoreline vegetation encroachment within beach transit corridors.

In addition to the proposed monetary fines, resolution of minor violations may also include remediation of the impacted site, removal of the land use and/or obtaining an After the Fact Site Plan Approval. Noncompliance of a CRVS notice issued for a

Conservation District use violation may be forward to the Board to be vetted. Recommended penalties above \$2,000.00 shall also be forwarded to the Board.

For minor conservation district violations under the CRVS, notice of the civil resource violation shall be issued and the respondent has 21 days to respond. The respondent may comply with the sanctions assessed; may request mitigation; or may contest the notice. Contested matters shall be processed under Chapter 13-1, HAR and Chapter 91, HRS.

DISCUSSION

About fifteen years ago, the Department had a major backlog of pending cases of alleged violations of the Conservation District. Although most of the alleged violations were minor under §183-41 and §183-43, HRS (Now 183C, HRS) the only way to resolve violations was to go to the Board. In an effort to streamline the process and reduce the backlog of cases, the Board approved a voluntary program whereby the alleged violator could opt out of appearing before the Board and either pay a fine or request a hearing from a hearings officer. This was known as the Hearing Officers Administrative Penalty System (HOAPS).

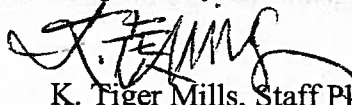
HOAPS had been a pilot program in the Department since 1994. Predecessor Offices of and the OCCL had been very successful in processing minor violations in addition to educating the public and deterring conservation district use violations. Over 300 minor violations have been processed under the HOAPS by the OCCL, therefore staff believes that the OCCL has collective and successful experience in utilizing the HOAPS.

The purpose of the CRVS is to give the Department authority to implement a system similar to the HOAPS as a mandatory department-wide program to efficiently process minor infractions of regulations that govern the use of our natural resources so that greater enforcement resources can be dedicated to more serious violations.

RECOMMENDATION

Staff recommends that the Board of Land and Natural Resources delegate to the Chairperson the administrative processing of minor civil resource violations under the Civil Resource Violation System in accordance with the attached Conservation District Sanction Schedule (**Exhibit 3**).

Respectfully submitted,



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

Approved for submittal:



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

State of Hawaii
Department of Land and Natural Resources
Civil Resource Violations System

ADMINISTRATIVE SANCTIONS SCHEDULE

Adopted on March 13, 2009

By the Board of Land and Natural Resources

The following Administrative Sanctions Schedule is adopted as a guideline for the Department of Land and Natural Resources to be used under the Civil Resource Violations System (CRVS).

PART 1. GENERAL PROVISIONS

Item 1-1. Objective

This Administrative Sanctions Schedule ("Schedule") seeks to provide a Department-wide standard policy guideline for all divisions of the Department of Land and Natural Resources (DLNR or "Department") in processing the civil resource violations so as to promote:

- Voluntary compliance of state law for the protection of Hawaii's natural and cultural resources,
- Fair and cost-effective process for all parties involved, and
- Deterrence of violations.

Item 1-2. Legal Authority

This Schedule is adopted pursuant to §171-6 and Chapter 199D, Hawaii Revised Statutes (HRS), §13-1-70, Hawaii Administrative Rules (HAR), and other statutes and administrative rules of the Department.

Item 1-3. Applicability

The Department shall follow this Schedule when processing a civil resource violation under the CRVS pursuant to Chapter 13-1, Subchapter 7, HAR.

Item 1-4. Denial of Application for Cause

If a person is a respondent in a pending case with the CRVS, the Department may deny any application submitted by such person to the Department for any regulatory permit, license, or a renewal of such, or may issue one with additional conditions upon full payment of the CRVS fines assessed, subject to the review by a hearing officer and the Board or its delegate if the CRVS case is properly contested.

Item 1-5. Delegation of Power to Suspend Permits and Licenses Issued by the Department

- (a) Unless otherwise provided by law or in this Schedule, if a respondent has been issued a CRVS violation notice for any violation related to a particular DLNR permit or license issued to or held by the respondent and fails to comply with the notice within 21 days of the service of the notice, the Chairperson is authorized to suspend the permit or license until the respondent comes into full compliance with all sanctions and requirements imposed through the CRVS.
- (b) A suspension of a permit or license shall mean that the permittee or licensee is not entitled to conduct any activity pursuant to the permit or license until such time as the permit or license is reinstated. Suspension of a permit or license will not affect the expiration of the term of the permit or license.
- (c) The Chairperson may reinstate a suspended permit or license for good cause at any time upon petition of the respondent.
- (d) The Division Administrator shall reinstate a suspended permit or license upon a determination that the respondent has come into full compliance with the law and all violation notices previously issued.

Item 1-6. Delegation of Power to Revoke Permits and Licenses Issued by the Department

- (a) Unless otherwise provided in this Schedule, if a respondent is found to have committed three offenses under this Schedule in the past twelve months for any violation of state law or the terms or conditions of a particular DLNR permit or license issued to or held by the respondent, the Chairperson is authorized to revoke the permit or license for a period not to exceed six month.
- (b) If a permit or license revoked under this Schedule expires before the end of the revocation period, the revocation shall continue to be enforced by denying any application for the renewal or new issuance of a permit or license until the revocation period is over.
- (c) For good cause, the Chairperson may withdraw a revocation of a permit or license.

- (d) After the revocation period, the Division Administrator may reissue a revoked permit or license upon the respondent's application for renewal and payment of the fee that the Department charges for the renewal of the permit or license.

Item 1-7. Interpretation of the Schedule

The Chairperson and a hearing officer appointed pursuant to §13-1-57, HAR, shall have the power to interpret this Schedule, subject to review by the Board.

Item 1-8. Standard Forms

- (a) The Chairperson may make minor modifications and corrections to a standard form adopted by the Board for use in the CRVS if deemed necessary.
- (b) The Department shall use the standard form of Notice of Civil Resource Violation(s), as attached in Appendix 1-A, when preparing a violation notice pursuant to §13-1-62, HAR.

Item 1-9. Effective Dates

This Schedule and its subsequent amendments shall be effective upon adoption by the Board.

Appendix 1-A. Standard Form – Notice of Civil Resource Violation(s)



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
NOTICE OF CIVIL RESOURCE VIOLATION(S)



Notice No. CRVS -- 09

Date:

TO RESPONDENT: Any administrative proceedings instituted pursuant to this Notice shall not preclude the State from pursuing separate criminal prosecution against you for an offense committed in the same course of conduct.

COMPLAINT: The undersigned official/officer of the Department of Land & Natural Resources (DLNR) states that the named respondent did commit the civil resource violation(s) noted below.

A. RESPONDENT INFORMATION				
Last Name / Company Name		First Name, M.I.		Sex <input type="checkbox"/> M <input type="checkbox"/> F
Street Address		City		Date of Birth
State & ZIP (Country)				
ID Type	Issued By	ID No.	Juvenile <input type="checkbox"/>	Phone

B. VEHICLE / VESSEL INFORMATION (If applicable)			
<input type="checkbox"/> Vehicle	License Plate No., VIN / Vessel Type, ID, Name		License State
<input type="checkbox"/> Vessel			Year / Make / Model / Color

C. STATEMENT OF FACTS		
Date	Time <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.	Violation Site: Island / Location / TMK
DESCRIPTION: (Specify any witness, evidence, damage, injury and seizure. Attach additional sheet if needed.)		

