

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

180-Day Exp. Date: August 14, 2023

June 23, 2023

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

REGARDING: Conservation District Use Application (CDUA) OA-3913, for the Diamond Head Breakwater Safety Project

LANDOWNER: State of Hawaii

APPLICANT: Department of Land and Natural Resources, Land Division

LOCATION: Seaward of 4055 Papu Circle; Kaalawai, Honolulu, Oahu

TAX MAP KEY: (1) 3-1-041:seaward of 005

AREA OF USE: Approximately 0.77 acres of submerged lands

SUBZONE: Protective

INTRODUCTION/LAND USE

The project concerns a man-made breakwater on State submerged lands (makai of the shoreline) located in the Protective Subzone of the State Land Use Conservation District. The surrounding land use is urban development with residential dwellings in the Kahala neighborhood to the north and the Pacific Ocean to the south. There are 2 adjacent breakwaters in close proximity to each other; the Diamond Head and the Koko Head breakwaters. These 2 breakwaters (along with a seawall abutting the Doris Duke Foundation for Islamic Arts (DDFIA)) form a boat basin. The breakwaters and boat basin are owned by the State of Hawaii and the basin area is currently used by the public for ocean activities, such as swimming, snorkeling, diving, and access for surf spots (see **Exhibit 1**). The project focuses on the dismantling of the Diamond Head breakwater and the reuse of the dismantled boulders to re-naturalize the shoreline abutting the existing seawall.

Item K-2

HISTORY OF THE PROJECT SITE

The existing historical records do not indicate what pre-contact land uses existed at Kupikipikio, though it is referenced as a place name in a number of traditional chants. The earliest historical reference is from 1895, when royalists seeking to restore the Hawaiian monarchy cached 300 rifles on the cape in support of a failed insurrection against the government of Sanford Dole.

A newspaper article from 1908 describes the point as having the best fishing in the vicinity of Honolulu when the surf was calm, noting that large ulua, and smaller poopaa, moana, hinalea luawahine, mamama, and humuhumu were plentiful¹.

The U.S. Army placed a small balloon battery on the cape in 1910. In the early 1920s the cape was developed as an upscale residential neighborhood composed of large estates. The Shangri La estate was developed in the 1930s.

The Diamond Head Breakwater and the Koko Head Breakwater were constructed in 1938 to create a private boat basin. At that time, the submerged lands, totaling approximately .77 acres, were conveyed to the former property owner (Doris Duke Cromwell) by way of a 1938 Exchange Deed. Under the Exchange Deed, Mrs. Cromwell transferred a shoreline parcel in Kailua to the territory for use as a park, and in return became one of the few private owners of submerged land in Hawaii. At the same time, Mrs. Cromwell established a perpetual easement with the Territory of Hawaii consisting of a 4-foot wide pedestrian right-of-way along the shoreline.

The portion of the private boat basin identified as the Diamond Head Breakwater was constructed over a natural lava dike, while the Koko Head Breakwater was placed directly on the substrate. A public walkway was created following the easement along the shoreline between the basin and the DDFIA (Shangri La) estate. The basin is on the southwestern facing side of Kupikipikio², a cape formed by a lava flow from the southeast side of Puu Leahi (Diamond Head). The near shore area is composed of lava rock, submerged remnants of volcanic dikes, and exposed outcroppings of limestone reef. There is a fringing reef outside of the project area.

Prior to the Diamond Head breakwater and basin's construction in 1938, the natural volcanic dike was used as one side of a salt-water swimming pool. This volcanic dike ran (estimated historical height 5-6 feet above the water surface) along the route of the Diamond Head Breakwater and across the basin channel. The swimming pool floor was later dredged to create a basin for vessel berthing. The initial Diamond Head breakwater construction plans were to use the dike to create the breakwater; however, historic documents on the construction work stated that blasting and drilling activities in the basin weakened the dike and parts of it fell apart from wave action. Therefore, a

¹ *Along the Reef With a Bamboo*, by T.O.P Joynt. Honolulu Advertiser, 1908

² *Hawaiian, to rage, as the sea when wind and current are opposite (A dictionary of the Hawaiian language*, Rev. H. H. Parker, 1922).

rubble mound breakwater (Diamond Head) was built over the dike to protect the site from Kona storm waves.

Figure 1 shows the conditions of the area in 1937, prior to the construction of the Diamond Head breakwater.

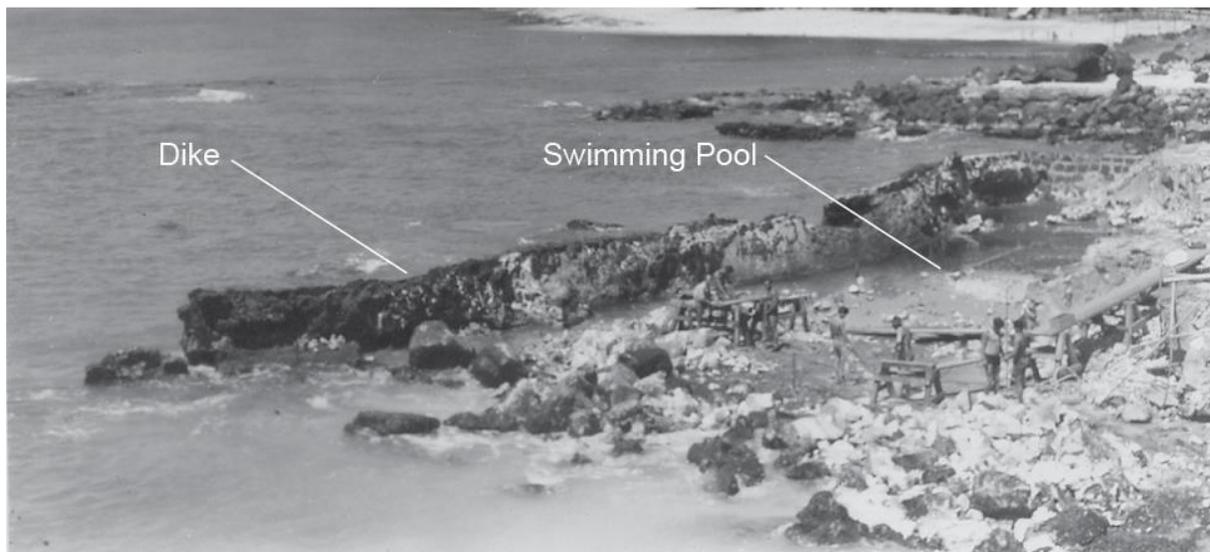


Figure 1: The site in 1937

The Diamond Head Breakwater (completed in 1938) is approximately 140-feet long, approximately 7.5 to 8.7 feet above sea level, and approximately 6 to 8 feet wide at its crest. The profile view of the breakwater is pyramid-shaped with a relatively level crest which allows for public traversing. The base portion extends 6 to 8 feet within the basin and 8 to 10 feet on the makai side. Also contained in this breakwater is a submerged 48-inch pipe that hydraulically connects the interior basin to the adjacent cove.

A second breakwater was built on the eastern end (Koko Head side) of the property to protect the site from south swells. No work is being proposed to the Koko Head Breakwater.

HISTORY OF PROPOSED BREAKWATER DISMANTLING

Over time the public began using the boat basin as a recreational area for picnicking, swimming, diving, snorkeling, and access to surfing spots. Many serious injuries have resulted from people engaging in unsafe recreational behavior such as jumping or diving from the breakwater and seawall. Examples of unsafe activities that resulted in minor to very serious injuries include diving and/or jumping from the top of the shoreline walkway as well as from the Diamond Head Breakwater into the shallow basin, swimming through the 48-inch drainage pipe within the breakwater, and more recently using social media posts to glamorize these unsafe activities which appears to have increase the number of users and “organized” gatherings at the basin.

To discourage injurious behavioral activities DDFIA employed various mitigative measures to deter the unsafe activities, such as, posting warning signs, hiring security guards, calling the Honolulu Police Department, and erecting a 6-ft. high fence along the walkway. The unsafe activities continued despite these mitigative measures. Eventually, DDFIA proposed to dismantle the breakwater and use the boulders to construct a natural looking rocky shoreline along the basin's seawall as a more direct method to deter the public's unsafe activities.

The following chronology summarizes and discusses the recent history of the proposed dismantling project:

- June 23, 2017: A Final Environmental Assessment/Findings of No Significant Impact (FEA/FONSI) was published in The Environmental Notice for the Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project.
- Dec. 15, 2017: The Department accepted Conservation District Use Application (CDUA) OA-3809 from the DDFIA to dismantle the Diamond Head breakwater and use the boulders to reinforce an existing seawall adjacent to the shoreline. The reinforcement was to be in the form of an engineered rocky, re-naturalized shoreline along the entire length of the basin that would mimic a more natural rocky sloped shoreline. DDFIA stated that the project would serve to mitigate a public safety hazard, as serious injuries (paraplegia and quadriplegia) have resulted from high-risk public behaviors; and, to minimize overtopping of the seawall from waves during large wave events.
- April 27, 2018: The Board of Land and Natural Resources (Board) denied Conservation District Use Application (CDUA) OA-3809 after public testimony in opposition. DDFIA requested a contested case.
- May 25, 2018: As a result of confusion regarding the Board's vote at the April 27 meeting the Board was asked to rescind its prior denial of CDUA OA-3809. Rather, the Board affirmed its denial of the application.
- June 14, 2018: DDFIA submitted to the Department an offer to convey to the state, by quitclaim deed, the submerged lands and improvements thereon that were the subject of the CDUA. DDFIA also withdrew its request for the contested case hearing.
- Sept. 28, 2018: The Board accepted DDFIA's conveyance offer at a regularly scheduled meeting.
- Sept. 23, 2020: The transfer of property (submerged lands) was completed. In addition, the State entered a Memorandum of Agreement with DDFIA in which DDFIA would pay up to 1 million dollars towards the dismantle

of the breakwater and construction of the re-naturalized shoreline along the seawall.

- Feb. 23, 2021: Land Division submitted CDUA OA-3875 on behalf of the Department to dismantle the Diamond Head Breakwater and use the boulders to construct a rocky, naturalized shoreline along existing seawall fronting DDFIA shoreline walkway. The application was substantively similar to DDFIA's previous application. A Hawaii Revised Statutes, Chapter 6E determination from the State of Hawaii Historic Preservation Division (SHPD) was not completed in time for a Board decision, and the CDUA was withdrawn.
- Dec. 23, 2022: Land Division received SHPD's Chapter 6E review. SHPD concurred with the project's proposal and submitted notification that the CDUA permitting process may continue. Land Division submitted CDUA OA-3913 for the project. The 180-day expiration date will expire on August 14, 2023.
- April 5, 2023: A public hearing was held at the Wesley United Methodist Church in Kahala. Oral testimonies in support of the project were given by two DDFIA representatives.

DESCRIPTION OF THE AREA AND CURRENT USE

The near shore area along Kupikipikio is composed of lava rock, submerged remnants of volcanic dikes, and exposed outcroppings of limestone reef. There is a fringing reef outside of the project area.

The basin is about 0.32 acres in size; this includes the waters inland of the Diamond Head Breakwater and up to the channel entrance bounded by the Koko Head Breakwater where the submerged dike once extended. The dike's current condition is unknown but is suspected to be somewhat deteriorated. There is a 48-inch drainage pipe located beneath the Diamond Head Breakwater for water circulation. The basin's interior consists of a basaltic substratum covered with a layer of sand.

