STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCESOFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawaii

April 25, 2014

ENF: OA-14-62

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

REGARDING:	Unauthorized reconstruction of a shoreline erosion control structure in the Conservation District Resource Subzone
PERMITTEE/ LANDOWNER:	Grand View Apartments, Inc.
LOCATION:	Waialua, North Shore, Island of Oahu, Hawaii
TMK:	*(1) 6-8-010:011, 012, & 013*
AREA OF PARCEL:	(011) 0.18 ac.; (012) 0.03 ac.; (013) 0.18 ac.
AREA OF USE:	1000 - 2000 ft²
SUBZONE:	**RESOURCE**

DESCRIPTION OF AREA:

The subject parcels are located on Ho'omana Place, in Waialua, on the north shore of the Island of Oahu (**Exhibit 1**). The parcels lie within a small subdivision which includes a number of shorefront single family residence (SFR) structures, associated landscaping and property development (**Exhibit 2**). While the subject parcels are not located in the Conservation District, these parcels border the shoreline; lands situated seaward (*makai*) of the shoreline are considered to be within the State Land Use (SLU) Conservation District Resource Subzone.

This enforcement action covers three (3) separate parcels, two (2) of which are residential lots owned by Grand View Apartments, Inc. (**p. 11 and p. 13**) while **parcel 12** is a county "Beach Right-of-Way" (BROW) that is owned by the City and County of Honolulu (CCH) (**Exhibit 3**). Both privately owned parcels have existing SFR structures with each SFR covering the majority area of each lot; some minor landscaping, retaining walls, lanais and associated development are also present. The CCH owned BROW is a 10-foot wide access pathway that begins at Ho'omana Place and extends directly to the shoreline, *makai* of the subject parcels. A review of the erosion maps for the Waialua Coast reveals a trend towards erosion for this area and staff notes that this property is one of several properties on this coastline that is experiencing coastal erosion.

ALLEGED UNAUTHORIZED LAND USES:

In *January 2014*, staff from the Office of Conservation and Coastal Lands (OCCL) was conducting a routine site inspection of neighboring properties in the vicinity of the subject parcels. Staff observed major shoreline work being conducted on the *makai* portion of the subject parcels (**Exhibit 4, 4a**), which appears to include the demolition of an existing shoreline structure, shotcrete placement and the construction of additional erosion control structures (i.e., placement of rocks and seawall). A subsequent site visit in *February 2014* revealed that rocks and shotcrete were placed in a continuous section, across parcels 11, 12 and 13 (**Exhibit 5**).

Additional investigation revealed that the previously existing seawall/shoreline erosion control structure (**Exhibit 6**) had been removed from Parcel 13 and was completely replaced with a new structure (**Exhibit 7**). Rip-rap and shotcrete were also added *makai* of the structure, and appear to be located within the SLU Conservation District. At this time the OCCL is unable to calculate the exact area (i.e., square ft.) of work that has occurred *makai* of the shoreline on Parcel 13 although based on an analysis of oblique aerial photographs, we believe that the area shaded in red (**Exhibit 8**) represents the encroachment into state lands located within the Conservation District.

Similar shoreline armoring was conducted on the *makai* side of Parcel 11; while this parcel had existing rocks *makai* of the existing seawall it was observed that rock and shotcrete were added to make the structure more robust by extending the structure into the conservation district (**Exhibit 9**).

Parcel 12, owned by the City and County of Honolulu, is a Beach Right-of-Way (BROW) that provides access from Ho'omana Street to the Beach. Similar to the work conducted on parcels 11 and 13, rocks and shotcrete were added to the *makai* end of the BROW (**Exhibit 10**) making access difficult as observed by staff visiting the site; the shoreline erosion control structure appears to be continuous across parcels 11, 12 and 13 (**Exhibit 11**).

Typically a shoreline landowner who requires approval to conduct repairs and maintenance of an existing shoreline erosion control structure must go through a process between, in this case, the City and County of Honolulu Department of Planning & Permitting and the Department of Land and Natural Resources (DLNR). The landowner must first obtain a Shoreline Certification to determine the official location of the shoreline; from that the landowner can apply for, or determine, the Shoreline Setback Variance (SSV) which will assist in the siting of the shoreline erosion control structure. Additionally the location of the shoreline determines jurisdiction between the County and State which therefore dictates the specific regulatory requirements for each agency. This process is in place to provide transparency concerning project details, environmental impacts and projected outcomes or objectives, and to make sure that the work is conducted in manner conducive for the health of Hawaii's coastal areas.

ANALYSIS:

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, Hawaii Revised Statutes (HRS).

Staff believes that unauthorized land uses have occurred within the Conservation District based upon the location of the seaward (*makai*) toe of the former seawall structures (**see Exhibit 6**). A review of aerial photographs, oblique aerial photographs, historical shoreline/site photographs (*taken by OCCL staff*) and information from the City and County has provided sufficient evidence that major work has been conducted across the three (3) parcels without authorization. Therefore, the OCCL believes there is sufficient cause to bring this matter to the board since it is evident that unauthorized land uses have been conducted within the Conservation District pursuant to the Hawaii 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 had been obtained. HAR §13-5-2 defines land uses as follows:

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

The penalty range for the unauthorized land uses will be substantially determined based on the type of permit that would have been required, had the landowner applied to the DLNR to conduct the identified land uses.

Pursuant to Hawaii Administrative Rules (HAR) §13-5-22, P-15, **SHORELINE EROSION CONTROL (D-1)** *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 with 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.

Under the Penalty Guideline Framework (**Exhibit 12**) these actions are considered "Major" since the identified land uses would require a Board Permit under the permit prefix "D". This violation follows a penalty range of $10,000 to $15,000 plus administrative costs. Therefore under the Penalty Guideline Framework these unauthorized land uses are considered a *Major* harm to resources or potential harm to resources.

DISCUSSION:

Coastal erosion occurs as a result of the following phenomena: 1) Seasonal changes in waves and currents that shift sand within the littoral cell; 2) Long-term (chronic) erosion due to natural deficits in sand supply or oceanographic processes such as sea level rise; and 3) Human impacts to sand availability through sand impoundment and supply disruption as a result of shoreline modifications including revetments and seawalls.