D. CITATION(S)			E. FINES ASSESSED	
No.	Authority	Civil Resource Violation	Comply in 21 days	After 21 days
1	\$		\$	\$
2	\$		\$	\$
3	\$		\$	\$
TOTAL ADMINISTRATIVE FINE ASSESSED >>>			\$	\$

F. OTHER SANCTIONS AND REQUIREMENTS	
TO RESPONDENT: In addition to any fines assessed in Section E, you must comply with the following sanctions and/or requirements within 21 days of the service of this Notice, unless a different period is provided in this section below:	

G. ISSUANCE AND SERVICE		
F.I. & Last Name	Agency	Signature
Service: <input type="checkbox"/> In Person <input type="checkbox"/> Certified Mail <input type="checkbox"/> Unoccupied vehicle/vessel		
Issued by APO:		

H. ACKNOWLEDGEMENT
I acknowledge the receipt of this Notice. This is not an admission of responsibility.
Respondent Signature

>>> CONTINUE TO BACK PAGE >>>

I. SUMMONS TO RESPONDENT

Pursuant to §199D-1, HRS, and §13-1-63, HAR, you are hereby summoned and required to submit an answer to this Notice within twenty-one (21) days from the date of service of this Notice. Submit your answer, payment, statement and/or evidence to DLNR/APO, 1151 Punchbowl Street, Room 130, Honolulu, Hawaii 96813, or at www.hawaii.gov/dlnr/apo. If you fail to answer within 21 days, a default decision for the relief demanded in this Notice will be entered against you, and you may be subject to additional actions without further notice to you.

J. ANSWER BY RESPONDENT (Required)**INSTRUCTIONS:**

1. You have three options in answering this Notice. **CHOOSE ONLY ONE** and check the corresponding box below. Sign and date your answer and return it to the DLNR Administrative Proceedings Office (DLNR/APO) at the address listed above or answer at the website address listed above.
2. If you choose Option 1, include with your answer payment in the amount stated in the first column of Section E if you are answering within 21 days of receiving this Notice or in the amount stated in the second column if after 21 days. Make your check payable to State of Hawaii. For credit card payment, see attached envelope. You are also required to comply with all sanctions and requirements specified in Section F. Your case will be concluded.
3. If you choose Option 2, include with your answer a statement and evidence showing the mitigating circumstances. A hearing officer will review your request and render a decision without holding a hearing, and may adopt, modify or reverse any sanctions assessed in this Notice. This decision is final and may not be contested or appealed.
4. If you choose Option 3, include with your answer a statement and evidence showing the reasons of your contest. A Notice of Administrative Hearing will be mailed to you within 30 days of your answer.
5. If answer by mail, return this original page to DLNR/APO. Retain a copy of everything you submit for your records. For inquiries, contact DLNR/APO at (808) 587-1496, DLNR.CO.APO@hawaii.gov or www.hawaii.gov/dlnr/apo.

<input type="checkbox"/> Option 1: Comply	<input type="checkbox"/> Option 2: Request Mitigation	<input type="checkbox"/> Option 3: Contest
I <u>DO NOT</u> contest this Notice, and have complied with all sanctions assessed herein.	I <u>DO NOT</u> contest this Notice, but request mitigation in the assessed sanctions.	I <u>DO</u> contest this Notice, and request an administrative contested case hearing.

STATEMENT OF RESPONDENT: (Please type or write legibly. Use additional sheet if necessary.)

Print your name:

Address:

Signature:

E-Mail:

Date:

Phone:

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CONSERVATION DISTRICT VIOLATION PENALTIES SCHEDULE GUIDELINES AND ASSESSMENT OF DAMAGES TO PUBLIC LAND OR NATURAL RESOURCES

September 2009

Relating to penalties for violations within the Conservation District

Act 217

1 INTRODUCTION

Hawaii Revised Statutes (HRS) §183C-7 was amended on July 7, 2008 to increase the maximum penalty for a Conservation District violation to up to \$15,000 per violation, in addition to administrative costs, costs associated with land or habitat restoration, and damages to public land or natural resources, or any combination thereof.

This document, *Conservation District Violation Penalties Schedule Guidelines and Assessment of Damages to Public Land and Natural Resources* is intended to provide the Office of Conservation and Coastal Lands (OCCL) with a framework to systematically carry out its enforcement powers, in the determination and adjudication of civil and administrative penalties. These guidelines are to be used for internal staff guidance, and should be periodically reviewed to determine their effectiveness, and whether refinements are needed. These guidelines are consistent with HAR §13-1, Subchapter 7, Civil Resource Violation System (CRVS).

2 CONSERVATION DISTRICT VIOLATION PENALTIES SCHEDULE GUIDELINES

The charging and collecting of penalties is an enforcement tool that may be used to ensure future compliance by the responsible party and others similarly situated. The penalty amount(s) shall be enough to ensure immediate compliance with HAR §13-5 and HRS §183C, and cessation of illegal activities. Penalties will be assessed for each action committed by an individual(s) that conducts an unauthorized land use and that impairs or destroys natural resources protected under Chapter §183C, HRS.

The Staff will treat each case individually when assigning conservation district penalties using the following framework, and additional considerations and factors for upward or downward adjustments. The staff of the OCCL (Staff) will use these penalty schedule guidelines to issue violation notices and to make recommendations to the Board of Land

and Natural Resources (Board), Chairperson of the Board of Land and Natural Resources (Chairperson), or Presiding Officer, whom may ultimately adjudicate the Conservation District penalties. These guidelines presume that all cases in which a violation has occurred, the Chairperson, Board, or Presiding Officer may also assess administrative costs, damages to public land or natural resources, and costs associated with land or habitat restoration.

2.1 PENALTY CALCULATION

The penalty range for these actions will be substantially-determined based on the type of permit that would have been required if the individual(s) had applied to the Department of Land and Natural Resources (Department) or Board for pre-authorization to conduct the identified use, under Hawaii Administrative Rules (HAR) §13-5-22, 23, 24, 25. Assessing the penalties according to the Conservation District permit type accounts for the level of review or scrutiny the unauthorized use would have received by the Department or Board in order to avoid damage to the natural resource. This graduated permit review framework corresponds to the level of actual or potential "harm to the resource"¹ caused by the violation.

Once the baseline for the penalty range has been established according the required permit, the penalty may be adjusted appropriately upward or downward according to the "harm to resource" caused or potentially caused by the violator's action and additional considerations and factors (See 2.1.4),² within the assigned penalty range. Where Staff was unable to associate the unauthorized use with a typical land use identified in HAR §13-5, Staff may try to associate the action with the most similar identified land use in HAR §13-5, or according to the "harm to the resource" caused by the violation. Table 1

¹ "Harm to resource" is an actual or potential impact, whether direct or indirect, short or long term, impact on a natural, cultural or social resource, which is expected to occur as a result of unauthorized acts of construction, alteration, or landscape alteration (See Appendix B: Definitions) *Adapted from Florida Department of Environmental Protection 2000 Administrative Fines and Damage Liability, Ch. 62B-34.*

² Penalty amounts may be adjusted up or down, based on additional considerations, such as the actual extent of the direct damages, significance of any offsite indirect impacts, environmental record of the violator, responsiveness of violator, etc. (See 2.1.4 Additional Considerations and Factors).

was created to demonstrate the penalty ranges for the type of required permit and "harm to resource" (See 2.1.1 or Appendix A).