A tall concrete retaining wall with lava rock veneer defines the limit of the developed portion of the Shangri La property. This retaining wall increases in height as it nears Shangri La's main house, and ranges from approximately 13 feet to 40 feet tall. **Exhibit 2** shows the existing site plan with designation of the man-made structures.

Figure 2 below shows the current built environment.

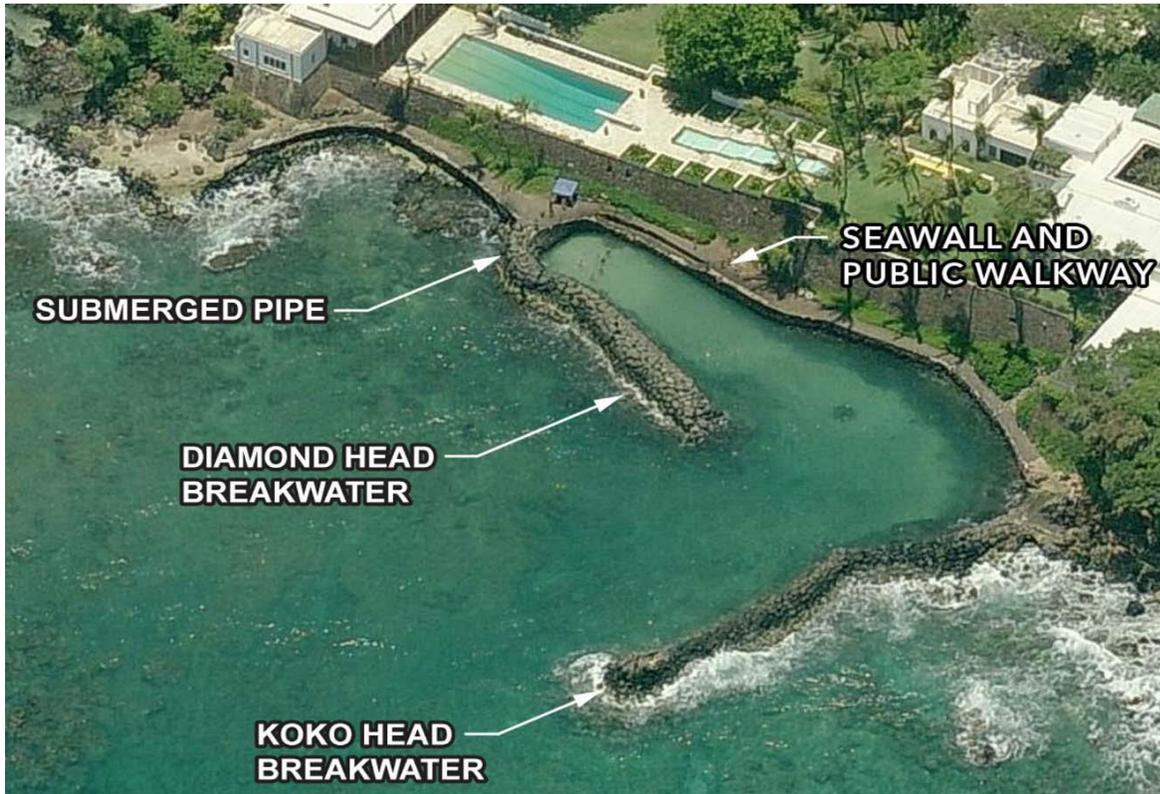


Figure 2: Built Environment

Figure 3 shows the swimming basin, with the breakwater on the left and the retaining wall on the right.



Figure 3: Swim basin

Public access along the shoreline is provided on the walkway along the basin's seawall, and there are concrete stairs leading down to the water on the southern end of the basin near the Koko Head Breakwater. DDFIA installed a 6-foot-high aluminum fence in May 2014 along the public shoreline walkway at the edge of the seawall to deter the

public from jumping or diving into the basin from the seawall's edge. The fence and the walkway appear to be outside of the Conservation District.

Figure 4 shows the seawall and the pedestrian walkway (behind the fence).



Figure 4: Detail of seawall and pedestrian walkway

Flora and Fauna: No endangered native Hawaiian waterbird species have been observed within the basin and breakwater project site. The project site does not appear to be a suitable habitat for native waterbirds. The Newell's shearwater may traverse the project area at night during their breeding season (Feb. 1-Dec. 15). The State-listed as threatened and indigenous White (Fairy) Tern, or Manu-o-Ku, is reported by the DDFIA to nest on the Shangri La residential site, mauka of the project site. No night activities would occur that could affect potential Newell's shearwater that may traverse the project area. There would be no negative impacts on the threatened shearwaters or Manu-o-Ku after project completion. Public testimony stated that sea turtles have been observed in the project vicinity.

During fieldwork, no marine mammals (e.g., whales and monk seals) or turtles were observed. The project site's water depth is too shallow for whales and the site's lack of beaches does not offer ideal resting or nursing areas for seals.

Three biotic surveys assessed biotic composition of the former boat basin and reef areas seaward of the Diamond Head breakwater. The consistent characteristic of the entire survey area is the relative scarcity of a well-developed living reef structure. The only invertebrate observed within the boat basin was the black sea cucumber. The only macroalgae observed during the surveys was green algae. No living coral was observed on the boulders comprising the breakwater. Within the inner entrance channel, corals were sporadic and were observed occurring primarily as lobate forms of porites growing on the reef platform. The outer reef seaward of the breakwaters consists of an eroded fossil reef platform with limited biotic colonization. The reef 20 feet seaward of the breakwater's boulders was observed essentially devoid of living corals.

The hemispherical branching coral was observed in the channel entrance and seaward of the breakwater. Common macroinvertebrates, the boring sea urchin were observed occupying the nearshore zone.

Traditional fish transect surveys were not possible due to shallow water depth and continual wave surges outside the breakwater. Overall, observed project site fish abundance was low. All observed fish were common Hawaiian reef fish of small size: Weke, and Manini, - both regulated species by the State DLNR – Division of Aquatic Resources. The observation of these individuals did not indicate a unique or abundant resource.

Coastal Hazards: The U.S. Geological Survey's (USGS) Atlas of Natural Hazards in the Hawaiian Coastal Zone places the project area in the tsunami and storms risk rating of "4," a high-risk rating (see **Exhibit 3**). The area also has a moderate rating of "3" for erosion and volcanic/seismic impact. The overall hazard assessment is slightly above moderate with a rating of "5" on a scale of 1-7. While the USGS has a relatively high rating for tsunami, storms, erosion, and seismic impact, the project area has had very little damage (if any) since completion of the boat basin in 1938. Given the damaging impact the same hazards have done to the other places around the State over the years the boat basin has remained intact and survived the natural hazards.

The project shoreline areas are within the designated tsunami evacuation zone. The project site and areas seaward are located within the Zone VE which is a coastal flood zone with velocity hazard (wave action) based upon the Flood Insurance Rate Map for the area.

Sea levels are rising in Hawaii and across the globe due to ocean thermal expansion and the melting of ice sheets and glaciers. The coastal modeling and engineering analysis conducted for the project incorporated a 1-foot rise in sea levels (see **Exhibit 4** for the PaclOOS 1.1-ft. sea level rise visual projection). The project model estimated changes to wave overtopping heights at the seawall resulting from the project. A high surf scenario was modeled for the project site using 12.5-foot waves originating from the southwest (typical wave direction for the area) indicated the project would have a beneficial impact on overtopping rates, even with the effect of sea level rise. When sea level rise is considered, the overtopping rate with the proposed re-naturalized shoreline is projected to rise 4 gal/min/ft, which is significantly lower than the 29 gal/min/ft estimated without the re-naturalized shoreline to dissipate wave energy.

Cultural Resources: A 1977 Conservation District Inventory Recreation Map may place the former boat basin in the "swimming hole" category. This conservation inventory was completed to identify land use, hazard, water resources, vegetation, fish and wildlife, surfing sites, and recreation. This inventory was used as a factual basis for the preparation of a Conservation District Plan. This historical document notation and traditional knowledge indicates that the boat basin, known as "Cromwells" or "swimming hole," has been a popular swimming recreational resource for decades.

The Shangri La breakwaters and boat basin site are part of the State Inventory of Historic Places (SIHP) number 50-80-14-7839. This historic site originally consisted of the main building, playhouse, and cottage associated with Mrs. Duke's residence. During the current project the historic site was revised to include other areas (including the seawall, both breakwaters, and the boat basin). These features are considered eligible for the National and/or Hawaii Register of Historic Places under Criteria B, C, and D pursuant to HAR §13-284-6 (private land) and HAR §13-275-6 (public land) (See **Exhibit 5**).

PROPOSED USE

To address and deter the unsafe behavior, the applicant proposes to dismantle the Diamond Head Breakwater and to relocate the boulders to create a natural rocky shoreline fronting the Shangri La seawall (see **Exhibit 6**). **Exhibit 7** shows the before and the after (rendition) photos of the project site. The proposed sloped re-naturalize shoreline is to not only deter the current risky behavior by the public, but to also reduce potential for wave overtopping the seawall. The stated purpose is to address public safety issues while maintaining public access to submerged lands.

Breakwater Dismantling

The breakwater will be dismantled by removing its boulders. The lowest row of boulders will be left in place. It is estimated that approximately 500 cubic yards of boulders would be removed from the breakwater. The Diamond Head breakwater was built over a natural volcanic dike. The state of the original volcanic dike is unknown. The applicant will inspect the dike during the breakwater deconstruction and remove any broken or loose pieces of the dike, but any structurally sound portions will be left intact. The drainage pipe section of the breakwater will also be removed.

The breakwater's current height is between 7.5 to 8.7 feet above sea level. Upon completion of the project the estimated height of the remnant dike will be between 0 and 3 feet above mean sea level. There will be no above sea level connection between the pedestrian walkway and the remnant dike. **Exhibit 8** is a sectional view of the breakwater and drainage pipe.

Detailed dismantling construction plans would be developed during the project's design phase. The applicant anticipates most of the work will be done using waterborne equipment. Preliminary construction plans include the use of a barge mounted crane and/or excavator that will be positioned within the work areas. Multiple barges or platforms may be used for temporary staging and storage of materials and equipment. Barges and platforms would be held in position using some combination of spuds moors (imbedded steel shafts used to stabilize a barge) or anchors, and other working vessels. Small vessels will accompany the barges and will be used to transport workers to and from the site and position the platforms during work. Primary construction plans indicate the barges will work from within the basin or just near the entrance at the eastern end of the breakwater.

A large excavator may be required to reach over the dike from within the basin to remove boulders on the makai side of the breakwater. To support a larger excavator, boulders from the breakwater or additional imported rock may be required to bolster the inside of the breakwater to create a safe surface. This would create the need to temporarily fill the basin with boulders, that will eventually be relocated and used to create the re-naturalized shoreline along the face of the Shangri La seawall.

An alternative plan may require barge placement makai of the breakwater. It is estimated an operational area of approximately 40 to 50 square feet would be required seaward of the breakwater. Barges and platforms would be positioned such that anchors and spuds would be located within an established operation zone to minimize impact to marine areas further outside of the breakwater. For this plan, the contractor would be required to prepare a Barge Spudding Plan prior to construction activities. This Plan would be required to be submitted for review to the Department of Aquatic Resources (DAR). Additionally, DAR would be consulted to develop an action plan with monitoring activities to address potential invasive species that may become colonized on the remaining dike and new shoreline structure.