Development on beaches and dunes has contributed to serious erosion of these areas, resulting in loss of recreational areas, habitat, and the storm protection that healthy beaches and dunes provide. Beach narrowing and loss, and shoreline erosion control structures (i.e., the construction of vertical seawalls, revetments) can also severely restrict public access to State Conservation Land and the natural resources these coastal regions provide. In heavily "armored" areas, sand impoundment landward of shoreline erosion control structures can lead to a reduction in localized sand supply which can increase regional coastal erosion trends.

Unfortunately, many of Hawai'i's beaches have been degraded or lost from a combination of natural erosion and inappropriate coastal development including shoreline "armoring", shallow beachfront lot subdivisions, and development too close to the shoreline. In *Romine and Fletcher, 2012*[1] it was shown that 70% of all beaches measured in the Hawaiian Islands (24 km total) indicated a trend of beach erosion. More than 21 km or 9% of the total length of beaches studied have been lost to erosion. In nearly all the cases reviewed, the beaches had been replaced by permanent shoreline erosion control structures.

Hawai'i Coastal Erosion Management Plan

On August 27, 1999, the BLNR adopted the Hawai'i Coastal Erosion Management Plan (COEMAP) as an internal policy for managing shoreline issues including erosion and coastal development in Hawai'i. COEMAP still serves as the primary shoreline policy for the DLNR and recommends a number of strategies to improve our State's management of coastal erosion and beach resources.

However, COEMAP's scope is of a general nature, more focused on broader government policy than erosion management practices. The COEMAP effort is guided by the doctrine

of sustainability promoting the conservation, sustainability, and restoration of Hawai'i's beaches for future generations. When assessing cases involving unauthorized shoreline structures the Department has implemented a "no tolerance" policy concerning unauthorized shoreline structures constructed after the adoption of COEMAP. Based on this policy the removal of the unauthorized structure is a mandatory recommendation from the OCCL.

Staff would like to note that while the landowner allegedly reconstructed (without authorization) a failed erosion control device *makai* of the subject parcels, it was in direct response to the erosion trends in this area. A review of the site and surrounding parcels reveals that a number of properties west of the site have been protected by hard shoreline erosion control structures (i.e., revetments and rock seawalls) starting in the early 1970's and continuing into today. Current science suggests that high erosion rates may be accelerated at the periphery (i.e., flanking) and seaward of shoreline armoring thus compounding the loss of beach the structure was trying to protect. This area in particular was extensively studied in *Romine and Fletcher, (2012)* [1] who found an almost near complete beach loss in 2006 along this particular shoreline segment. While armoring is a typical response to shoreline erosion, it was discovered that increased flanking erosion can occur as a result of shoreline armoring.

FINDINGS:

1. That the landowner did in fact, authorize, cause or allow the reconstruction of a shoreline erosion control structure to occur;

2. That the landowner did in fact, authorize, cause or allow work to be conducted on lands owned by the City and County of Honolulu without authorization; and

3. That the unauthorized land uses occurred within the State Land Use Conservation District, Resource Subzone.

AS SUCH, STAFF RECOMMENDS AS FOLLOWS:

That, pursuant to §183C-7, HRS, the Board finds the landowner in violation of §183C-7, HRS and §13-5-6 HAR, and is subject to the following:

1. The landowners are fined $15,000 in one instance for violating the provisions of §183C-7, HRS, and §13-5-6, HAR, for the unauthorized reconstruction of shoreline erosion control structures on TMKs: (1) 6-8-010:013 & 011 by failing to obtain the appropriate approvals within the Conservation District;

2. The landowners are fined $15,000 in one instance for violating the provisions of §183C-7, HRS, and §13-5-6, HAR, for the unauthorized construction of a shoreline erosion control structure on TMK: (1) 6-8-010:012 by failing to obtain the appropriate approvals within the Conservation District;

3. The landowner is fined an additional $1000.00 for administrative costs associated with the subject violations;

4. The landowner shall pay all designated fines and administrative costs ($31,000) within ninety (90) days of the date of the Board's action;

5. The landowner shall completely remove all unauthorized material, stone, and structures from TMKs: (1) 6-8-010:011, 012 & 013 and then return the land to a condition as prescribed by the Chairperson within one-hundred and twenty (120) days of the date of the Board's action; and

6. That in the event of failure of the landowner to comply with any order herein, the matter shall be turned over to the Office of the Attorney General (OAG) for disposition, including all administrative costs.

Respectfully submitted,

Alex J. Roy, M.Sc., Planner
Office of Conservation and Coastal Lands

Approved for submittal:

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

[1]*Romine, B. M. and Fletcher, C. H., 2012; Armoring on Eroding Coasts Leads to Beach narrowing and Loss on Oahu, Hawaii, in Pitfalls of Shoreline Stabilization: Selected case Studies, Cooper J., and Pilkey, O.H. (eds), Coastal Research Library 3, Chapter 10, Springer Science and Business Media Dordrecht*