The first two of the following sections explain the identified and non-identified land use framework. The next four sections: Tree Removal, Additional Considerations and Factors, Continuing Violations and Permit Non-Compliance, and In-Kind Penalties, provide guidance for the upward or downward adjustment of penalties based on the initial framework discussed in Section 2.1.1. Identified land use penalties.

2.1.1 Identified Land Use Penalties

The violation penalty range associated with each required permit will be assessed in accordance with the following harm to resource indices in this graduated framework.

Table 1. Penalty Guideline Framework

Harm to resource or potential for harm to resource	Identified land use permit beginning with the letter	Penalty Range
Major	D (Board)	\$10,000-\$15,000
Moderate	C (Departmental)	\$2,000-\$10,000
Minor	B (Site Plan)	\$1,000-\$2,000
Very Minor	(B) (Site Plan)	Up to \$1,000

Major Harm to the Resource/ Board Permit (D)

Violations identified with the required permit prefix (D) may incur a penalty in the range of \$10,000 - \$15,000 as a Board permit would have been required to minimize the possibility of causing "major harm to the resource." Examples of "major harm(s) to the resource" may include actions that cause substantial adverse impact to existing natural resources within the surrounding area, community, ecosystem or region, or damage to the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics. Such actions may include, but are not limited to, unauthorized single-family residences or unauthorized structures, grading or alteration of topographic features, aquaculture, major marine construction or dredging, unauthorized shoreline structures, major projects of any kind, mining and extraction, etc.

Moderate Harm to the Resource/Departmental Permit (C)

Violations identified with the required permit prefix (C) may incur a penalty in the range of \$2,000-\$10,000, as a Departmental permit would have been required, due to the possibility of causing "moderate harm to the resource." Examples of "moderate harm(s) to the resource" may be adverse impacts that degrade water resources, degrade native ecosystems and habitats, and/or alter the structure or function of a terrestrial, littoral or marine ecosystem. Such actions may include, but are not limited to, unauthorized landscaping causing ground disturbance, unauthorized alteration, renovation or demolition of existing structures or facilities, such as buildings and shoreline structures, maintenance dredging, agriculture, and animal husbandry, etc.

Minor Harm to the Resource/Site Plan Approval (B) Permit

Violations identified with the required permit prefix (B) may incur penalties as a site plan approval would have been required to assure that "minor harm(s) to the resource" are minimized. "Minor harm(s) to the resource" may incur a penalty of \$1,000-\$2,000 and could be actions causing limited to short-term direct impacts including, but not limited to, small-scaled construction, construction of accessory structures, installation of temporary or minor shoreline activities or similar uses.

Very Minor Harm to the Resource/(B) Permit

In instances in which a permit with the B prefix should have been sought but are considered to have only caused "very minor harm(s) to resource" a penalty of up to \$1,000 may be incurred. These "very minor harm(s) to the resource" could be actions in which the impact on the water resource or terrestrial, littoral or marine ecosystem was temporary or insignificant, and was not of a substantial nature either individually or cumulatively.

2.1.2 Non- Identified Land Use Penalties

Violations in which an unauthorized use is not identified in HAR §13-5-22, 23, 24, 25, Staff may try to associate the action with the most similar identified land use in HAR

§13-5 or according to the "harm to the resource" caused by the violation. Refer to the above section, *Identified Land Use Penalties*, for the most similar required permit prefix. To categorize the violation as a "harm to resource" when no similar use is identified in HAR §13-5, Staff will refer to Table 1 and the definitions of the four violation types of "harm to resource" (See Appendix B: Definitions).

2.1.3 Tree Removal

Violation penalties for the removal of any federal or state listed threatened, endangered, or commercially valuable tree may incur a fine of up to \$15,000 per tree. Removal of any native tree may incur a fine of up to \$1,000 per tree. The removal of any invasive tree shall be considered as removal/clearing of vegetation.

The Board, Department, or Presiding Officer also has the option of considering the removal of more than one tree as a single violation, similar to the removal/clearing of vegetation.³ If violation is considered as one violation, a fine amount of up to \$15,000 may be incurred, utilizing the guidelines for Major, Moderate, Minor, and Very Minor outlined in this schedule. However, the removal of any federally or state listed threatened or endangered tree shall be considered on a one violation per tree basis, with a maximum penalty of up to \$15,000 per tree.

2.1.4 Vegetation Removal/Vegetation Clearing

Past Staff recommendations and Board decisions have treated some cases of tree or removal as one citation of vegetation clearing/vegetation removal, this practice may be continued in violations resulting in minor or very minor harm to the resource. In accordance with the identified land uses within HAR §13-5 the assessment of vegetation removal has been based on a single citation of removal/clearing determined by the square footage of vegetation removed (See Table 3 Vegetation Removal). However, the

³ While Staff and Board decisions in MA-01-09, OA-05-10 and HA-06-08 have treated the removal of non-native, invasive, or noxious trees as one citation of "clearing" with mandatory remediation plans.

Department may see fit to assess the removal/clearing of threatened, endangered, or commercially valuable plants similar to the modified tree removal framework and may be penalized on an individual plant basis of up to \$15,000 per plant.

Table 3. Vegetation Removal

Action	Comparable Harm to Resource	Penalty Range
Removal of more than 10,000 sq. ft.	Major	\$10,000-\$15,000
Removal of Vegetation or of 2,000-10,000 sq. ft. of vegetation	Moderate	\$2,000-\$10,000
Removal of less than 2,000 sq. ft. of vegetation	Minor	\$1,000-\$2,000
Clearing of Invasive or noxious vegetation	Very Minor	Up to \$1,000 ⁴

Note: The clearing of threatened, endangered or commercially valuable plants will be addressed on a case-by-case basis, but depending on the importance of the species may incur a penalty of up to \$15,000 per plant. According to Table 2, the clearing of vegetation may incur a penalty of up to \$1/ sq. ft., as clearing 10,000 sq. ft. Staff could assess a penalty of \$10,000.

2.1.5 Additional Considerations and Factors

After Staff applies the Conservation District violation graduated penalty framework to identify the violation penalty range (1, 2, and 3 found above), the Staff may incorporate several considerations into the final assessed conservation district penalty including but not limited to, those factors identified in HAR §13-1-70 Administrative Sanctions Schedule; Factors to be Considered.

2.1.6 Continuing Violations and Permit Non-Compliance

Each day during which a party continues to work or otherwise continues to violate conservation district laws, and after the Department has informed the violator of the offense by verbal or written notification, the party may be penalized up to \$15,000 per day (penalties for every day illegal actions continue) by the Department for each separate offense.

⁴ Provided the harm to the resource and offsite damage were minimal.