Some work will be performed mauka of the shoreline from the Shangri La property. This work would be performed using light-duty equipment and hand tools. A staging area of approximately 250 square feet will be used. In addition, the contractor may use smaller equipment positioned on land for final rock placement to create the naturalized shoreline.

Naturalization of the Rocky Shoreline

Boulders from the dismantled breakwater will be placed along the makai face of the existing seawall for the entire length of the basin. The design will incorporate an engineered sloped, natural-appearing shoreline with the placement of boulders.

The sloped shoreline has a 2-fold designed. First, the slope angle is designed to deter the risky behavior of people jumping from the vertical edge of the seawall into the basin. Secondly, the slope design will absorb wave energy and minimize overtopping of the seawall from waves during large wave events.

The OCCL notes that although the proposed shoreline re-naturalization is intended to minimize overtopping of the seawall from waves during large wave events, the structure would also decrease available open water along the DDFIA seawall by about 6 to 10 feet within the inner basin and uncovering the volcanic dike will increase available recreational space within the basin by about 6 to 8 feet. The overall net loss of available recreational space is estimated to be approximately +/- 2 horizontal feet. It appears that more wave energy will be dissipated after the "swimming hole" site because the proposed re-naturalization structure will be placed adjacent to the seawall versus being dissipated by the current Diamond Head Breakwater. Additionally, the actual height and integrity of the existing volcanic dike to be uncovered is unknown.

The project would require approximately 850 cubic yards of boulders to create the re-naturalized shoreline. An estimated 500 cubic yards of boulders will be available from the dismantled breakwater and an additional 350 cubic yards of similar rocks will be imported to the site. Large rocks would be exposed approximately 1 to 2 feet above sea level to create intertidal conditions similar to the adjacent cove to the west and would extend seaward from the seawall approximately 10 to 15 feet (exposed and submerged). The footprint of material placement along the seawall in the basin water would be approximately 2,850 square feet (0.07 acres). **Exhibit 9** shows sectional views of the proposed shoreline structure.

The placement of boulders and rock would be done using a crane and/or excavator. As the breakwater is dismantled, it may be necessary to stockpile and sort material in order to place smaller pieces and under layer material along the Shangri La seawall. Temporary stockpiles would be placed on a separate materials barge until needed for placement along the seawall. Additionally, the imported rocks would also be incorporated to complete the improvements along the seawall face.

During the construction period, best management practices (BMPs) would be implemented to avoid or minimize possible short-term effects on marine resources, and water quality. Turbidity barriers, such as silt curtains and debris booms, would be installed at appropriate locations and maintained for the duration of the in-water work. The turbidity barriers would control silt, sediment, and debris within the project area that may occur from the breakwater dismantling and construction of the rocky, re-naturalized shoreline. The applicant states that BMPs will be incorporated in the project's design along with the applicable agency permit condition and requirements. Clean rock material that meets the project specifications would be delivered by barge. Additionally, the FEA/FONSI outlines U.S. Fish and Wildlife Service standard BMPs that will be implemented as well as other BMPs that will be implemented during the project's design (see **Exhibit 10**). The shoreline access along the walkway and the concrete steps leading the near shore area will not be accessible during the construction period due to public safety issues and liability. Upon completion of the project the walkway and concrete steps will be open for public use.

Timeline

The work would commence once the applicant has secured all permits, including a Department of Army Permit from the U.S. Army Corps of Engineers. The project is anticipated to begin in late 2024 and is expected to be completed within 6 to 9 months. The project is slated to begin during the winter months and is expected to be complete before the summer's increased wave activity along the south shore.

Other Alternatives Considered

Alternative 1: No Action. Under the No Action Alternative, the applicant would not proceed with dismantling of the breakwater. As a result, the current conditions within

the basin would continue with unsafe recreational activities occurring. Based on prior historical activities, there will continue to be occasional injuries to people, some of which may be severe. Serious injuries could potentially lead to lawsuits against the State of Hawaii. The No Action Alternative was eliminated from consideration because it does not meet the project purpose of increasing public safety and reinforcing the shoreline with a more natural setting. This alternative would provide a baseline of future environmental conditions to assess and evaluate probable impacts or changes resulting from the proposed project.

Alternative 2: Breakwater Removal to Ocean Floor. This alternative is similar to the proposed project with the primary difference being the complete removal of the breakwater and dike down to the ocean floor. This alternative was eliminated because demolishing the dike would require construction methods that may have additional impacts on the surrounding marine environment. Also, this alternative would increase the seawall's exposure to wave action and deterioration; and increase over-wash on the public walkway creating safety concerns. Although removing the dike completely would eliminate the possibility of people trying to access it for the purpose of jumping off the remnant dike, the proposed project to retain the dike is expected to provide protection for the seawall against wave action.

Other considered alternatives were eliminated for poor feasibility and practicability, and their limited potential for success to increase safety in the basin or curtailing unsafe behavior. These were as follows:

1. Initiate public educational outreach programs, coupled with enforcement by DDFIA security guards to prevent persons from engaging in unsafe activities. *Rationale: It is uncertain that educational programs would reach the right people who engage in unsafe activities, let alone be effective in curtailing such behavior. Previous attempts to use DDFIA security have proven to be unsuccessful in restricting behavior. Additionally, guards cannot physically restrict behavior, and DDFIA does not want to engage both verbally and physically.*
2. Restrict all individual access into and within the basin. *Rationale: The basin is now State owned, as such, the area is public trust lands that is open for public use. The objective of the project is to curtail unsafe activities and not shut down the basin.*
3. Increase the height of the present fence. *Rationale: The City's Special Management Area Minor Permit, along with the City's building codes limit the fence to 6 feet in height. The fence does not prevent persons from accessing the breakwater to jump into the basin or access the narrow landing in front of the fence to continue jumping.*
4. Fill the boat basin with sand creating a pocket beach, or with other material to create additional land. *Rationale: Various Federal and*

State agencies do not support filling submerged lands to create additional land, therefore, it is unlikely this proposal would obtain approval by jurisdictional agencies. Filling the basin with sand may only be a temporary solution as ocean currents may eventually displace the sand over time creating a similar situation as now.

5. Construct re-naturalized shoreline improvements using grouted rock (concrete slurry). *Rationale: This alternative would involve filling voids between the boulders with a concrete slurry creating a grouted rock structure. Approximately 250 cubic yards of concrete slurry would be needed to fill the voids. The slurry would probably be delivered by barge and pumped into the rock voids. This alternative would have a greater impact on the marine environment and have a negative effect on water quality due to the concrete being introduced into shoreline waters. This alternative was eliminated because the proposed project would accomplish the same objective of protecting the seawall and would not result in additional impacts on water quality and the marine environment.*

SUMMARY OF COMMENTS

The Office of Conservation and Coastal Lands referred the application to the following agencies for review and comment: DLNR - Division of Aquatic Resources, Division of Conservation and Resource Enforcement, Engineering Division, Oahu District Land Office, Division of Forestry and Wildlife; Office of Hawaiian Affairs; United States (US) Army Corps of Engineers; US Fish and Wildlife Service; State Office of Planning; City and County of Honolulu (C&C) - Department of Planning and Permitting; C&C Fire Department; Waialae-Kahala Neighborhood Board No. 3; and the Historic Hawai'i Foundation. The application was forwarded to the Kaimuki Public Library and was also available on OCCL's website for review.

The following written comments and/or testimony were received from individuals and agencies, and summarized by staff:

C&C-Department of Planning and Permitting

No comments and no objections.

Applicant's response

We acknowledge that the Land Use Permits Division had no comments nor objections regarding the subject project. We appreciate your participation in this process.

Office of Planning and Sustainable Development (OPSD)

The OPSD submitted written testimony that was received on March 28, 2023. OPSD recommends the application carefully assess whether the proposed project will be able to eliminate unsafe recreational activities and risky behavior at the project site by diving and/or jumping into the ocean.

Applicant's response

Thank you for your comments/testimony on the subject project. We strongly believe that the proposed project will mitigate a hazardous condition to protect public health and safety.

Much of the risky activity takes place at the Ewa end of the boat basin where the water is the shallowest. During certain conditions, the sand accumulates and is trapped which causes the water level to decrease. Further, during low tides, water in the area can be only waist high. In addition, the visibility in the water is also reduced during certain conditions, which may impair proper water depth judgement of those jumping into the basin from the Ewa end. Therefore, it is our hope that by removing the breakwater, we would reduce the hazardous condition created by the existence of an artificial manmade structure.

We thank you again for your testimony and for participating in this process.

William Saunders

William Saunders submitted written and email project opposition testimony that was received on March 30, 2023, for the May 26, 2023, Board Information Briefing (Non-Action Agenda Item). The general opposition points are as follows:

- *Safety and Ocean Conditions:* The current project configuration will create a hazardous situation for swimmers, snorkelers, and others within the harbor and will eliminate the current safe swimming conditions. The proposed project would eliminate the protection from wind, waves, tidal surges, currents, and sea level rise that the Diamond Head Breakwater currently provides for the swim basin.
- *Erroneous and Outdated Data:* The EA relies on erroneous and/or outdated tide, sea level rise, bathymetry, wave height, and surf spot location data: (1) the tidal analysis relies entirely on “predictions” and totally ignores readily available NOAA data showing actual observed tide levels that are significantly higher; (2) the studies relied upon for sea level rise are obsolete; (3) surf spot location and wave condition information is taken from a foreign social media website which is erroneous and unreliable; (4) assumptions of wave dissipation on “fringing reef” are erroneous and ignore offshore bathymetry; and (5) it appears actual wave, tide, and current conditions at the site were not surveyed and no knowledgeable sources were consulted. Mr. Saunders provided links to tide and currents, personal videos in drop-box, and weather information.
- *Contravenes Requirements of Hawaii Law:* (1) An SMA permit is required because the project area includes on-shore development that includes placement or erection of any solid material, change in land use, and change in the use of water, ecology, and/or access; (2) The project is inconsistent with objectives, policies, and guidelines under Hawaii Revised Statutes (HRS) 205A relating to conservation of marine ecosystems, preservation of historic sites, protection of

cultural practices and protection and enhancement of coastal recreational opportunities.

- *Species Protection:* There are several important native species, including endangered sea turtles and monk seals that frequent the area. There are also opihi on the rocks that local residents gather. The FEA gave only passing mention to, and no meaningful analysis of, the impact on these animals. The population of opihi on the rocks represents a traditional and cultural resource which should be protected under HRS 205A. Mr. Saunders provided a drop-box link to personal videos of sea turtles in the vicinity.
- *Failure to adequately consider feasible alternatives:* There has not been consideration of the fact that the project alternatives available to the State are different from and more extensive than those available to the Duke Foundation, the first time this was proposed. The project's cost was initially estimated at 2.5 million dollars (in 2016 dollars). Other alternatives like budgeting for a lifeguard to prevent dangerous behaviors in the basin would be much easier, cheaper, and a less destructive alternative.
- *Flawed procedural process:* This application was twice brought to the BLNR and twice rejected. Someone in the Department seems to have a reason for pushing this project, and perhaps believes that the change in Board membership will allow it to go through this time.

In addition, Mr. Saunders also included in his testimony package National Oceanic and Atmospheric Administration tide charts for various days, wave photos, a screen-shot of WannaSurf webpage, excerpts from HRS Chapter 205A, excerpts from Revised Ordinances of Honolulu Chapter 25, Hawaii's Comprehensive Wildlife Conservation Strategy Opihi information, Washington Post article by Jason Samenow dated February 13 (no year stated), on Sea-level rise, Chicago Tribute article by Chris Mooney dated October 26, 2017, on ocean rise, maps of the project area, and a Hawaii Historic Foundation letter to OCCL dated January 19, 2018, regarding comments of the breakwater dismantle project (OA-3809).