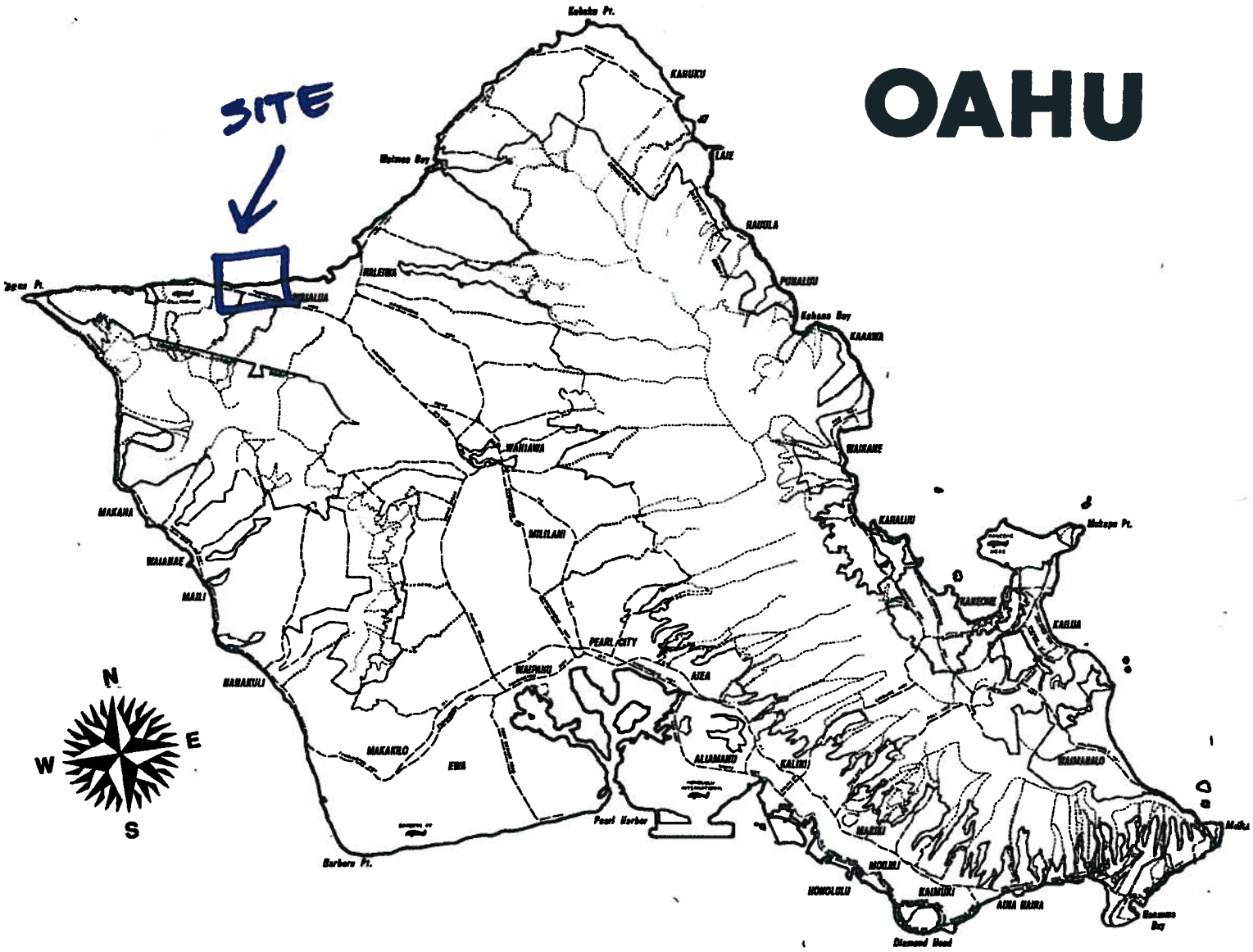

EXHIBIT 1

[OA-14-62]