Violation of existing approved Conservation District Use Permit (CDUP) conditions will be assessed on a case-by-case basis. Existing permit violations, in which deadlines are not met, may be individually assessed by the Staff as to prior violator conduct, knowledge, and compliance. Violation of permit conditions involving initiation and/or completion of project construction, notification of start and completion dates, failure to file legal documents, etc., may be considered very minor within the existing framework, although it should be noted that such actions may result in permit revocation. Failure to perform proper cultural, archeological, or environmental impact studies or failure to implement proper best management practices as identified in the standard permit conditions may be assessed more severely by Staff, as a moderate or major harm to the resource, due to the potential of greater adverse impacts to natural resources from the violator's failure to comply with the permit conditions, may have occurred.

2.1.7 In-Kind Penalties

Once the penalty amount has been established through the framework above, the Department may determine that the full payment or some portion of the penalty may be paid as an in-kind penalty project.⁵ This would not serve as a way to avoid payment but as a way to reduce the cash amount owed while allowing the Department to consistently enforce its rules. The in-kind penalty project is not designed to credit the violator for restoration or remediation efforts that may be already required, but to offset a portion of the cash penalty assessed. The in-kind penalty should be enough to ensure future compliance with HAR §13-5 and HRS §183C, by the violator and to deter other potential violators from non-compliance.

In-kind penalties will only be considered if (1) the responsible party is a government entity, such as a federal agency, state agency, county agency, city agency, university, or school board, or if (2) the responsible party is a private party proposing an environmental

⁵ In-Kind Penalty framework has been adapted from Florida Department of Environmental Protection, 2007, Program Directive 923, Settlement guidelines for civil and administrative penalties.

restoration, enhancement, information, or education project. In-kind penalties are limited to the following specific options:

- a. **Material and/or labor support for environmental enhancement or restoration projects.** The Department will give preference to in-kind projects benefiting proposed government-sponsored environmental projects. For shoreline violations, this may include state beach nourishment projects and dune restoration projects.
- b. **Environmental Information and Environmental Education projects.** Any information or education project proposed must demonstrate how the information or education project will directly enhance the Department's, and preferably the OCCL's, mission to protect and conserve Hawaii's Conservation District Lands.
- c. **Capital or Facility Improvements.** Any capital or facility improvement project proposed must demonstrate how the improvement will directly enhance the Department's and/or public's use, access, or ecological value of the conservation property.
- d. **Property.** A responsible party may propose to donate land to the department as an in-kind penalty. Donations will be handled by the Department's Legacy Lands program or similar program.

3 ASSESSMENT OF DAMAGES TO PUBLIC LAND OR NATURAL RESOURCES

Penalties to recoup damages to public lands or natural resources for the purposes of enforcement and remediation may be assessed in addition to Conservation District violation penalties assessed by the aforementioned guidelines. The assessed total value of the initial and interim natural resource(s) damaged or lost (compensatory damages) and the cost of restoration or replacement of the damaged natural resource(s) (primary restoration cost) along with any other appropriate factors, including those named in HAR §13-1-70, may be adjudicated by the Board. The total value may be estimated on a per annum basis, and then may be used to calculate the net present value of the initial and interim loss of natural resource benefits, until the ecosystem structure, function, and/or services are restored.

The cost of a full-scale damage assessment by the Department would be an administrative cost, which could be recouped by the Board from the landowner or offender pursuant §HRS 183C-7. In some cases, the damage to public lands or natural resources may occur on more than one ecosystem or habitat type, (e.g., sandy beaches, seagrass beds, and coral reefs). In such instances, damages for all impacted systems will be handled cumulatively.

Since all the ecosystem services provided by the ecosystem in question cannot be quantified (e.g., the aesthetic value), the values obtained are lower bound estimates, and may be applied to systems similar to the referenced ecosystem using the benefit transfer method. These valuations, to account for the loss of ecosystem services and the cost to restore them, may be applied to Hawaiian ecosystems on public lands: such as Koa and Ohia forests, coral reefs, seagrass beds, wetlands, dune and beach ecosystems, and other important Hawaiian ecosystems.

While each case is unique and individual in nature, the Department may not be able to conduct detailed damage assessments in each case, and may refer to past precedent,

2.1.8 Penalty Adjudication

Violation penalties may be adjudicated similarly to the harm to resource indices in the penalty guideline framework.

Comparable Harm to Resource	Identified land use permit and Penalty Range	Penalty Adjudicator
Major	\$10,000-\$15,000	Board
Moderate	\$2,000-\$10,000	Board
Minor	\$1,000-\$2,000	Chairperson or Presiding Officer
Very Minor	up to \$1,000	Chairperson or Presiding Officer

Major and Moderate Harm to the Resource

The Board may adjudicate penalties to violations categorized as causing or potentially causing major or moderate harm(s) to the resource. The Board may also adjudicate cases in which repeat violations, repeat violators, or egregious behavior were involved, or moderate to significant actual harm to the resource occurred. The Board may also adjudicate the payment of part or all, of the penalty as part of an In-kind penalty.

Minor and Very Minor Harm to the Resource

The Board may delegate to the Chairperson or a Presiding Officer the power to render a final decision in minor and very minor conservation district violations in order to provide expeditious processing and cost effective resolution. The Chairperson or appointed Presiding Officer may adjudicate penalties to minor and very minor violations characterized by inadvertent or unintentional violations and those violations which caused minor or very minor harm to the resource.

economic ecosystem valuations, and other published environmental valuations to estimate and assess damages on smaller scales (for valuations and publication examples see Appendix C: References and Appendix D: Damages Examples). Using the benefit transfer method to apply past precedents and published valuations in some situations would allow the Department to focus its administrative duties and time on remediation and restoration efforts. However, as ecological valuation and research continue, more comprehensive estimates may be produced and utilized.

The Board may allow restoration activities and damage penalties to be conducted and/or applied to a site different from the location of the damaged area where similar physical, biological and /or cultural functions exist. These assessed damages are independent of other, city, county, state and federal regulatory decisions and adjudications. Thus, the monetary remedies provided in HRS §183C-7 are cumulative and in addition to any other remedies allowed by law.

3.1 PRIMARY RESTORATION DAMAGES

The cost of land or habitat restoration or replacement, the cost of site monitoring, and site management may be assessed and charged as primary restoration damages. Restoration efforts will aim to return the damaged ecosystem to a similar ecological structure and function that existed prior to the violation. In cases in which the damaged ecosystem was predominately composed of non-native species, restoration efforts must re-vegetate Conservation District land and public lands with non-invasive species, preferably native and endemic species when possible. The use of native and endemic species may thus result in the restoration of ecological structure and function critical for the survival of endemic Hawaiian species.

Returning the damaged and or severely degraded site to a condition similar to or better than its previous ecological structure and function (e.g., a terrestrial system such as a Koa (*Acacia koa*) forest) would include: (1) calculating the level of ecosystem services to be restored from carbon sequestration, climate regulation, nutrient cycling, air and water purification, erosion control, plant and/or wildlife habitat, and any other services which

may be valued; (2) purchase, production and out-planting of Koa seedlings; and (3) monitoring, maintenance, and management for the time period of mature growth of ~40-60 years, to achieve mature canopy structure, native under-story, and an acceptable level of lost ecosystem structure, function and/or services restored.