Applicant's response

Thank you for your comments/testimony on the subject project. We offer the following responses to your comments in the order in which they were received:

A. Flawed Procedural Process

We disagree with your claim that we are bringing this application back before the Board without any changes. The primary change is that the applicant is different as the submerged lands and improvements now belong to the State, which has an obligation to protect public health and safety.

Further, the current Board is not bound to previous policy decisions made by a former Board, especially under different circumstances. As long as they act within the bounds of the law, Board members are free to apply the knowledge and experience they have gained in their respective fields to address important matters arising before the Board, even if it results in a change to a past Board practice, policy, or decision. The decisions made under one administration can be overturned by a later administration and so forth.

B. The EA is Flawed and Outdated

While we understand you have concerns with the Final EA prepared for the DDFIA project, the Final EA/Finding of No Significant Impact (FONSI) was issued and was not challenged during the legal challenge period. The EA being prepared by a private party does not negate its applicability to this project as it is the same project location and the same project area.

Regarding your claim that that the Environmental Assessment (EA) document is outdated, we believe that the findings of the EA are still relevant to the proposed scope of the project. Further, regardless of wave conditions and sea level rise, the State's priority is to protect public health and safety by reducing the danger created by the existence of an artificial manmade structure that was essentially built to benefit a private individual.

We believe that your comment regarding the risk from sea level rise and that the analysis in the EA "of waves, currents, and sea level" may not be applicable in a situation like this which involves mitigating a hazardous condition to protect public health and safety.

Again, we stress that the harbor was never meant to function as a recreational area as further evidenced by the lack of adequate parking to access the site and the presence of ocean safety personnel. We wish to reiterate that the purpose of this project is to reduce the hazardous condition created by the existence of an artificial manmade structure.

C. The EA is Flawed with Respect the Species Protection

Regarding your comment regarding monk seals and sea turtles, in the event that the Hawaiian monk seal, other marine mammals, or sea turtles are observed to be in close proximity to the project site during construction, best management practices (BMPs) will be instituted to ensure that contractors take appropriate action to modify activities in order to avoid disturbance to the regular behavior and activities of the animal. Such action would include, but is not limited to ceasing construction activity until the animal leaves the area. In addition, we wish to note that the area is not designated as a critical habitat for sea turtles.

Regarding the presence of opihi, we are not sure what your concern is regarding their protection, but the opihi will continue to be accessible to the public, though short-term

impacts from construction may temporarily halt such activity should it be deemed unsafe for the public to access the area during construction activities.

D. Violation of HRS Chapter 205A

Again, we wish to reiterate that this area was not originally intended to function or be designated as a public recreational area evidenced by the lack of adequate public access, public parking and water safety personnel. The site was designed as a private boat harbor for the benefit of a private individual. The State's goal is to promote the natural state of coastal waters.

E. The Proposal Involves Action on State Lands Within the SMA Which Will Change the Intensity of Use of the Harbor Area, therefore it Requires an SMA Major Permit

We respectfully disagree with this statement and both the State Office of Planning and the City and County of Honolulu, Department of Planning and Permitting have both made the determination that the project is not located within the Special Management Area and will not require a permit.

F. Failure to Adequately Consider Feasible Alternatives

While we understand your concern regarding exploration of other alternatives, the Department believes that the proposed project will yield the most noticeable result in terms of reducing the potential for severe, catastrophic injuries to occur as the project eliminates an attractive public nuisance that encourages risky and dangerous behavior and has been further promoted through the existence of social media sites. In addition, the project does not negate the exploration of other safety measures that could/would act in conjunction with the proposed project.

While you believe that the presence of water safety personnel would be a good alternative, the Department believes that presence of a lifeguard alone would not prevent risky and dangerous behavior and severe injury as their primary responsibility is to respond to incidents.

We thank you again for your testimony and for participating in this process.

Leigh Wai Doo

Leigh Wai Doo submitted written project opposition testimony that was received on March 28, 2023. Mr. Doo listed 10 points on why the Board should deny the project.

- Bad policy that would establish a precedent in administration and Board responsibility opening the disagreement on matters of administration/Board decision making at all levels of government and all agencies statewide. There would be no finality.

- No diligence of administration doing its homework and working out solutions, including hearing from numerous agencies.
- The defective Environmental Assessment (EA), asserted as formal, should never have been declared final, there must be a final environmental assessment.
- Historic Icon – the Shangri-la Breakwater and saltwater pool/basin are icons of an important era in Hawaii’s history.
- Sovereign immunity is held by the state which now owns the swimming basin.
- Since the two prior rejections by the Board, neither DLNR, nor DDFIA have answered the previous opposition testimony, or met to discuss issues and solutions.
- Numerous attempts to contact DDFIA to discuss the issues and solutions have not been responded to.
- The destruction of Doris Duke’s legacy connecting to the people of Hawaii will be destroyed.
- Legacy connection to Hawaii. Doris Duke’s breakwater and basin is her connection to the people of Hawaii.
- One of a kind opportunity to create a worldwide attraction in Hawaiian hospitality, ocean safety, and uniqueness.

Applicant’s response

Thank you for your comments/testimony on the subject project. We offer the following responses to your comment in the order in which they were received:

1. *We disagree with your claims that it would be “bad policy” for the current Board to make a decision on the current application as a similar recommendation was already denied. While the current application may have a similar recommendation that was presented in CDUA OA-3809, the applicant is different as the submerged lands and improvements now belong to the State, which has an obligation to protect public health and safety.*

Further, the current Board is not bound to previous policy decisions made by a former Board, especially under different circumstances. As long as they act within the bounds of the law, Board members are free to apply the knowledge and experience they have gained in their respective fields to address important matters arising before the Board, even if it results in a change to a past Board practice, policy or decision. The decisions made under one administration can be overturned by a later administration and so forth.

2. *We are unsure of what you mean by not doing our “homework.” We are well aware of additional permitting needed by the Army Corps of Engineers and have already met with them to discuss the project. We believe that it is in the public’s best interest in regard to cost savings that we try to obtain the CDUA permit first*

before expending resources on additional permitting should the CDUA ultimately be denied. Further, we are not sure what you are referring to regarding the “finality of the shoreline management permit.” According to the City and County of Honolulu, Department of Planning and Permitting (DPP), in a letter date March 25, 2021, “any work makai of the certified shoreline is not subject to the permitting requirements of ROH Chapters 23 or 25. The temporary storage of construction equipment that is proposed mauka of the shoreline does not trigger those permitting requirements either.”

3. *While we understand you have concerns with the Final EA prepared for the DDFIA project, the Final EA/Finding of No Significant Impact (FONSI) was issued and was not challenged during the legal challenge period. Further, your claim that age of the harbor/basin equating to being “considered a natural part of old Hawaii” is a flawed statement in and of itself. The fact is that the basin was manmade regardless of its age and therefore its removal cannot be categorized as a “disruption of the natural environment.” Rather it is the Department’s goal is to protect public health and safety by reducing the danger created by the existence of an artificial manmade structure that was essentially built to benefit a private individual.*

Your comments as they relate to climate change may not be applicable to this project as sea level rise and changing wave conditions is a natural occurrence happening all over the State. This project focuses on public health and safety and mitigating a hazardous condition created by a manmade structure.

4. *We disagree with your assertion that the breakwater and basin are a historic icon. Rather, we view the Shangri-La property itself is what is truly iconic and holds historic value. In reality, the construction of the boat basin should have never occurred, as it resulted from the privatization of submerged lands which should have remained in public ownership.*
5. *Regarding your comment that the State has sovereign immunity, it is unclear to us whether that is the case and would ultimately be decided by a court.*
6. *While we cannot speak to DDFIA not responding to your previous testimony, the only testimony that we, as the State, recall receiving from you, was oral testimony you gave during the public hearing for our previous application. We apologize for not responding to that testimony as we had decided to withdraw the application.*
7. *Again, we are unable to address your issue as it is directed specifically at DDFIA.*
8. *We thank you for your comment and acknowledge that we have differing opinions on this matter.*
9. *We thank you for sharing your opinion and views on the site.*

10. The “Leahi natural volcanic swimming pool” will not disappear with the removal of the breakwater. The breakwater was formed around the natural dike and it is our intention to leave that natural dike in place.

We thank you again for your testimony and for participating in this process.

Elizabeth Benyshek

Elizabeth Benyshek, Surfrider Foundation, submitted written project opposition testimony that was received on March 21, 2023. Ms. Benyshek listed 4 points in opposing the project.

- Identical proposals were twice rejected by the Board and it is improper to keep bringing it back to the Board without any changes.
- The EA is outdated (preparation began in 2014 or earlier) and does not consider recent science on climate change, global warming, and sea level rise.
- The swimming hole is a significant recreational resource. The EA states safe swimming will be able to continue after the jetty is reduced in height. This is false as waves over-top the jetty at its current height. Lower the jetty will result in dangerous swimming conditions.
- The EA was flawed from the outset. The section on ocean conditions was based on models and assumption, rather than observation of wave conditions which resulted in erroneous conclusions. The analyses and discussion of sea life in the vicinity was inadequate and failed to recognize sea turtle feeding areas, opihi on the jetty boulders, and seals frequenting the area. The cost analysis is outdated. Removal of the breakwater will increase the longshore currents in the area.

Applicant's response

Thank you for your comments/testimony on the subject project. We offer the following responses to your comment sin the order in which they were received:

1. *We disagree with your claim that “it is improper” for the Department to bring this application back before the Board “without any changes.” This biggest change is that the applicant is different as the submerged lands and improvements now belong to the State, which has an obligation to protect public health and safety.*

Further, the current Board is not bound to previous policy decisions made by a former Board, especially under different circumstances. As long as they act within the bounds of the law, Board members are fee to apply the knowledge and experience they have gained in their respective fields to address important matters arising before the Board, even if it results in a change to a past Board practice, policy or decision. The decisions made under one administration can be overturned by a later administration and so forth.

2. *Regarding your claim that that the Environmental Assessment (EA) document is outdated, we feel that the findings of the EA are still relevant to the proposed scope of the project. Further, regardless of climate change, global warming, and sea level rise, the State's priority is to protect public health and safety by reducing the danger created by the existence of an artificial manmade structure that was essentially built to benefit a private individual.*
3. *We disagree with your statement that the "swimming hole is a significant recreation resource in the coastal zone." We wish to emphasize that this area is a former harbor and was not built for swimming purposes. This is further evidenced by the lack of ocean safety personnel and adequate parking to access the site.*

Your arguments regarding sea level rise and wave assumptions in the EA may also not be applicable in this situation where public health and safety is the main priority. Again, we stress that the purpose of this project is to mitigate a hazardous condition created by a manmade artificial structure.