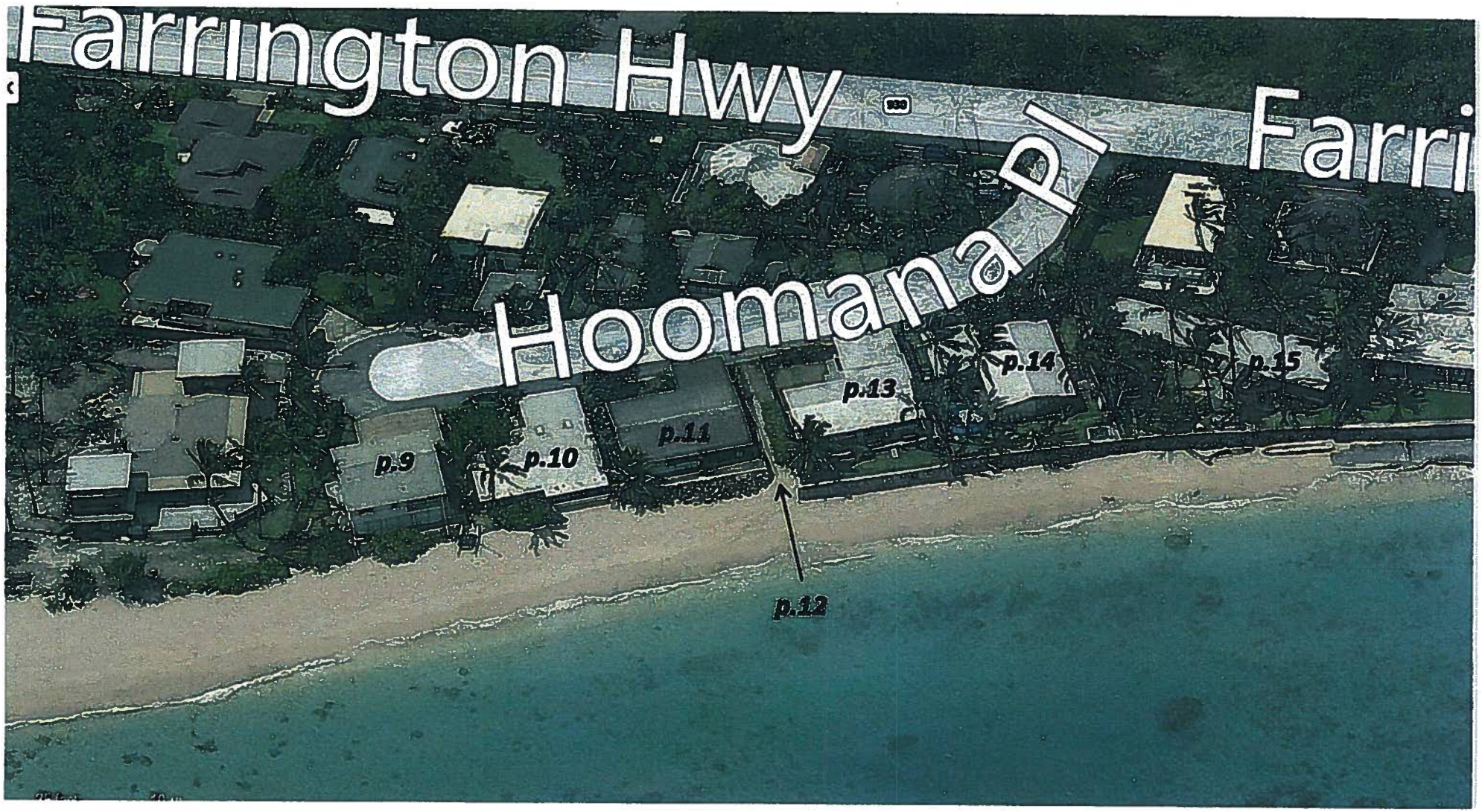

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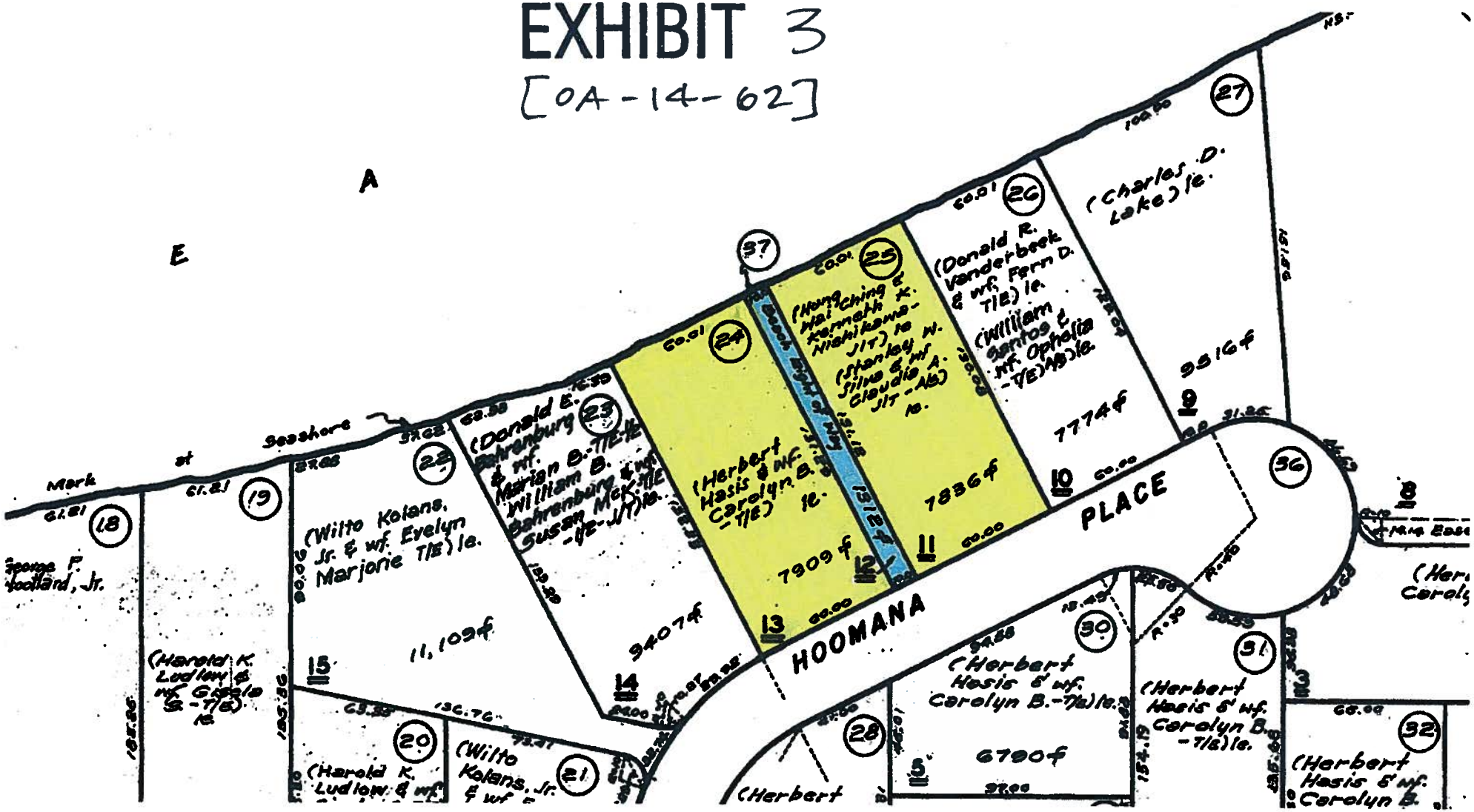
EXHIBIT 3

[OA-14-62]