3.2 COMPENSATORY DAMAGE CALCULATION

Compensatory damages to public lands or natural resources may be assessed and charged to the violator to compensate for ecosystem damage and lost initial and interim ecosystem services to the public. All Divisions of the Department may coordinate their resources and efforts along with existing ecosystem valuations and publications (See Appendix C and D for examples) to derive the estimated total value of the natural resource damaged until the ecosystem structure, function, and services are estimated to be recovered.

The total value of the natural resource that is lost or damaged may include the initial and interim values of the ecosystem services provided by the natural resource or habitat, and the social-economic value of the degraded site, until the ecosystem structure, function, and/or services are restored. Assessing the damages to the resource could include: estimating the loss of ecosystem services of carbon sequestration, climate regulation, nutrient cycling, plant and/or wildlife habitat, biodiversity, air and water purification, erosion control, coastal protection, the loss of benefits to tourism, fisheries, society, cultural inspiration and practices, and any other services which may be valued.

These natural resource damages may be assessed using economic valuation techniques to estimate the total value(s) of the natural resource(s) damaged on a per area basis, including: total ecosystem service value, total annual benefits, the market value of the natural resource, or any other factor deemed appropriate. The total value of the present and interim natural resource damage may be estimated by calculating the net present value of these lost benefits, values and services. The net present value may be calculated using a discount rate to scale the present and future costs to the public, of the interim losses of ecosystem services over the restoration time. The restoration time may be

estimated as the number of years for the damaged natural resource or ecosystem to reach maturity and/or the ecosystem structure and function to be restored similar to the pre-violation state. The discount of future losses and accrued benefits may be used in the valuation of mitigation efforts performed by the violator. For example the restoration conducted immediately after damage occurred may be calculated to have a higher present benefit worth than the benefit of restoration activities undertaken a year or two later.

In other instances, a habitat equivalency analysis (HEA) or a resource equivalency analysis (REA) may be used to scale equivalent habitat or wildlife losses for estimating both ecosystem damage penalties and restoration efforts.

3.3 ADJUDICATION OF DAMAGES

The adjudication of primary restoration damages and compensatory damages will be adjudicated by the Board due to the complexity of the assessment process and to assure proper checks and balances, including adequate public notice and a public hearing.

In addition to the damages and penalty violations assessed, the Department is allowed to recoup all administrative costs associated with the alleged violation pursuant to HRS §183C-7(b). All penalties assessed will be in compliance with HRS §183C-7(c) and will not prohibit any person from exercising native Hawaiian gathering rights or traditional cultural practices.

APPENDIX A: GUIDELINE FRAMEWORK TABLES
Table 1. Penalty Guideline Framework

Harm to resource or potential for harm to resource	Identified land use permit beginning with the letter	Penalty Range
Major	D (Board)	\$10,000-\$15,000
Moderate	C (Departmental)	\$2,000-\$10,000
Minor	B (Site Plan)	\$1,000-\$2,000
Very Minor	(B) (Site Plan)	Up to \$1,000

Table 2. Vegetation Removal

Action	Comparable Harm to Resource	Penalty Range
Removal of more than 10,000 sq. ft.	Major	\$10,000-\$15,000
Removal of Vegetation or of 2,000-10,000 sq. ft. of vegetation	Moderate	\$2,000-\$10,000
Removal of less than 2,000 sq. ft. Vegetation	Minor	\$1,000-\$2,000
Clearing of Invasive or noxious vegetation	Very Minor	Up to \$1,000 ^d

Note: According to Table 2, the clearing of vegetation may incur a penalty of up to \$1/ sq. ft., as clearing 10,000 sq. ft. Staff could assess a penalty of \$10,000. The clearing of threatened, endangered or commercially valuable plants, will be addressed on a case-by-case basis, but depending on the importance of the species may incur a penalty of up to \$15,000 per plant.

APPENDIX B: DEFINITIONS

Definitions:

- (1) "Baseline" means the original level of services provided by the damaged resource.
- (2) "Benefit Transfer Method" estimates economic values by transferring existing benefit estimates from studies already completed for another location or issue.⁷
- (3) "Board" means the Board of Land and Natural Resources.
- (4) "Board Permit" means a permit approved by the Board of Land and Natural Resources.
- (5) "Chairperson" means the chairperson of the board of land and natural resources
- (6) "Civil Resource Violations System" or "CRVS" means a system of administrative law proceedings as authorized under chapter 199D, HRS, and further prescribed in Subchapter 7, 13-1, HAR, for the purpose of processing civil resource violations.
- (7) "Compensatory Damages" means damages for compensation for the interim loss of ecosystem services to the public prior to full recovery.
- (8) "Contested Case" means a proceeding in which the legal rights, duties, or privileges of specific parties are required by law to be determined after an opportunity for an agency hearing.
- (9) "Department" means the Department of Land and Natural Resources.
- (10) "Departmental Permit" means a permit approved by the Chairperson.
- (11) "Discounting" means an economic procedure that weights past and future benefits or costs such that they are comparable with present benefits and costs.
- (12) "Ecosystem Services" means natural resources and ecosystem processes, which may be valued according to their benefits to humankind.

For example: carbon sequestration, climate regulation, nutrient cycling, plant and/or wildlife habitat, biodiversity, air and water purification, erosion control, coastal protection, the loss of benefits to tourism,

⁷ Ecosystem Valuations http://www.ecosystemvaluation.org/benefit_transfer.htm

recreation, scientific discovery, fisheries, society, cultural inspiration and practices, and any other services which may be valued.

- (13) "Grossly negligent" violation means conscious and voluntary acts or omissions characterized by the failure to perform a manifest duty in reckless disregard of the consequences.⁸
- (14) "Harm to resource" means an actual or potential impact, whether direct or indirect, short or long term, acting on a natural, cultural or social resource, which is expected to occur as a result of unauthorized acts of construction, shoreline alteration, or landscape alteration as is defined as follows:
 - (a) "Major Harm to resource" means a significant adverse impact(s), which can cause substantial adverse impact to existing natural resources within the surrounding area, community or region, or damage the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics
 - (b) "Moderate Harm to Resource" means an adverse impact(s), which can degrade water resources, degrade native ecosystems and habitats, and/or reduce the structure or function of a terrestrial, littoral or marine system (but not to the extent of those previously defined as those in (a)).
 - (c) "Minor Harm to Resource" means limited to short-term direct impacts from small scaled construction or shoreline or vegetation alteration activities.
 - (d) "Very Minor Harm to Resource" means an action in which the impact on the water resource or terrestrial, littoral or marine ecosystem was insignificant, and was not of a substantial nature either individually or cumulatively.

For example, "major harm to the resource(s)" would be associated with a major land use violation that would have likely required a Board Permit, such as building a house, while a "minor harm to the resource(s)" may be

⁸ Definition adapted from Florida Department of Environmental Protection, 2000 Administrative Fines and Damage Liability, Ch. 62B-34.

associated with minor land uses requiring an administrative Site Plan Approval, for building a small accessory structure.