4. *While we understand you have concerns with the Final EA prepared for the DDFIA project, the Final EA/Finding of No Significant Impact (FONSI) was issued and was not challenged during the legal challenge period.*
 - a. *We believe that the findings of the EA are still relevant to the proposed scope of the project. Further, regardless of wave conditions, the State's priority is to protect public health and safety by reducing the danger created by the existence of an artificial manmade structure that was essentially built to benefit a private individual.*
 - b. *Regarding your comment regarding monk seals and sea turtles, in the event that the Hawaiian monk seal, other marine mammals, or sea turtles are observed to be in close proximity to the project site during construction, best management practices (BMPs) will be instituted to ensure that contractors take appropriate action to modify activities in order to avoid disturbance to the regular behavior and activities of the animal. Such action would include, but is not limited to ceasing construction activity until the animal leaves the area. In addition, we wish to note that the area is not designated as a critical habitat for sea turtles.*

Regarding the presence of opihi, we are not sure what your concern is regarding their protection, but the opihi will continue to be accessible to the public, though short-term impacts from construction may temporarily halt such activity should it be deemed unsafe for the public to access the area during construction activities.

- c. *While the cost estimate for the project has not been updated, nevertheless, we believe it is a worthy investment if the mitigation work results in saving lives or preventing severe injuries from occurring at the site.*
- d. *Beneath the breakwater is a naturally occurring volcanic dike that would be left in place once the breakwater is removed, therefore, we are unsure of the factual basis of your statement.*

We thank you again for your testimony and for participating in this process.

Mary Jane Tabios-Felicilda

Mary Jane Tabios-Felicilda submitted written project opposition testimony that was received on March 30, 2023. Ms. Tabios-Felicilda cited her opposition of the project is based on the current proposal is a duplicate of two previous ones that were either denied or withdrawn. Ms. Tabios cited key facts as:

1. The first CDUA OA-3809 by DDFIA was denied twice by BLNR in 2018 after public opposition.
2. DDFIA withdrew its Contested Case Hearing on 6/14/2018 after offering to convey the breakwater/improvements to the State.
3. BLNR accepted the offer against staff's advice and transferred the area.
4. DDFIA offered to pay up to 1 million dollars to the State towards the breakwater dismantle project.
5. The second CDUA OA-3875 was withdrawn by DLNR on 2/23/2021, because applicant was unable to obtain a HRS Chapter 6E determination in a timely manner.
6. The third CDUA OA-3913 by DLNR is now pending approval and is a resubmission of an identical application as before.
7. The DLNR is requesting to use the same FEA-FONSI as DDFIA for the breakwater dismantling.
8. The FEA-FONSI was issued by OCCL in 2017 and DLNR states the project and impacts are relatively the same

Is there justification of approving this third CDUA (OA-3913) submitted by DLNR for the dismantling of the breakwater, when DLNR notes that this is essentially a similar copy of the second CDUA (OA-3875) it withdrew on 2/23/2021. And, the second CDUA is almost identical to the first CDUA (OA-3809) submitted by DDFIA and was twice denied by the BLNR in 2018.

Ms. Tabios recommends rejecting this third CDUA (OA-3913) and preserve the breakwater to protect public interest and avoid unnecessary environmental impacts.

Applicant's response

Thank you for your comments/testimony on the subject project. While we understand your concern that the Board had previously denied this permit, we wish to remind you that the Applicant at the time of denial was a private landowner. While the project has not changed, the Applicant is now the State, who now owns the submerged land and breakwater, and has an obligation to protect public health and safety by reducing the danger created by the existence of an artificial manmade structure that was essentially built to benefit a private individual.

We thank you again for your testimony and for participating in this process.

Sarah Fairchild

Sarah Fairchild, Outrigger Duke Kahanamoku Foundation, submitted written project support testimony that was received on March 31, 2023. Ms. Fairchild testimony cited the two major injuries that occurred from jumping off the wall and noting Hawaii has the second highest rate of drowning in the nation. Further noting that Act 190 allows DLNR to convene the Task Force on Beach and Water Safety to advise and coordinate ocean safety, which has not been done since 2016.³

Applicant's response

Thank you for your comments/testimony on the subject project. We appreciate your support for this project and your participation in this process.

Derrick Tsukayama

Derrick Tsukayama submitted written project support testimony that was received on April 4, 2023. Mr. Tsukayama's testimony noted that he was a former DDFIA security manager for 8 years and that he has observed individuals participating in perilous activities on a near-daily basis during his employment at DDFIA. Despite efforts to educate and warn people, his testimony notes that individuals continued to scale the fence which was installed to deter diving, and dive into the shallow basin. Mr. Tsukayama also states that water level in the basin changes rapidly as the waves go in and out of the drainage pipe. He also recounts that a fellow classmate became a quadriplegic after an accident at "Cromwell's". According to his testimony, Mr. Tsukayama believes the project would reduce the risk, but swimming conditions would remain the same, and restoration of the coastline will minimize shoreline erosion.

Applicant's response

³ Staff notes that Act 190, SLH 1996, established a process for the State and County to provide both meaningful and legally adequate warnings to the general public of extremely dangerous natural conditions in ocean areas adjacent to their respective public beach parks.

Thank you for your comments/testimony on the subject project. We appreciate your support for this project and your participation in this process.

Richard Ing

Richard Ing submitted written project support testimony that was received on March 31, 2023. Mr. Ing's testimony states the project will be critical to ensuring community safety and bring the environment closer to its natural state. His testimony notes that for many years residents have flocked to the breakwater to engage in dangerous activities which sometimes results in serious injuries. Removing the breakwater will make it difficult for people to jump from its rocks into shallow water during low tide. Mr. Ing also states that the project has carefully considered the environmental impacts.

Applicant's response

Thank you for your comments/testimony on the subject project. We appreciate your support for this project and your participation in this process.

JD Watumull

JD Watumull submitted written project support testimony that was received on March 31, 2023. Mr. Watumull states while growing up in the neighborhood he is familiar with the basin and went there as teenager. The breakwater poses a danger with many documented injuries. Current mitigation measures fail to deter risky behaviors. The proposed plans would reduce risk, while allowing surfers and swimmers to enjoy the area. Also, the project would have no negative impact on waves or marine habitat.

Applicant's response

Thank you for your comments/testimony on the subject project. We appreciate your support for this project and your participation in this process.

Sam Gill, Meredith Artley, Lea Major

Sam Gill, Meredith Artley, and Lea Major, on behalf of DDFIA, submitted written project support testimony that was received on March 31, 2023. DDFIA believes the project demonstrates the necessary consideration of the historical, ecological and community impacts. DDFIA's testimony notes the breakwater has been the site of high-risk activities for years and has resulted in no fewer than eight injuries, including para- and quadriplegia. For more than two decades DDFIA has taken measure to discourage unsafe behavior, including consulting with ocean safety experts, hiring security guards, security technology to warn people, allowing first responders quick access to the shoreline, posting warning signs, and erecting a six-foot high fence to discourage jumping and diving from the path. Their testimony notes that despite these efforts, high-risk behavior persists. The project will decrease the risk of injury and return the coastline to its pre-development state by repurposing the boulders to create a re-naturalized shoreline, removing the concrete culvert, and retaining the natural dike.

Applicant's response

Thank you for your comments/testimony on the subject project. We appreciate your support for this project and your participation in this process.

Dan Kayser

Dan Kayser submitted written project support testimony that was received on April 5, 2023. According to his testimony, Mr. Kayser is concerned about the way children and young adults misuse the boat basin area. His testimony noted that people often climb the fence to jump into the basin and caught off guard with the subsurface water conditions. Large boulders from the breakwater as well as concrete from an underwater drainage pipe are easily hit when jumping from the fence and walkway. Mr. Kayser believes a strong undertow pulling jumpers into the breakwater is the source of many injuries. Mr. Kayser's testimony states restoring the coastline is the right thing to do and a much better situation for everyone. He also believes the restoration is ecologically and culturally significant and would set a great example for how we should restore more of our natural coastlines.

Applicant's response

Thank you for your comments/testimony on the subject project. We appreciate your support for this project and your participation in this process.

The following are oral testimonies from the April 5, 2023 public hearing.

Lea Major

Lea Major, DDFIA, supports the project and states that the submerged lands was conveyed back to the state about 3 years ago, but supports the project which considers historical, ecological, and community impacts. As previous owners of the basin their support is focused on two main issues. First, the breakwater is a risk to community safety. DDFIA has witnessed countless unsafe activities and severe injuries which included permanent para and quadriplegia. The multitude of safety measures, summarized under testimony by Sam Gill, Meredith Artley, Lea Major (all from DDFIA), put in place by DDFIA are not working. Secondly, this is a conservation initiative as the project proposes to restore the coastline to its original, natural state. Environmental experts confirm restructuring the breakwater has no adverse impact on nearby reefs, wave height, and conditions, nearshore circulation patterns, and sand distribution.

Applicant's response

Thank you for your comments/testimony on the subject project. We appreciate your support for this project and your participation in this process.

David Louie

Mr. Louie, Kobayashi, Sugita, & Goda, LLP, counsel for DDFIA, supports the project. In his testimony, Mr. Louie commented on three legal issues that he believes the Board should consider. First, approval of the CDUA would reduce the potential for serious public injury and reduce potential liability risk to the State. Mr. Louie stated that some public comments have incorrectly stated that the State, as current owner of the breakwater, does not have a significant risk of liability if someone were to injure themselves by jumping or falling from the breakwater. Second, public comments have incorrectly claimed the Board is not able to approve the CDUA, because prior CDUAs

proposing similar projects were not approved. Third, other comments claim the State has sovereign immunity for negligence claims for personal injury which is not true as the State has waived sovereign immunity for tort claims.

- Approval of the CDUA would reduce the potential for serious injury and the potential risk to the State of Hawaii as a landowner of the breakwater.
- Under Hawaii Law, administrative agencies are to review permit applications on their merits and are not precluded from making decisions which differ from prior decisions.
- The State of Hawaii does not have sovereign immunity as landowner of the breakwater.

Applicant's response

Thank you for your comments/testimony on the subject project. We appreciate you sharing your legal knowledge on this matter, your support for this project, and your participation in this process.

ANALYSIS

On February 15, 2023, the Department notified the applicant that:

1. The proposed uses are identified land uses in the Protective subzone of the Conservation District, pursuant to the Hawaii Administrative Rules (HAR), 13-5. Please be advised that this finding does not constitute approval of the proposal.
 - a. HAR, §13-5-22, P-6, **PUBLIC PURPOSE USES**, (D-1) Not for profit land uses undertaken in support of a public service by an agency of the county, state, or federal government, or by an independent non-governmental entity, except that an independent non-governmental regulated public utility may be considered to be engaged in a public purpose use. Examples of public purpose uses may include but are not limited to public roads, marinas, harbors, airports, trails, water systems and other utilities, energy generation from renewable sources, communication systems, flood or erosion control projects, recreational facilities, community centers, and other public purpose uses, intended to benefit the public in accordance with public policy and the purpose of the conservation district.
 - b. HAR, §13-5-22, P-8, **STRUCTURES AND LAND USES, EXISTING** (D-1) Major alteration of existing structures, facilities, uses, and equipment, or topographical features which are different from the original use or different from what was allowed under the original

permit. When county permit(s) are required for the associated plan(s), the department's approval shall also be required.

2. Pursuant to HAR, §13-5-40, a Public Hearing will be required;
3. In conforming with the Hawaii Revised Statutes (HRS), Chapter 343, as amended, and HAR, §11-200, the Final Environmental Assessment (FEA) and Findings of No Significant Impact (FONSI) was published in The Environmental Notice on June 23, 2017; Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project FEA (FONSI). The FEA was reviewed and a FONSI was determined by the DLNR.
4. The State Historic Preservation Division (SHPD) has provided notice that the CDUA permitting process may continue contingent upon proposed mitigation commitments developed between Land Division and SHPD (see Exhibit 5). The mitigation commitments are:
 - a. Architectural photograph documentation of the dismantling of the breakwater (before, during, and after).
 - b. Re-use of the cobbles and boulders from the breakwater in the stabilization of the existing reinforced concrete seawall.
 - c. Architectural photographic documentation of the stabilization work.
 - d. The results to be presented in a letter report submitted to SHPD.
5. The County has determined the project is makai of the certified shoreline and is outside of the SMA.