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[04-14-62]
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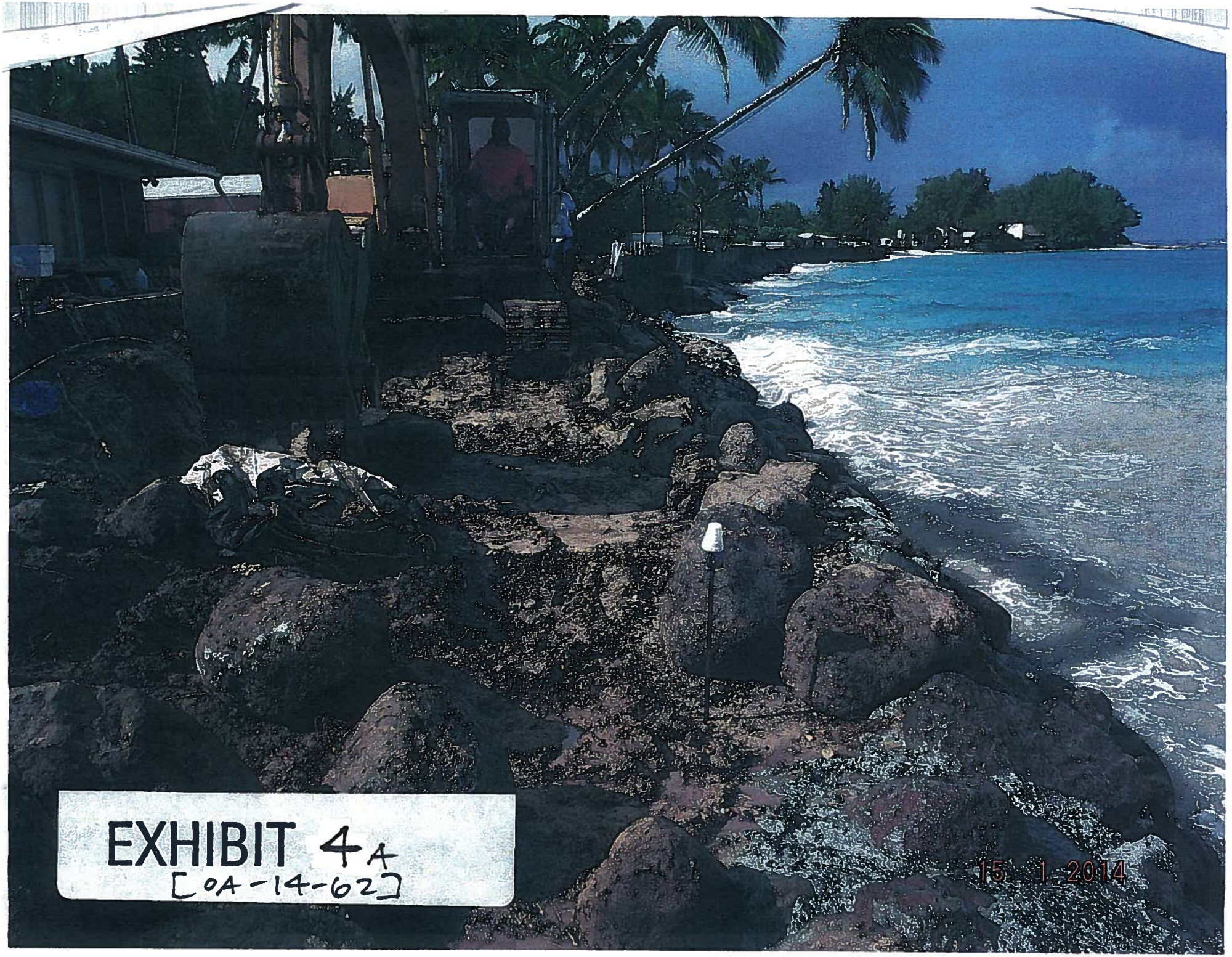
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[OA-14-62]
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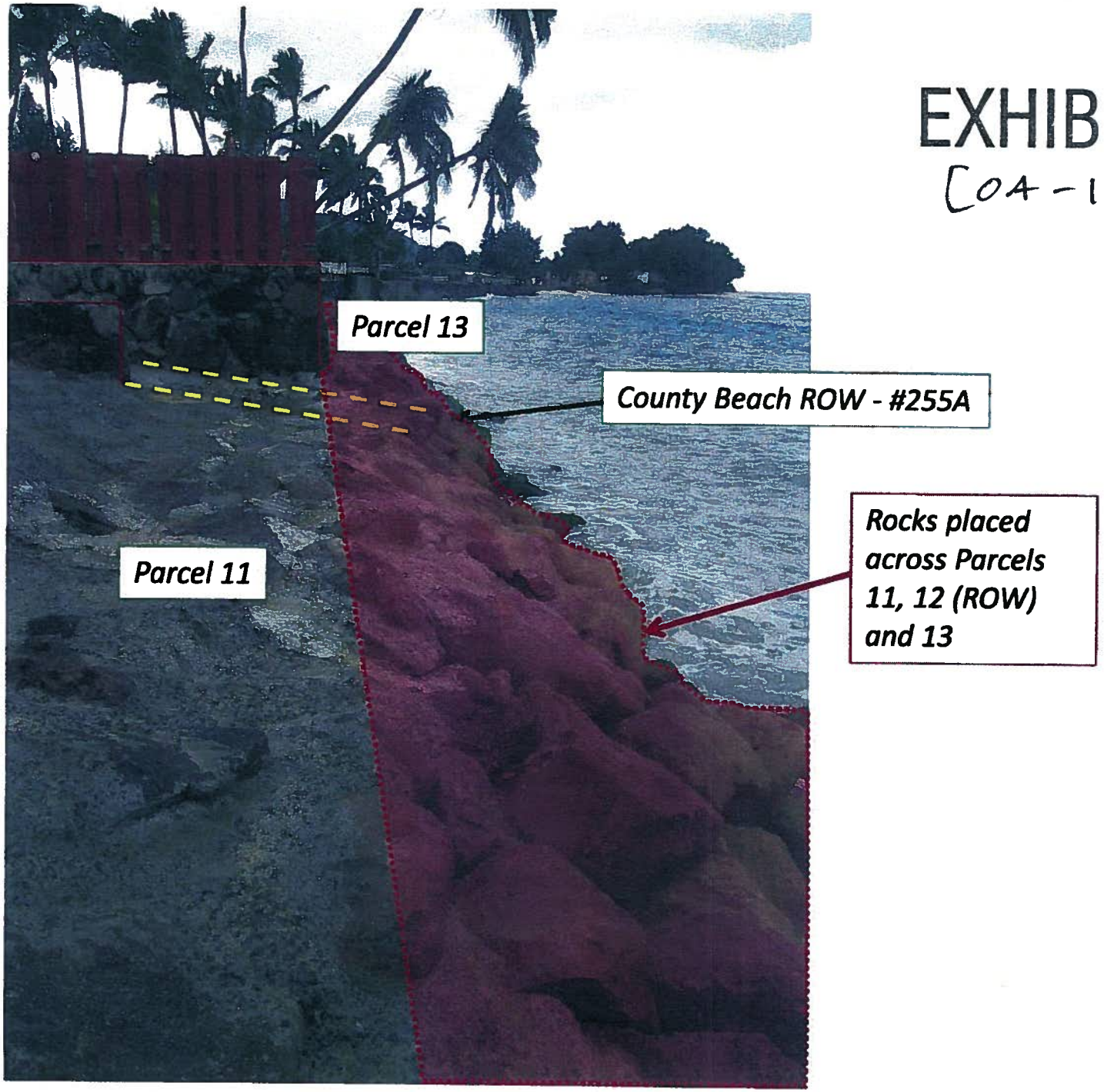
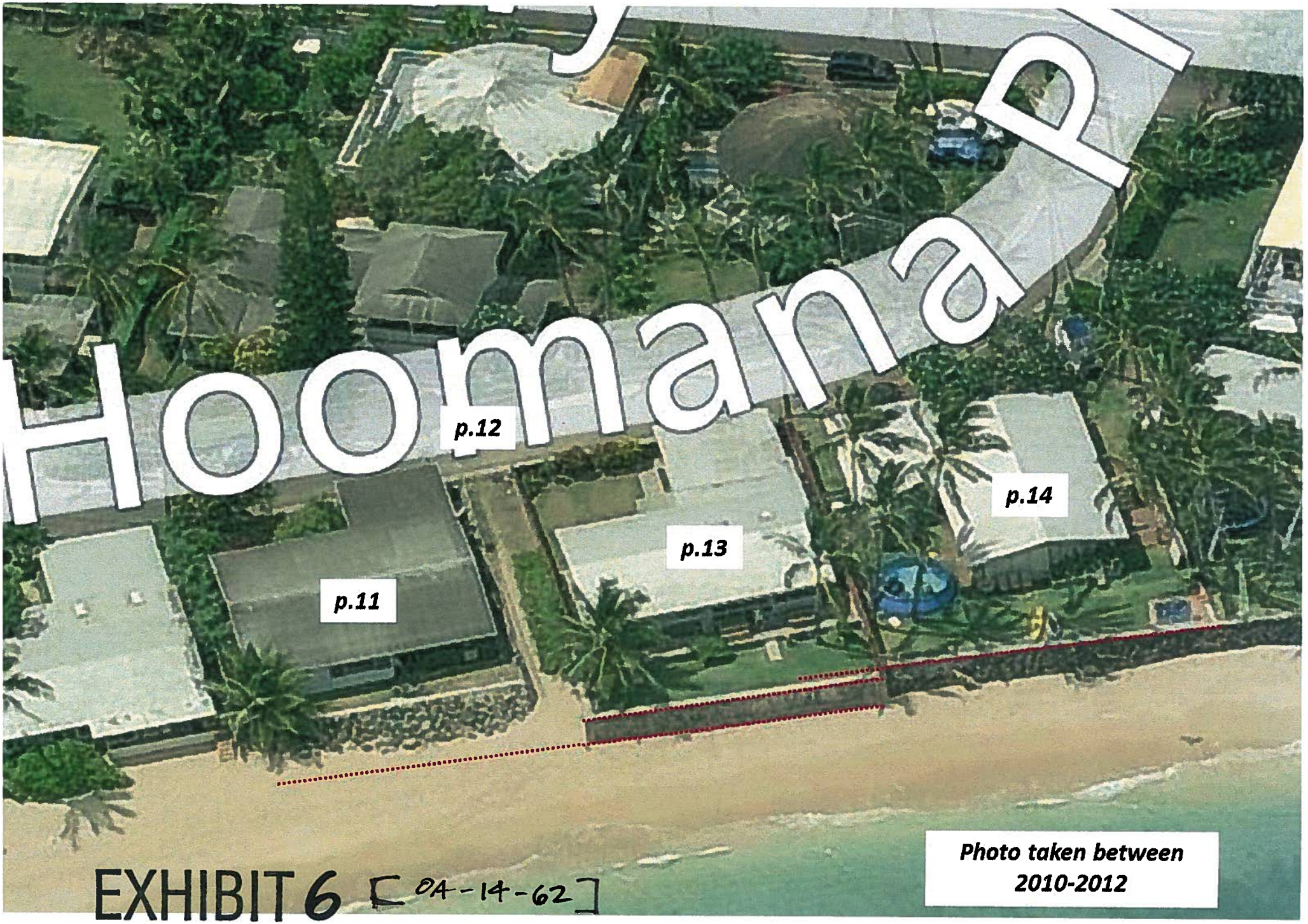
[OA-14-62]