- (15) "Knowing" violation means an act or omission done with awareness of the nature of the conduct.
- (16) "Net Present Value" means the total present value (PV) of a time series of cash flows.
- (17) "OCCL Administrator" means the Administrator of the Office of Conservation and Coastal Lands.
- (18) "Party" means each person or agency named or admitted as a party.
- (19) "Person" means an appropriate individuals, partnership, corporation, association, or public or private organization of any character other than agencies.
- (20) "Presiding Officer" means the person conducting the hearing, which shall be the chairperson, or the chairperson's designated representative.
- (21) "Primary Restoration Damages" means the costs to restore the damaged site to its prior baseline state.
- (22) "Site Plan" means a plan drawn to scale, showing the actual dimensions and shape of the property, the size and locations on the property of existing and proposed structures and open areas including vegetation and landscaping.
- (23) "Willful violation" means an act or omission which is voluntary, intentional and with the specific intent to do something the law forbids, or fail to do something the law requires to be done.

APPENDIX C: REFERENCES

- Cesar, H., van Beukering, P., Pintz, S., Dierking J. 2002. Economic valuation of the coral reefs of Hawaii. NOAA Final Report NA 160A1449.
- Conservation International. 2008. Economic Values of Coral Reefs, Mangroves, and Seagrasses: A global Compilation. Center for Applied Biodiversity Science, Conservation International, Arlington VA, USA.
- Costanza, R. and Farley J. 2007. Ecological economics of coastal disasters: Introduction to the special issue. Ecological Economics 63 p. 249-253.
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- Florida Department of Environmental Protection. Damage Costs in Seagrass Habitats. http://www.dep.state.fl.us/coastal/habitats/seagrass/awareness/damage_costs.htm
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- Florida Department of Environmental Protection. 2007. Program Directive 923. Settlement guidelines for civil and administrative penalties. www.dep.state.fl.us/admin/depdirs/pdf/923.pdf
- Florida Department of Environmental Protection. 2000. Rules and procedures for application for coastal construction permits. Ch. 62B-41. <http://www.dep.state.fl.us/beaches/publications/pdf/62b-41.pdf>

APPENDIX D: DAMAGES EXAMPLES

Examples of Damage Assessments and Possible Remediation Efforts

The following are only brief past estimates used in Hawaii and other states; they are by no means comprehensive or limiting. These are intended to be examples for possible assessments and remediation efforts not as templates. As previously stated each case will be handled individually to account for unique ecological, economic and cultural impacts. The following are organized by habitat type.

Coral

Florida Department of Environmental Protection (Civil Damages).

The DEP can impose fines of up to \$1,000/m² of reef damaged and is dependent on the absence of extenuating circumstances such as weather conditions, disregard of safe boating practices, navigational error, whether the vessel operator was under the influence of drugs or alcohol etc.

Cesar et al 2002 (Ecosystem Service Valuation)

Cesar et al. used a Simple Coral Reef Ecological Economic Model (SCREEM) to assess Hawaiian coral reefs based on the annual benefits of the coral reefs to recreation/tourism, property amenities, biodiversity, fisheries and education. The annual benefits and total economic value could then be expressed on a 'per area' basis. This study found the total annual benefits of the coral reefs of Hanauma Bay to be \$37.57 million (\$2,568/m²), of the coral reefs in Kihel to be \$28.09 million (\$65/m²) and the coral reefs on the Kona coast to be \$17.68 million (\$19/m²).

Pilaa enforcement (KA-02-10) (Primary Restoration Cost)

Damage to Coral reef ecosystems was assessed for restoration activities according to Florida guidelines, as \$5,830,000 for 5,380 m² of coral reef damage. This calculation

was similar to the estimated cost of remediation efforts \$390,000 to clean 5,000 yd³ of beach sand. However between 30,000-50,000 yd³ was estimated to be impacted, totaling \$2,300,000-\$3,900,000. While cleaning the sediment from the reef was estimated to cost approximately \$845,000 (for the 13 acres, or \$65,000 for 10m²). This totaled between \$3,100,000 and \$4,700,000, and did not include coral colony re-establishment. An additional \$630,000 was estimated for the 10-year monitoring period, (however studies by Cesar et al. 2003 estimated a 25 year period for recovery of ecological impacts).

Thus damage to corals may be calculated as follows:

Number of square meters of coral damaged
X Multiplied by \$1,000 (or estimated value of coral on per/area basis)
(#m² x \$1000)

Plus the estimated net present value of ecosystem services lost until recovery. (This may be more if damage to an area such as Hanauma Bay with increased recreational economic revenue.)

- +Plus cost of Remediation
- +Plus Cost of cleaning sediment from reef
- +Plus Cost of cleaning sediment/mud from beach sand
- +Plus Cost of coral reestablishment
- +Plus Cost of Monitoring
- +Plus Cost of Management

Seagrass beds (Compensatory Damage)

The Florida DEP fines offenders \$100/yd² of damage to seagrass beds for the first yd² damaged and \$75/yd² per each additional yd² damaged.

\$100 for the first yard damaged
+\$75 per each additional yard
or net present total value of ecosystem services lost until recovery
+vegetation planting
+monitoring

Sand Beaches (ex. Of Primary Restoration Costs)

Minimum penalty cost of restoration and potential negative ecological, social and environmental impacts should be included in the assessment of damaged, degraded or lost sandy beaches. As one of Hawaii's greatest natural resources the following should be included in the minimum penalty assessment, however, as ecological valuation and research continue, more comprehensive estimates may be produced. In KA-02-10 Pila, \$390,000 fine was estimated to clean 5,000 yd³ of beach.

- +Cost of lost revenue due to altered Beach resources (compensatory)
- +primary restoration costs
- +Plus cost of cleaning of sediment/mud from beach area (if necessary)
- +Plus cost of beach nourishment (sand replacement)
- +Plus cost of native dune vegetation

(In some circumstances the loss of beach resources may be assessed in conjunction with other ecological impacts listed above, such as coral reefs and sea grass beds.)

APPENDIX E: PENALTY CALCULATION WORKSHEET

Violator's Name(s): _____
 TMK: _____
 OCCL Staff Member: _____
 Date: _____

Part 1 - Penalties

Violation Type	Permit Prefix (D, C, B)	Harm to Resource (actual & potential)	Tree or Vegetation Status	Penalty Range	Adjustments (Mark Adj. Choice #1-8)	Multi-day (# days)	Total
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Penalty Total:

Penalty Adjustments and Descriptions (please attach additional adjustments and descriptions, including but not limited to those listed in §13-1-70)

1. Actual environmental damage extent (onsite)

Description: _____

2. Actual environmental damage extent (offsite)

Description: _____

3. Does the violator's have a history of violations?

4. Was the violation repetitious or of a long duration?

5. Was the violator Responsive and exhibit a level of cooperation of with the Department and/or Staff?

6. Does the Violator have a Financial Hardship?

7. Did the violator receive Economic or commercial gain through non-compliance?

8. Other.

Description: _____

Total Adjustment: up/down _____

Multi-day penalties

Number of days to multiply penalty: _____

Reasoning: _____

Total multi-day: _____

CIVIL RESOURCE VIOLATION SYSTEM
The Conservation District
Sanction Schedule

These guidelines are to implement Hawaii Administrative Rules §13-1, Subchapter 7, Civil Resource Violation System (CRVS) for the Conservation District to be assessed by the Office of Conservation and Coastal Lands Staff (Staff) for minor and very minor harm to the resource for CRVS processing.