The Final Environmental Assessment and Findings of No Significant Impact (FEA-FONSI) was published in The Environmental Notice on June 23, 2017.

The Notice of CDUA OA-3913 was published in The Environmental Notice on February 23, 2023.

The applicant has also submitted a Chapter 343 exemption declaration, in accordance with HAR, §11-200.1-15, and the Exemption List for the Department of Land and Natural Resources concurred with by the Environmental Council and dated November 10, 2020. The exemption declaration states that the subject project is exempt from the preparation of an environmental assessment pursuant to General Exemption Type 1, Part 2, Item 1, which states the "Mitigation of any hazardous conditions that present imminent danger as determined by the Department Director and that are necessary to protect public health, safety, welfare, or public trust resources".

OCCL held a public hearing on April 5, 2023, at the Wesley United Methodist Church in Kahala. Two representatives from DLNR-Land Division were present to address any public questions regarding the project. Attendees were encouraged to write to the OCCL with further questions and comments regarding the project. There were

approximately 7 public attendees present. Of the 7 participants, 2 attendees provided testimony in favor of the project and no attendee expressed opposition to the project.

On May 26, 2023, under agenda item K-1, a non-action briefing was presented, by the applicant, to provide the Board and the public information regarding the proposed project.

CONSERVATION CRITERIA

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

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

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

The applicant proposes to dismantle the Diamond Head Breakwater as a public health and safety project. The project's purpose is to prevent people from pursuing unsafe recreational activities in the basin waters. The applicant believes the project is consistent with the Conservation District because it promotes public health, safety, and welfare for the people who use the site for recreational purposes.

The OCCL notes the 1977 Conservation District Inventory Recreation Map identifies this area as a "swimming hole" and presents this area as having possible significance to recreational users.

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

The project is in the Protective subzone of the State's Land Use Conservation District. The objective of the Protective Subzone is to protect valuable natural and cultural resources in designated areas such as restricted watersheds, marine, plant, and wildlife sanctuaries, significant historic, archaeological, geographical, and volcanological features and sites, and other designated unique areas. Additionally, this definition encompasses (2) lands and waters necessary for the preservation and enhancement of designated historic or archaeological sites and designated sites of unique physiographic significance; and (3) areas necessary for preserving natural ecosystems of native plants, fish, and wildlife, particularly those which are endangered.

The applicant states that dismantling of the Diamond Head Breakwater will restore the shoreline to an appearance similar to prior natural conditions and will uncover

the natural dike (currently beneath the breakwater) which supports subzone objectives related to significant geological features and sites.

The proposed use is an Identified Land Use in this subzone pursuant to HAR §13-5, P-8 STRUCTURES AND LAND USES, EXISTING and HAR §13-5, P-6 PUBLIC PURPOSE USES. The application is being processed as a major modification to an existing structure.

The environmental studies indicate that there will be little impact to the area's natural resources, provided that best management practices are followed during construction. The water quality analysis conducted for the FEA suggests the project may enhance site water quality.

The applicant states that although the various features associated with the boat basin are contributing elements of the property, they are of secondary significance; thus, removing the breakwater will have a negligible impact on the overall site's historic significance. Members of the community argue that the breakwater itself is a historic site. The State Historic Preservation Division (SHPD) defines historic property as "any building, structure, object, district, area, or site, including heiau and underwater site, which is over fifty years." The Diamond Head Breakwater is over fifty years old.

In summary, the applicant states that the proposed project will support a public purpose by making recreational use of the basin safer and will better protect the public shoreline walkway.

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

Recreational resources. The proposed use should have a neutral effect on public access to some recreational resources: swimmers, surfers, and fisherman. The effect on the swimming basin is less certain. The Breakwater's removal has the potential to eliminate the current swimming conditions in this former boat basin known as Cromwells as evidenced by the 1977 Conservation District Inventory Recreation Map and John R.K. Clark's book Beaches of Oahu.

Historical resources. Cultural Surveys Hawaii (CSH) completed the archaeological inventory survey (AIS) fieldwork under archaeological permit number 15-03, issued by the Hawaii SHPD per Hawaii Administrative Rules (HAR) §13-13-282. The CSH recommended architectural recordation for the boat basin and breakwaters per HAR §13-284-8. The OCCL notes that SHPD has completed its HRS 6E review and approves the processing of the CDUA (see Exhibit 5).

Scenic and open space resources. The removal of the breakwater will eliminate a man-made element from the near shore waters. Conversely, the breakwater

rocks will be used to create a re-naturalized shoreline structure along an existing private seawall.

Coastal ecosystems. Best management practices will need to be followed to protect the coastal ecosystem during construction. The project is not anticipated to have any impact on coral species, and the placement of the boulders near the seawall will mimic the natural habitat found in undeveloped areas along the shoreline.

Economic uses. The project will result in small increase in employment during the construction phase. The project cost's estimated is dependent upon the contractor's type of equipment and methods. However, the proposed project is meant as a public health, safety, and welfare project to reduce State's liability by mitigating risky behavior. As such, the project is not anticipated to be considered important to the State's overall economy.

Coastal hazards. The proposed project is anticipated to reduce potential for wave overtopping at the Shangri La seawall. No adverse impacts from natural disasters are anticipated and efforts will be taken to minimize natural hazard impacts to the proposed project improvements. The placement of large rocks from the breakwater along the seawall should withstand large waves from a tsunami, based upon wave modeling analysis. Additionally, the uncovered volcanic dike would be inspected to ascertain structural integrity and any unsound pieces would be removed. The project is not expected to exacerbate or reduce the coastal hazard or sea level rise.

Public participation. The CDUA was published in The Environmental Notice on February 23, 2023, and OCCL's website at <http://dlnr.hawaii.gov/occl> since acceptance. A public hearing was held on April 5, 2023, at the Wesley United Methodist Church in Kahala with approximately 7 attendees. During this hearing, the public was able to submit public testimony. Two testimonies were presented, both were in favor the project. The OCCL also received public comments via mail and emails. The applicant has provided OCCL with written responses to all public comments that were received. A non-action, information briefing was presented to the Board on May 26, 2023, under agenda item K-1.

Beach protection. There are no sandy beaches adjacent to the breakwater. The basin itself currently has a sandy substrate.

Marine resources. The Division of Aquatic Resources (DAR) previously surveyed the site and removed coral colonies from the project area for transplanting and has requested that they be allowed to conduct a final survey, and review best management plans, prior to construction. Additionally, the DAR will be consulted to develop an action plan with monitoring activities to address potential invasive species that may become colonized on the remaining dike and new shoreline structure. Boulder placement along the seawall has the potential to increase

habitat for reef fish and limu, and to improve foraging opportunities for sea turtles. Proposed best management practices (BMPs) would include setting up a turbidity curtain with debris boom along the basin channel entrance and across the area where the barge(s) would be operating outside the breakwater.

The State Office of Planning and the City and County of Honolulu Department of Planning and Permitting has confirmed that the site is outside the Special Management Area, and not subject to SMA permitting requirements.

The applicant will be working with the Army Corps of Engineers to comply with any federal Coastal Zone Management requirements.

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

The applicant shall take suitable precaution to ensure that the project does not adversely impact the existing natural resources of the region.

The basin itself currently has a sandy substrate with poor water quality. Studies conducted in support of and attached to the application have noted that the area does not appear to be suitable habitat for reef fish, limu, sea turtles, or significant corals in the project area. It is believed the project will improve water quality via increased mixing of water in the basin, which will dissipate existing nutrient concentrations. Re-naturalization of the shoreline with the placement of the boulders may provide or improve potential habitat for small fish and for limu.

The applicant has identified a number of best management practices, as outlined in the CDUA, that shall be strictly adhered to minimize the risk of sedimentation or contamination of near shore waters, as well as to reduce the risk of introducing potentially harmful invasive species to the area.

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

The project involves dismantling an existing breakwater and placing the boulders along the makai face of the Shangri La seawall to create a rocky, naturalized shoreline similar to the adjacent rocky shorelines in the area. The applicant states the project is compatible with the surrounding basin area and will approximate restoration of the area's original condition by leaving the volcanic dike. The new rocky shoreline design is intended to create a shallow tidal habitat similar to surrounding conditions which may improve habitat for marine resources.

The OCCL concurs with the applicant that the partially restored site will be compatible with the surrounding locality. The finished project will mimic the rocky natural shoreline found on neighboring properties.

- 6) *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

The removal of the breakwater will expose the remnants of the original volcanic dike that is thought to have a positive impact on views by reducing the obstruction of ocean views and uncovering the existing natural volcanic dike. Additionally, the removal of the breakwater will help to restore natural water flow in the basin, which will lead to an improvement in water quality.

Conversely, the Diamond Head Breakwater is associated with the adjacent historical property. There is a historical connection with the basin and the Shangri La property. It could be viewed that the existing Breakwater is an existing physical characteristic of the adjacent historic property.

While the OCCL acknowledges the historical connection that the breakwater has to the Shangri La property it does agree that Breakwater dismantling and boulder placement near the existing seawall will mimic the appearance of the nearby shorelines.

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

No subdivision of land is proposed for this project.

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

The project action is proposed as a health and safety initiative. The applicant wishes to dismantle an existing breakwater to deter jumping into shallow waters, and notes that there are cases of severe injury, including permanent paraplegia and quadriplegia from those who have jumped from the property walls and breakwater.

Conversely, those who oppose the project have raised concerns that removing the breakwater will make swimming conditions more dangerous in the basin during periods of high surf.

CULTURAL IMPACT ANALYSIS

Cultural and recreational practices that occur in the project area and nearby waters include fishing, surfing, snorkeling, diving, reflection, and swimming.

There is a public pedestrian easement that runs along the shore, and a set of concrete stairs that leads from the easement to the ocean on the southern end of the basin.

The project is not expected to impact known fishing areas, limu gathering spots, or surf spots.

During construction, use of the site may be prevented for public safety reasons. Upon completion, public use of the area will resume. The basin will be open to swimmers, although the placement of rocks to re-naturalize the shoreline will reduce the open area for swimming by +/- 2 horizontal feet. As previously mentioned, there are public comments expressing concern that removing the breakwater will make swimming more dangerous during periods of high surf.

The project's intention is to eliminate jumping and diving from the seawall and the breakwater. While jumping and diving can be seen as recreational activities, the OCCL notes that they can be high-risk activities, and that the applicant is proposing the project as a safety initiative. The OCCL notes that other recreational activities do occur in the boat basin, such as swimming.

The Office of Hawaiian Affairs was consulted during the processing of this CDUA and no comments were received.

To the extent to which traditional and customary native Hawaiian rights are exercised, the proposed action does not appear to affect traditional Hawaiian rights. It appears that no action is necessary to protect these rights, as there are no known cultural practices occurring within the project site. Additionally, it appears that the project will not hinder traditional native Hawaiian cultural practices or resources, but staff does note that historically the boat basin has traditional ties to Oahu's residents and visitors.