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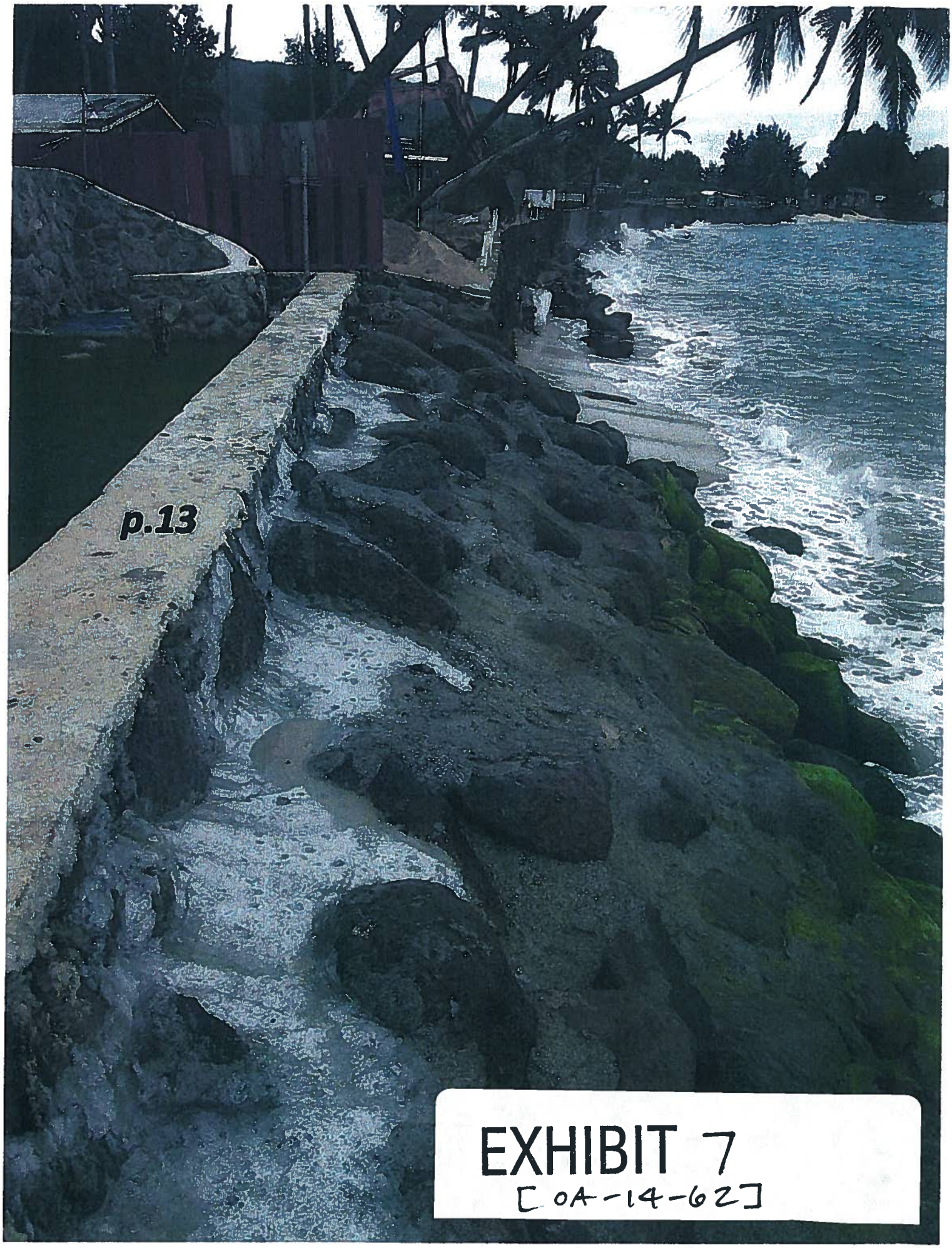