AUTHORITY

Chapter 183C, Hawaii Revised Statutes (HRS)

§183C-3, HRS identifies the Board and Department of Land and Natural Resources to establish and enforce land use regulation on conservation district lands including the collection of fines for violations of land use and terms and conditions of permits issued by the department.

§183C-7, HRS Penalty for violation identifies that: (a) The department shall prescribe administrative procedures as it deems necessary for the enforcement of this chapter and any zoning rule adopted in accordance therewith. (b) Any person violating this chapter or any rule adopted in accordance with this chapter shall be fined not more than \$15,000.00 per violation in addition to administrative costs, costs associated with land or habitat restoration, and damages to public land or natural resources, or any combination thereof.

After written or verbal notification from the department, willful violation of this chapter or any rule adopted in accordance with this chapter may incur an additional fine of up to \$15,000.00 per day per violation for each day in which the violation persist.

Chapter 183C shall not be construed to prohibit any person from exercising native Hawaiian gathering rights or traditional cultural practices as authorized by law or as permitted by the department pursuant to Article XII, section 7 of the Hawaii constitution.

Chapter 13-5, Hawaii Administrative Rules (HAR)

Chapter 13-5, HAR is utilized to regulate land use in the conservation district. All proposed uses must be an identified land uses as defined in 13-5, HAR. If a use is not identified within 13-5, HAR, then by definition the land use would not be allowed. The rules provide for a hierarchy of permit processes, where the level of review is scaled to the level of potential impact.

Chapter 115, HRS

This statute provides for public access to coastal area and has recently been amended to reaffirm public policy of extending public use and ownership of Hawaii's shoreline to ensure the public's lateral access along the shoreline, by requiring the removal of private landowners' induced or cultivated vegetation that interferes or encroaches seaward of the shoreline. As land seaward of the shoreline is designated Conservation, the Department shall enforce upon adjacent landowners to maintain access within beach transit corridors under chapter 183C.

PENALTY ASSESSMENT

Staff will treat each case individually when assigning conservation district penalties using the following framework and additional considerations and factors for upward or downward adjustments. Authorization requiring a Site Plan Approval under 13-5, HAR shall be the threshold for processing a conservation district land use violation under the CRVS. Staff will use these penalty schedule guidelines to issue civil resource violation notices for Conservation District penalties.

These guidelines presume that all cases in which a Conservation District violation has been assessed, the Department is allowed to recoup all administrative costs associated with the alleged violation pursuant to HRS §183C-7(b). Recommended penalties above \$2,000.00 shall be forwarded to the Board of Land and Natural Resources. Noncompliance of a CRVS notice issued for the Conservation District may also be forwarded to the Board.

I. Violations Pertaining to Identified Land Use Penalties (Authority §183C-7, HRS)

Minor Harm to the Resource/Site Plan Approval (B) Permit

In instances in which a permit with the B prefix should have been sought to assure that "minor harm(s) to the resource" are minimized may incur a penalty of \$1,000-\$2,000 and could be actions causing limited to short-term direct impacts including, but not limited to, small-scaled construction, construction of accessory structures, encroachment and installation of temporary or minor shoreline activities or similar uses.

Very Minor Harm to the Resource/(B) Permit

In instances in which a permit with the B prefix should have been sought but are considered to have only caused "very minor harm(s) to resource" a penalty of up to \$1,000 may be incurred. These "very minor harm(s) to the resource" could be actions in which the impact on the water resource or terrestrial, littoral or marine ecosystem was temporary or insignificant, and was not of a substantial nature either individually or cumulatively.

In addition to a monetary penalty, other sanctions to resolve unauthorized identified land use penalties may include land remediation, removal of the unauthorized land use or the filing of an After the Fact Site Plan Approval (SPA).

Table 1-Conservation District Penalty Guideline Framework for Identified Land Uses

Harm to resource or potential for harm to resource	Identified land use permit beginning with the letter	Penalty Range
Minor	B (Site Plan)	\$1,001-\$2,000
Very Minor	B (Site Plan)	Up to \$1,000

II. Non- Identified Land Use Penalties (Authority §183C-7, HRS)

Regarding violations in which an unauthorized use is not identified in HAR §§13-5-22, -23, -24 and -25, staff may try to associate the action with the most similar identified land use in Chapter 13-5, or in accordance to the "harm to the resource" caused by the violation. Refer to the above section I. In addition to a monetary penalty, other sanctions to resolve unauthorized identified land use penalties shall require removal of the unauthorized land use and may include land remediation.

III. Vegetation Removal/Vegetation Clearing (Authority §183C-7, HRS)

In minor or very minor harm to the resource, in accordance with the identified land uses within HAR, §13-5 the assessment of vegetation removal is based on a single citation of removal/clearing determined by the square footage of vegetation removed (See Table 2 Vegetation Removal). However, the Department may see fit to assess the removal/clearing of threatened, endangered, or commercially valuable plants on an individual plant basis of up to \$15,000 per plant that would be forwarded to the Board of Land and Natural Resources.

In addition to a monetary penalty, other sanctions to resolve unauthorized clearing may include land remediation and/or the filing of an After the Fact Site Plan Approval (SPA).

Table 2-Vegetation Removal

Action	Comparable Harm to Resource	Penalty Range
Removal of less than 2,000 sq. ft. vegetation	Minor	\$1,001-\$2,000
Clearing of Invasive or noxious vegetation	Very Minor	Up to \$1,000 ¹

Note: The clearing of threatened, endangered or commercially valuable plants may incur a penalty of up to \$15,000 per plant as determined by the Board of Land and Natural Resources. Vegetation clearing may incur a penalty of up to \$1 per square foot.

IV. Permit Non-Compliance (Authority §183C-7, HRS)

Violation of existing approved Conservation District Use Permit (CDUP) conditions involving initiation and/or completion of project construction, notification of start and completion dates, failure to file legal documents, etc., may be considered very minor within the existing framework, although it should be noted that such actions could result in a recommendation to the Board of Land and Natural Resources for permit revocation.

V. Shoreline Vegetation Encroachment (Authority §183C-7, HRS & §115, HRS)

Coastal property owners must ensure that beach transit corridors abutting their land be kept passable and free from human-induced, enhance, or unmaintained vegetation that interferes or encroaches upon beach transit corridors. The department shall maintain access within beach transit corridors by requiring private property owners to ensure that

¹ Provided the harm to the resource and offsite damage were minimal.

beach transit corridors abutting their lands shall be kept passable and free from the landowner's human-induced, enhanced, or unmaintained vegetation that interferes or encroaches in the beach transit corridors.

If any landowner fails to remove the induced, enhanced, or unmaintained vegetation within twenty-one days of notice being issued, the department shall take any action authorized under §183C-7, HRS as necessary to maintain access within beach transit corridors; provided that if the landowner contests the basis upon which the notice was issued prior to the expiration of the notice period, the department's enforcement actions under §183C-7, HRS shall be tolled until the final resolution of the contested matter.