DISCUSSION

The project involves dismantling the Diamond Head breakwater and placing the removed boulders along the base of an existing seawall to create a more rocky, natural shoreline that is similar to the adjacent shorelines. Currently, the breakwater and the seawall form a small boat basin that was never used for this purpose. Over time, the basin area has been and is now being used by the public for swimming and other ocean activities. The project does not propose to remove the volcanic dike, that is enveloped by the breakwater, and estimates that once the dike is exposed it may extend up to 3 feet above mean sea level.

Reasons for the proposal are as follows:

- To *eliminate unsafe activity* in the area such as jumping and diving from the breakwater, fence, and seawall into shallow waters. The Environmental Assessment states that there have been numerous calls to City Emergency Medical Services (EMS) to treat injuries, and there is one person who has suffered permanent quadriplegia and two persons who have suffered permanent paraplegia from jumping into the basin.

Water quality is expected to improve by increasing water circulation in the area that will improve the near-shore habitat for reef fish and limu by placing rocks along the base of the seawall. This will provide more sheltered spaces among the rocks for reef fish, and that the rocky, re-naturalized shoreline will reduce the amount of wave over-topping on the pedestrian easement during high surf events.

Reasons against the proposal are as follows:

- *Deprive the public of a recreational resource:* This is a nonconforming recreational use that appears to have been identified both in the 1977 Conservation District Inventory Recreation Map as a “swimming hole,” and John R.K. Clark’s book Beaches of Oahu.
- *It will destroy a historic resource:* The Shangri La breakwaters and harbor site are part of State Inventory of Historic Places (SIHP) 50-80-14-7839. The removal of the breakwater will alter an historic element.
- *Dike condition and swimming conditions:* The dike’s current structural integrity and height will be unknown until the breakwater is dismantled. There is a possibility that either the dike’s height or integrity are compromised, or both. Swimming conditions may not be as calm with the Breakwater removal.
- *Other options to reduce unsafe activities are still available:* Public testimony has commented that there has not been consideration of the fact that the project alternatives available to the State are different from and more extensive than those available to the Duke Foundation, the first time this project was proposed.
- *It will have a negative environmental impact:* Public testimony has commented that there are several important native species, including endangered sea turtles and monk seals that frequent the area.
- *Board of Land and Natural Resources:* The BLNR has reviewed this matter and has previously denied this use. At its meeting on April 27, 2018, under agenda K-4, the BLNR considered CDUA OA-3809 from the DDFIA, the BLNR denied its application despite staff’s recommendation for approval. At its May 25, 2018, meeting under agenda K-1 the BLNR was asked to rescind its prior denial of CDUA OA-3809, instead, the BLNR affirmed its prior permit denial.

It is unclear how much of the original volcanic dike remains, therefore, it is difficult to predict or model how much protection the site will have during large swells. It is possible that removal of the breakwater might lead to an increase of high waves impacting the swimming basin (former boat basin) and the pedestrian easement, even with the re-naturalized shoreline structure in place to disperse wave energy.

The proposed land use includes re-naturalizing the shoreline which will dissipate wave energy. Currently, wave energy is dissipated by the breakwater which protects the

former boat basin, swimming basin. With the breakwater removal, the swimming basin will no longer be afforded this protection. While this dissipated wave energy may protect pedestrians along the public accessway, it will reduce current swimming protection and further harden a private seawall.

Individuals have chosen, of their own free will, to engage in unsafe activities. These unsafe activities include jumping and diving from the pedestrian walkway, fence, and breakwater into the shallow basin waters.

The Board as rendered a decision on similar CDUA applications regarding this breakwater project. The CDUA has essentially remained the same, and conditions of the site have not changed.

Staff now comes before the Board of Land and Natural Resources with a nearly identical CDUA request to dismantle the Diamond Head breakwater.

RECOMMENDATION

Based on the preceding discussion and noting that the Board has twice denied the same request, staff recommends that the Board render a decision regarding Conservation District Use Application OA-3913 for *the Diamond Head Breakwater Safety Project* located at Kaalawai, Oahu, makai of tax map key: (1) 3-1-041: 005, upon submerged land.

Respectfully submitted,

Calen Miyahara

Cal Miyahara, Coastal Land Program Specialist
Office of Conservation and Coastal Lands

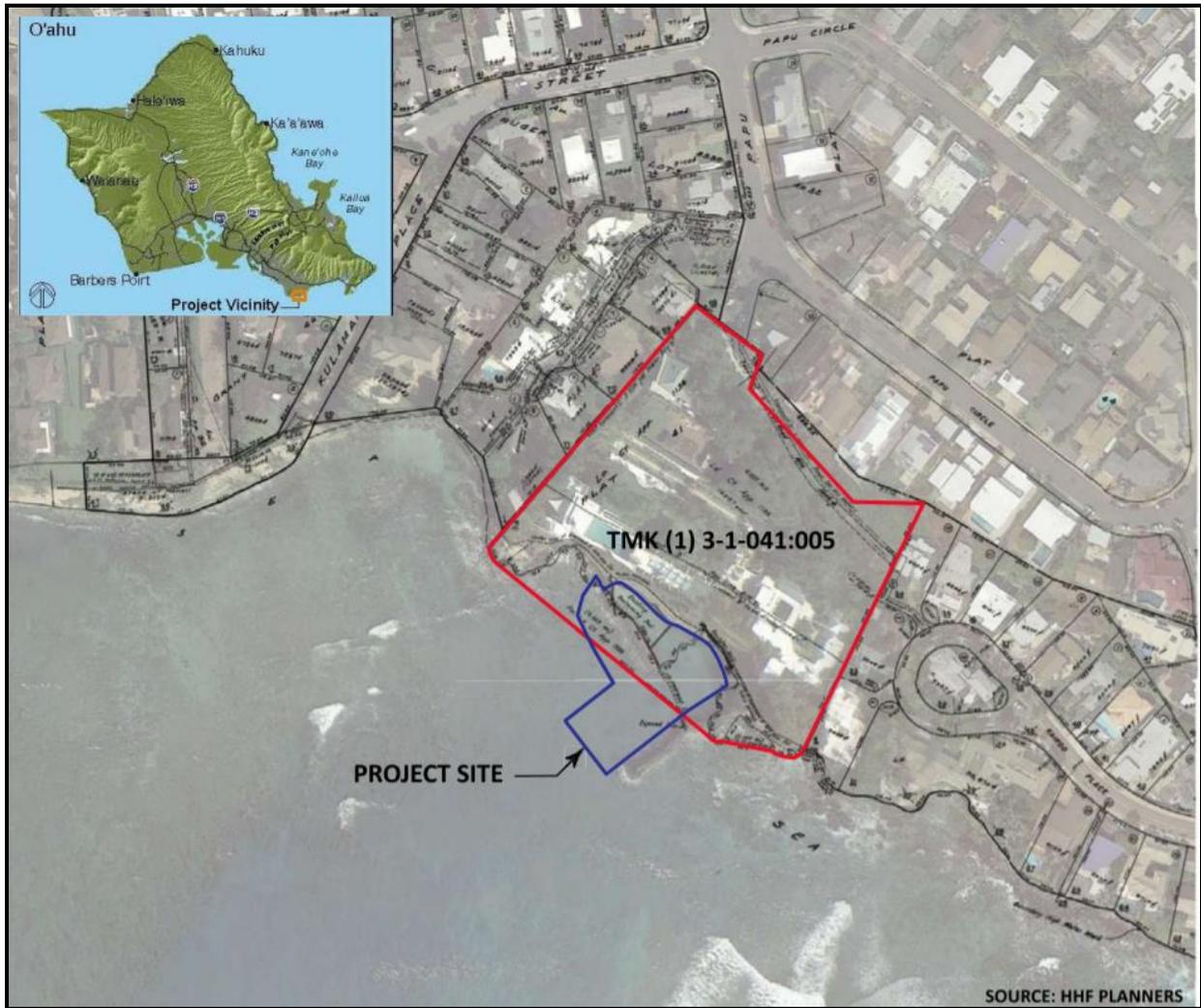
Approved for submittal:



Dawn N.S. Chang, Chairperson
Board of Land and Natural Resources

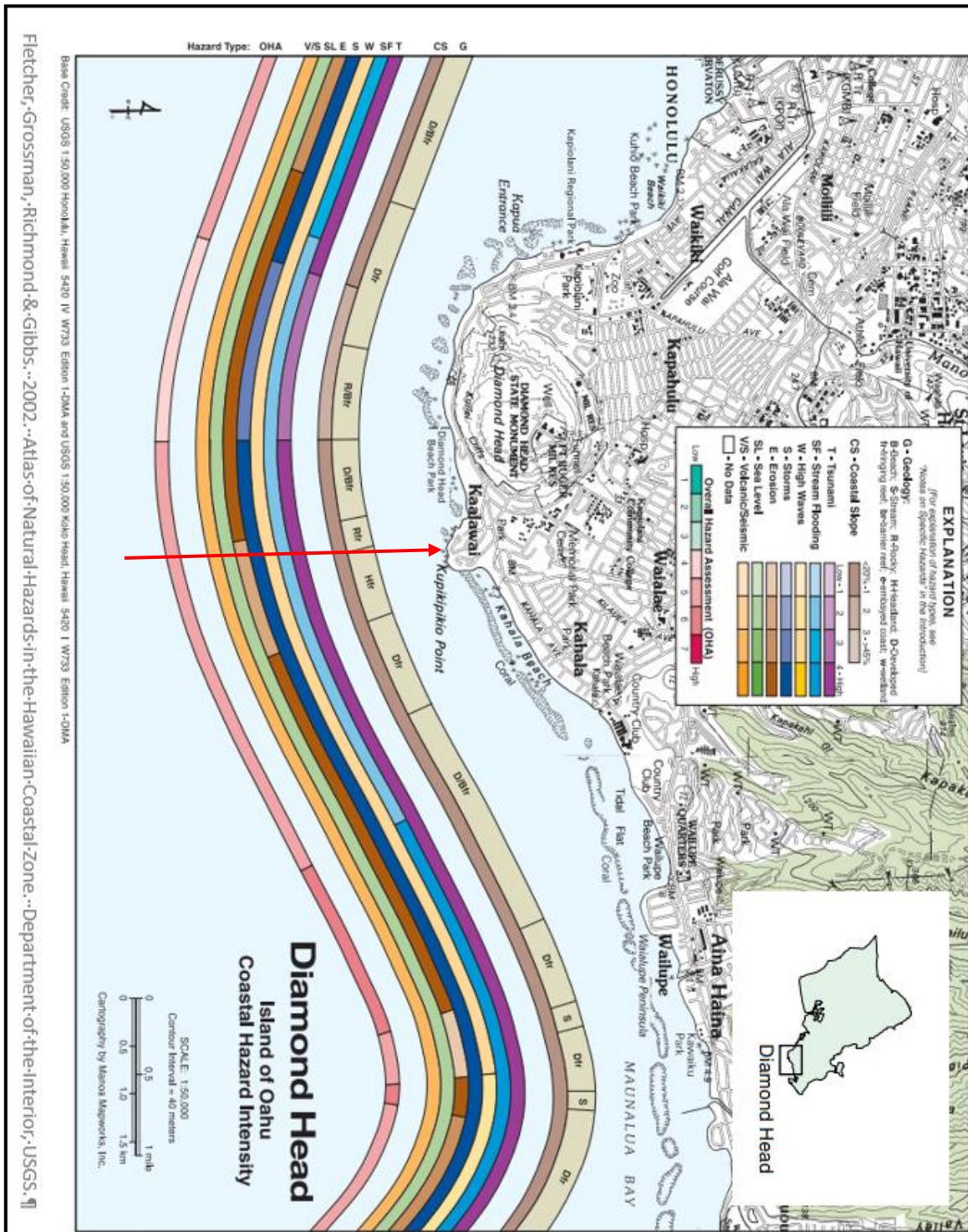
List of Exhibits

1. Aerial view of Diamond Head breakwater project site and geographical location.
2. Existing architectural project site plan.
3. USGS Atlas of Natural Hazards for the project area.
4. PacIOOS – 1.1 feet sea level rise exposure area.
5. SHPD Chapter 6E-8 review determination letter.
6. Preliminary construction plan.
7. Current view and simulated after view of the breakwater project.
8. Sectional view of the breakwater and drainage pipe.
9. Sectional view of the rocky re-naturalized shoreline structure.
10. US Fish and Wildlife Services standard Best Management Practices.