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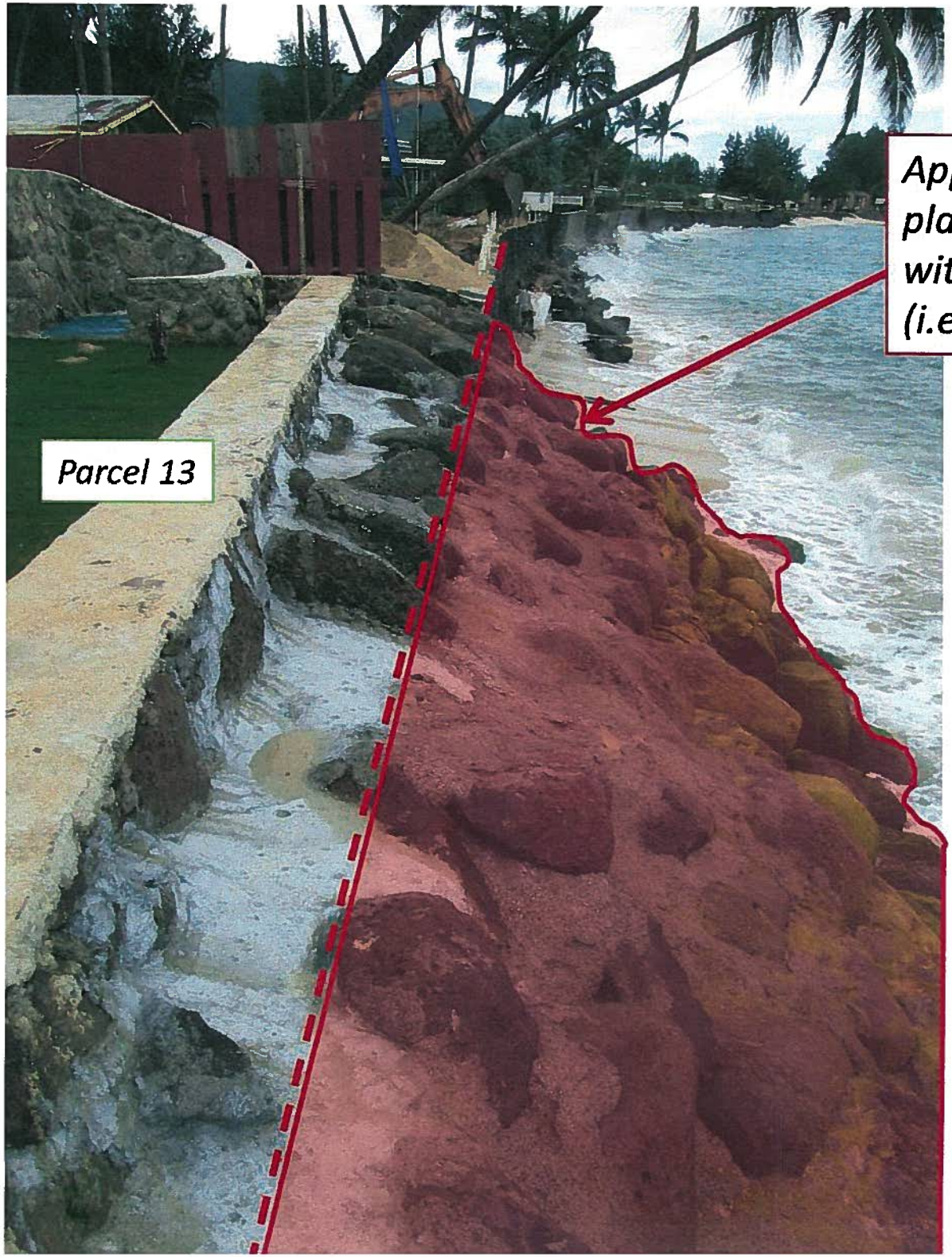
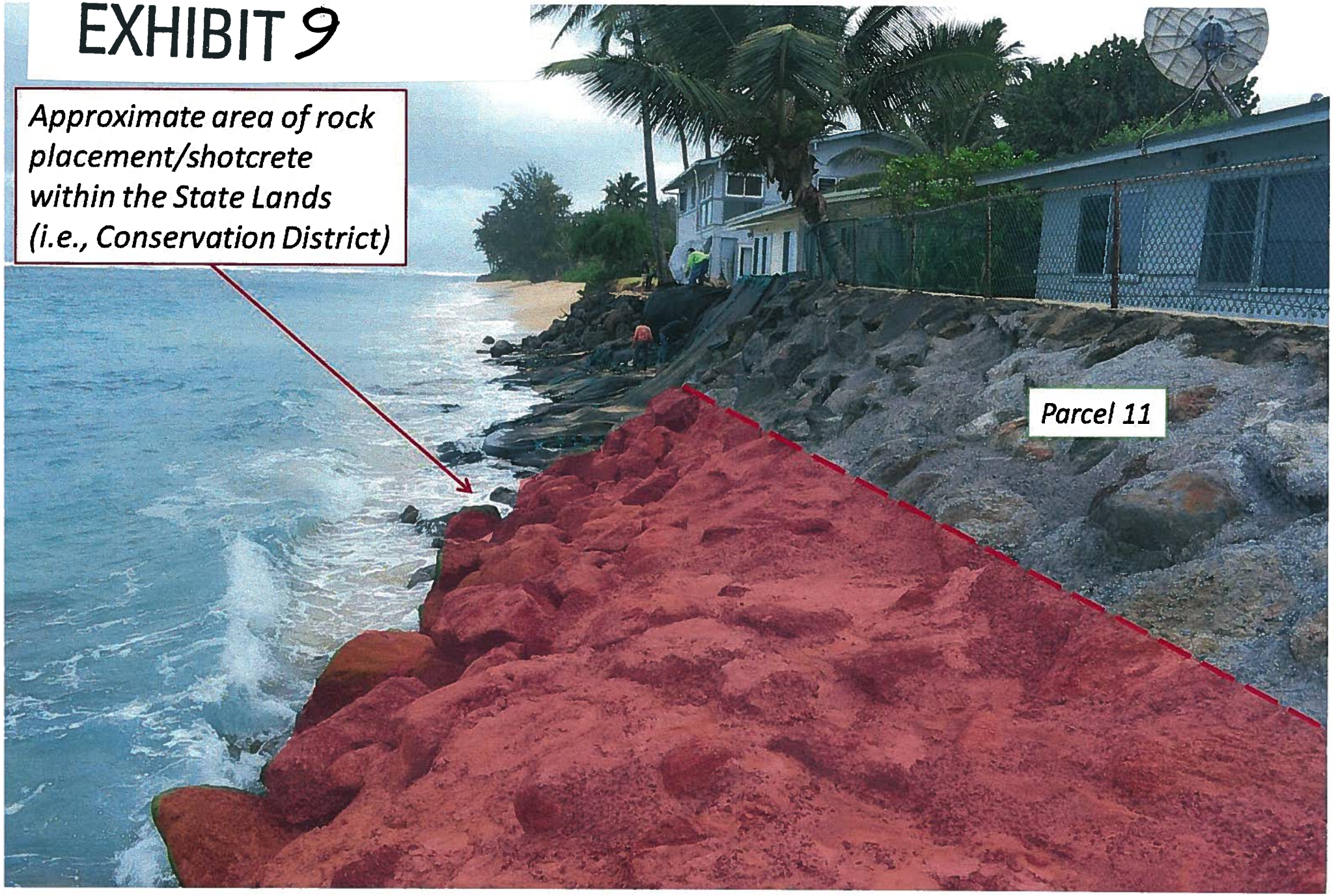