The Department shall issue the first notice requesting removal of the encroaching vegetation. If there is no compliance within 21-days, the Department shall issue a second notice with a recommended monetary penalty of no less than \$1,000.00.

Additional Considerations and Factors

After Staff applies the Conservation District violation graduated penalty framework for minor or very minor harm to the resources, staff may incorporate several considerations into the final assessed conservation district penalty including but not limited to, factors identified in HAR, §13-1-70 Administrative Sanctions Schedule; Factors to be considered.

**Conservation District
Administrative Sanctions Table**

Item	Authority	Violation	Notice	Fine		Other Sanctions*
				Very Minor	Minor	
I	§183C-7, HRS	Identified Land Use	1st	Up to \$1,000	\$1001 to \$2,000	<ul style="list-style-type: none"> • Remediation • Removal • After the Fact SPA
II		Non-Identified Land Use	1st	Up to \$1,000	\$1001 to \$2,000	<ul style="list-style-type: none"> • Remediation • Removal
III		Vegetation Removal	1st	Up to \$1,000	\$1001 to \$2,000	<ul style="list-style-type: none"> • Remediation • After the Fact SPA • Board Determination
IV		Permit Noncompliance	1st	Up to \$1,000		<ul style="list-style-type: none"> • Board Determination

*No permit application shall be processed by the Department until any violations pending against the subject parcel are resolved.

Item	Authority	Violation	Notice	Fine	Other Sanctions*
V	§115, HRS***	Encroaching Vegetation Within Beach Transit Corridors	1st	\$0	<ul style="list-style-type: none"> • Removal
			2nd	\$1,000	<ul style="list-style-type: none"> • Removal
	§183C-7, HRS		3rd	\$2,000	<ul style="list-style-type: none"> • Removal
			4th		<ul style="list-style-type: none"> • Board Determination

*No permit application shall be processed by the Department until any violations pending against the subject parcel are resolved.

***This statute will be repealed July 1, 2013. Violations shall be processed under §183C-7, HRS.

**Conservation District
Administrative Sanctions Table**

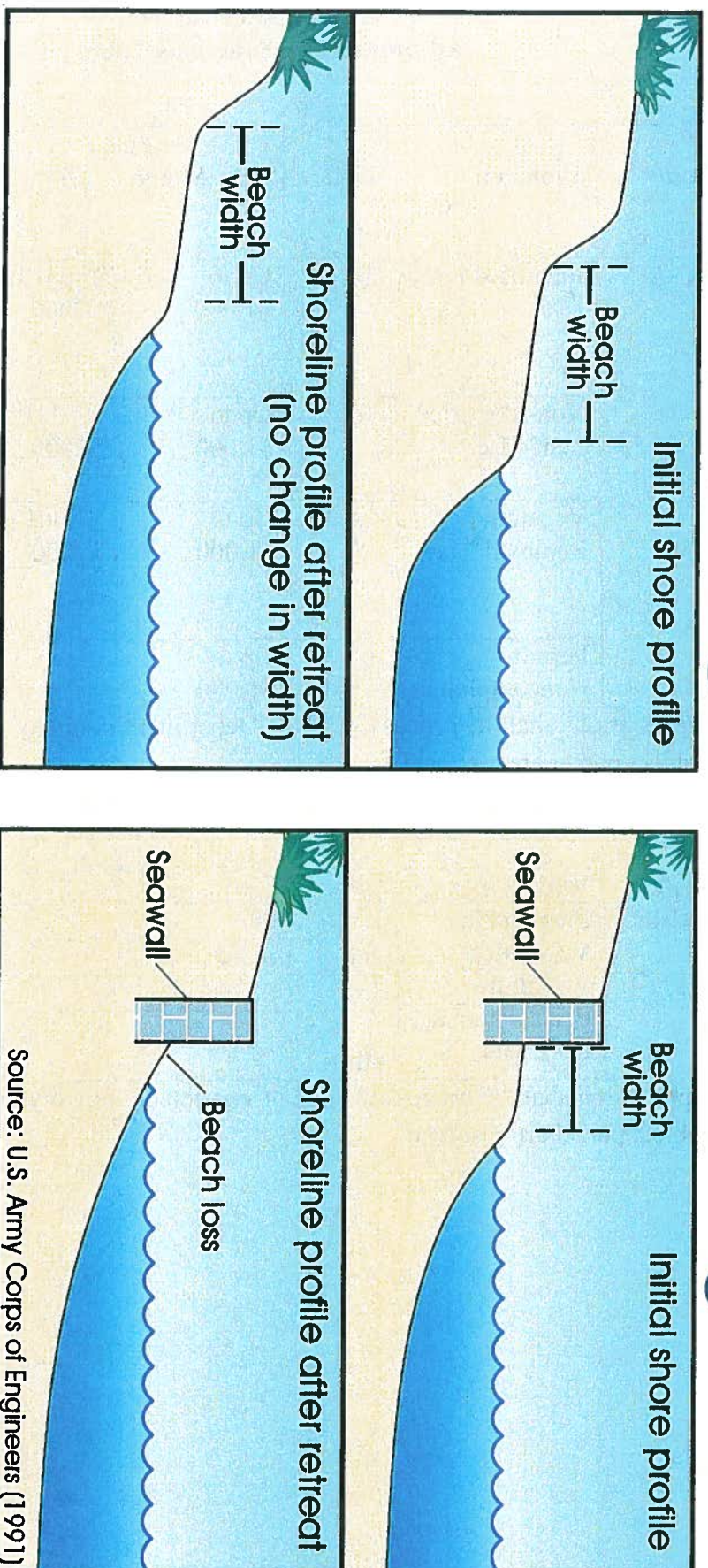
Item	Authority	Violation	Notice	Fine		Other Sanctions*
				Very Minor	Minor	
I	§183C-7, HRS	Identified Land Use	1st	Up to \$1,000	\$1,001 to \$2000	<ul style="list-style-type: none"> • Remediation • Removal • After the Fact Site Plan Approval
II		Non-Identified Land Use	1st	Up to \$1,000	\$1,001 to \$2000	<ul style="list-style-type: none"> • Remediation • Removal
III		Vegetation Removal	1st	Up to \$1,000	\$1,001 to \$2000	<ul style="list-style-type: none"> • Remediation • Removal • After the Fact Site Plan Approval
IV		Permit Noncompliance	1st	Up to \$1,000		<ul style="list-style-type: none"> • Board Determination

*No permit applications shall be processed by the Department until any violations pending against the subject parcel are resolved.

Item	Authority	Violation	Notice	Fine	Other Sanctions*
V	§115, HRS	Encroaching Vegetation Within the Beach Transit Corridors	1st	\$0	• Removal
	§183C-7, HRS		2nd	\$1,000	• Removal
			3rd	\$2,000	• Removal
			4th		• Board Determination

*No permit application shall be processed by the Department until any violations pending against the subject parcel are resolved.

Beach Loss Fronting Coastal Armoring



Beaches on chronically eroding shores can maintain their natural width as they slowly retreat landward.

Beach loss eventually occurs in front of a seawall where there is chronic erosion.