EXHIBIT 8

(OA-14-62)

[OA-14-62]

EXHIBIT 9



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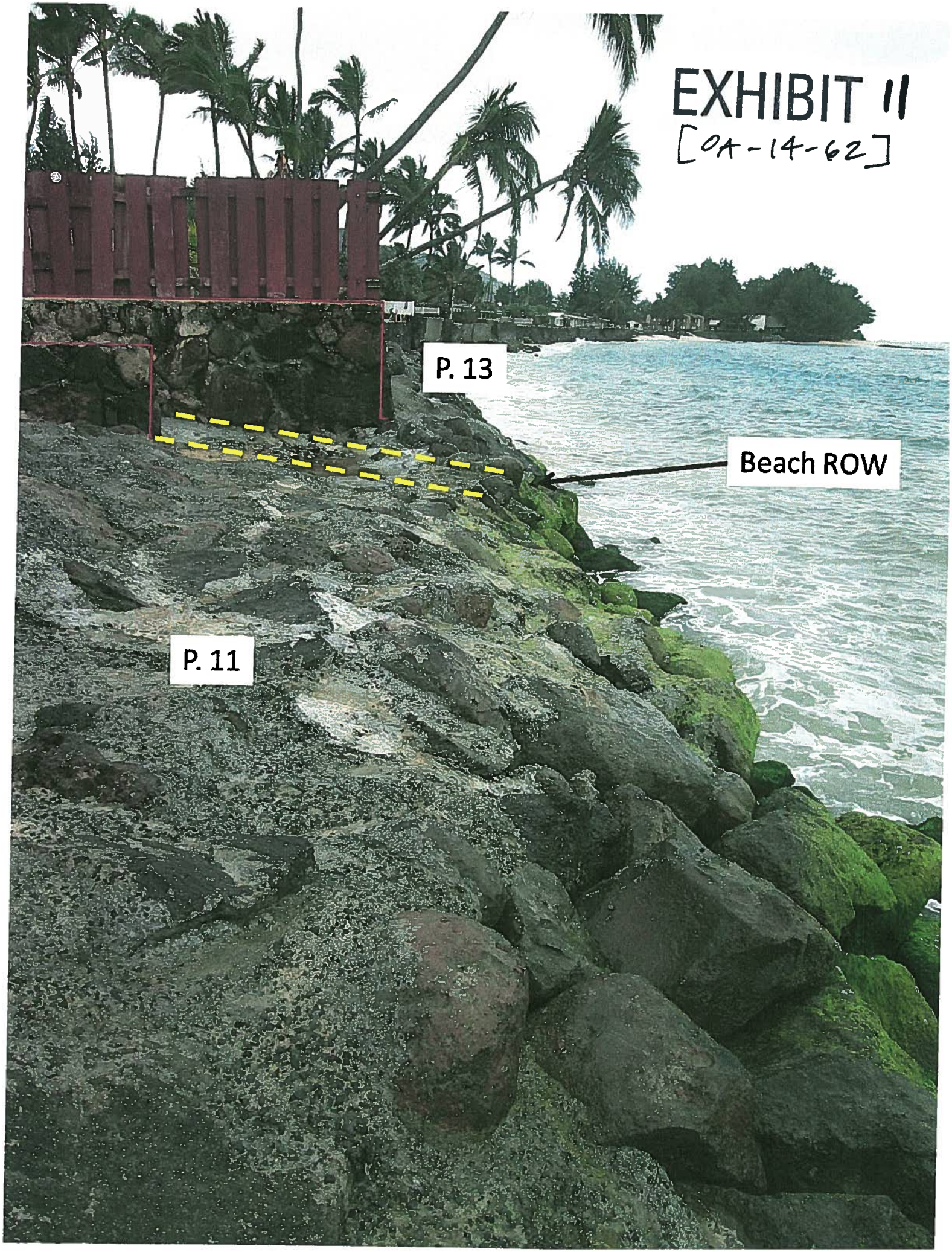
EXHIBIT 11
[OA-14-62]
P. 13
Beach ROW
P. 11

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

EXHIBIT 12
[OA-14-62]

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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, shoreline alteration, or landscape alteration (See Appendix B: Definitions) *Adapted from Florida Department of Environmental Protection2000 Administrative Fines and Damage Liability, Ch. 62B-54.*

[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-05-40 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. 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.

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.

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,

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[6]

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.

was similar to the estimated cost of remediation efforts $390,000 to clean 5,000 yd^3 of beach sand. However between 30,000-50,000 yd^3 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 $10m^2$). 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 $100/$yd^2$ of damage to seagrass beds for the first yd^2 damaged and $75/$yd^2$ per each additional yd^2 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 Pilaa, $390,000 fine was estimated to clean 5,000 yd^3 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 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, 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*

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

[8] Definition adapted from Florida Department of Environmental Protection. 2000 Administrative Fines and Damage Liability. Ch. 62B-54.

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

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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 $\$1,000/m^2$ 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/m^2$), of the coral reefs in Kihei to be $28.09 million ($\$65/m^2$) and the coral reefs on the Kona coast to be $17.68 million ($\$19/m^2$).

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 m^2 of coral reef damage. This calculation

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: _____