Note: Satellite view of Diamond Head Breakwater project area.

Exhibit 1



Note: USGS Atlas of Natural Hazards. Project area has a high rating for tsunami and storms.

Exhibit 3



Note: A 1.1-ft. sea level rise exposure area for the project site.

Exhibit 4

JOSH GREEN, M.D.
GOVERNOR | KE KIA'ĀINA

SYLVIA LUKE
LIEUTENANT GOVERNOR | KA HOPE KIA'ĀINA



STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD, STE 555
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SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

M. KALEO MANUEL
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

December 23, 2022

Lauren E. Yasaka, Planner
Land Division
Department of Land and Natural Resources
1151 Punchbowl Street, Room 131
Honolulu, HI 96813
Email: Lauren.E.Yasaka@hawaii.gov

IN REPLY REFER TO:
Project No.: 2021PR00216
Doc. No.: 2212SL01
Archaeology, Architecture

Michael Cain, Administrator
Office of Conservation and Coastal Lands
Kalanimoku Building
1151 Punchbowl Street, Room 131
Honolulu, HI 96813
Email: Michael.Cain@hawaii.gov

Dear Ms. Yasaka and Mr. Cain:

**SUBJECT: Chapter 6E-8 Historic Preservation Review –
Shangri-La Breakwater Safety Initiative and Shoreline Stabilization Project
Request for Concurrence with Effect Determination and Proposed Mitigation Commitments
Archaeological Inventory Survey Report
Architecture Reconnaissance-Level Survey Report
Ka'alāwai, Waikīki Ahupua'a, Honolulu (Kona) District, Island of O'ahu
TMK: (1) 3-1-041:005 por. and seaward**

This letter provides the State Historic Preservation Division's (SHPD's) review of the subject CDUA project permit application and the revised supporting archaeological inventory survey (AIS) report titled, *Archaeological Inventory Survey Report for the Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project, Ka'alāwai, Waikīki Ahupua'a, Honolulu (Kona) District, O'ahu TMK: (1) 3-1-041:005 por. and seaward* (Starr et al., December 2022).

The CDUA application for the proposed breakwater project was initially submitted to SHPD for HRS §6E-42 when both the terrestrial and submerged portions of the Shangri La property were owned by the Doris Duke Foundation for Islamic Arts (DDFIA). As of September 23, 2020, the State of Hawai'i received the submerged portion under quiet title which conveyed ownership to the State as unencumbered State lands. Thus, the current project being undertaken by the State of Hawai'i, Department of Land and Natural Resources (DLNR) is subject to review under HRS §6E-8. Additionally, due to the project's location within navigable waters, the project will require a permit from the U.S. Army Corps of Engineers. As such, the project is a federal undertaking as defined in 36 CFR 800.16(y) and is subject to Section 106 of the National Historic Preservation Act (NHPA). Only HRS §6E is being addressed at this time.

The DLNR Land Division proposes to remove the Diamond Head Breakwater from the former Shangri La boat basin as a safety initiative, and use the boulders from the breakwater to stabilize the existing reinforced concrete seawall

Note: State Historic Preservation Division determination letter.

Exhibit 5

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along the shoreline of the Shangri La property. The terrestrial portion of the property fronting the shoreline may be used for stockpiling and staging.

The following materials were provided to SHPD via HICRIS on February 23, 2021: an initial draft AIS (Starr et al., July 2016), which included architectural documentation completed by Mason Architects, Inc. (Appendices B and C); construction plans; a Final Environmental Assessment (June 2017) for the project; the CDUA Application; and a cover letter dated February 23, 2020 from the DLNR Land Division requesting the SHPD's concurrence with a HRS §6E-8 project effect determination of "Effect with proposed mitigation commitments" and with mitigation being satisfied by the architectural documentation provided in Appendices B and C of the draft AIS (Starr et al., July 2016).

SHPD received the following project submissions on December 21-22, 2022:

- (1) State Inventory of Historic Places (SIHP) site number request for a complex of petroglyphs on five vertical bedrock faces in the northern portion of the property initially documented by Hammatt and Chiogioji (2005).
- (2) Request to revise the description of SHIP Site 50-80-14-07839 to include among other structures, 7 features of the breakwater and boat harbor identified within the current project area.
- (3) Copy of an architectural document titled, *Shangri La, 4055 Papu Circle, Honolulu, Hawaii 96816, Historic Structure Report* (Historic Resources Group, LLC, September 2008).
- (4) Copy of an architectural document titled, *Intensive Level Historic Resources Inventory Survey, Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project* (Mason Architects, Inc., July 08, 2016.)
- (5) Copy of an architectural document titled, *Hawaii State Historic Preservation Division Historic Resource Inventory Form – Intensive Level, Boat Basin* (Mason Architects, Inc., July 08, 2016).
- (6) SHA Site Plan [showing Shangri La residential area].
- (7) Revised AIS report titled, *Archaeological Inventory Survey Report for the Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project, Ka'alāwai, Waikīkī Ahupua'a, Honolulu (Kona) District, O'ahu TMK: (1) 3-1-041:005 por. and seaward* (Starr et al., December 2022).

Two historic properties have been identified within the Shangri La property: SIHP Site 50-80-14-10000 (a Pre- to Early Post-Contact complex of traditional Hawaiian petroglyphs) and SIHP Site 50-80-14-07839, Shangri La Residence and Associated Structures (1937-1993). The basin and breakwater portion of Site 50-80-14-07839 is within the current project area while the remainder of this site and the entirety of the Site 50-80-14-10000 petroglyphs are outside and will not be affected by the current project.

The Site 50-80-14-10000 includes the following basalt faces (1-5): Face 1 is a single petroglyph comprising a four-legged animal with what appear to be horns. Face 2 consists of at least four human figures arranged in two pairs. Face 3 comprises a pair of two human figures (lower) and two single figures higher up. Face 4 consists of two human figures, one positioned above the other, and Face 5 is five human figures, of which the upper three are in a horizontal line and two smaller figures are below. On the left side is a possible upside down goat. The site has integrity of location, design, workmanship, materials, feeling and association, but does not retain integrity of setting due to the development of the area. The petroglyphs were previously recommended as eligible for listing in the National Register of Historic Places. The petroglyphs are assessed as significant pursuant to HAR §13-275-6 criteria d for their potential to provide information regarding traditional Hawaiian culture and history, and criteria e for the site's importance to the Native Hawaiian community and traditional practices.

Site 50-80-14-07839, Shangri La, originally designated as consisting of the main building, playhouse, and cottage associated with the former Doris Duke residence (1939-1993). It was revised during the current project to include site amenities (driveways, electrical vault, tennis court, shed, Mughal Garden, marble steps, pool terrace, cascade, south retaining wall, sea wall, entry court, concrete retaining wall, East and West boundary walls, and the boat harbor and breakwaters). The seven features within the boat harbor include the Diamond Head Breakwater (Feature 1), the Koko Head Breakwater (Feature 2), two sets of basalt stairs and a loading platform (Feature 3), stairs, platform, and submerged concrete pad near the Koko Head Breakwater (Feature 4), rock landing and walkway (Feature 5), the Boat Basin (Feature 6), and a remnant buoy (Feature 7). Mason Architects, Inc. (2016) determined that SIHP Site 50-80-14-07839 (then described as the main building, playhouse, and site features) was eligible for listing in the National Register of Historic Places under Criteria B and C. They further indicated that the boat basin and breakwaters retained historic integrity, are contributing elements to the property as a whole (Mason Architects, Inc. 2016:25). The current

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AIS indicates the Shangri La breakwaters and harbor, possesses integrity of location, design, setting, materials, workmanship, feeling, and association. SIHP Site 50-80-14-07839, Shangri La, including the breakwaters and harbor, is assessed as significant per HAR §13-275-6 Criteria b, c, and d.

The *Intensive Level Historic Resources Inventory Survey* (Mason Architects, Inc., July 08, 2016) and the *Hawaii State Historic Preservation Division Historic Resource Inventory Form – Intensive Level, Boat Basin* (Mason Architects, Inc., July 08, 2016) adequately identify, document, and assess the integrity and site significance of SIHP Site 50-80-14-07839, along with the AIS report (Starr et al., December 2022). SIHP Site 50-80-14-10000 is also adequately documented and assessed and will continue to be passively preserved.

SHPD concurs with DLNR Land Division’s HRS §6E-8 project effect determination of “Effect, with proposed mitigation commitments” and with the proposed mitigation commitments which were developed in consultation between Land Division and SHPD. The mitigation commitments are: (1) architectural photographic documentation of the dismantling of the breakwater (before, during, and after), (2) re-use of the cobbles and boulders from the breakwater in the stabilization of the existing reinforced concrete seawall, and (3) architectural photographic documentation of the stabilization work. The results will be presented in a letter report submitted to SHPD for review and acceptance.

SHPD accepts the following three documents:

- (1) Architectural document titled, *Intensive Level Historic Resources Inventory Survey, Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project* (Mason Architects, Inc., July 08, 2016.)
- (2) Architectural document titled, *Hawaii State Historic Preservation Division Historic Resource Inventory Form – Intensive Level, Boat Basin* (Mason Architects, Inc., July 08, 2016).
- (3) Revised AIS report titled, *Archaeological Inventory Survey Report for the Shangri La Breakwater Safety Initiative and Shoreline Stabilization Project, Ka’alāwai, Waikīkī Ahupua’a, Honolulu (Kona) District, O’ahu TMK: (1) 3-1-041:005 por. and seaward* (Starr et al., December 2022)

Please send one hard copy of each document, clearly marked FINAL, along with a copy of this letter and a text-searchable PDF version of each to the Kapolei SHPD office, attention SHPD Library. Also, submit a text-searchable PDF copy of each to HICRIS Project No. 2021PR00216 using the Project Supplement option and send a PDF copy of the AIS to lehua.k.soares@hawaii.gov.

SHPD hereby notifies the DLNR Office of Conservation and Coastal Lands that the CDUA permitting process may continue.

Note: As the project is also a federal undertaking, as defined in 36 CFR 800.16(y), it is subject to Section 106 of the NHPA. The SHPD looks forward to the U.S. Army Corps initiating the Section 106 consultation process, which must be conducted prior to project initiation. If the project results in a determination of *adverse effect*, pursuant to 36 CFR 800.5, then a Memorandum of Agreement must be prepared and executed to address the adverse effects prior to project initiation.

SHPD requests written notification via email and HICRIS at the start of the project and initiation of the HRS §6E-8 mitigation commitments involving architectural documentation before, during and following dismantling of the breakwater and stabilization of the seawall.

Please submit all project documents and correspondence to HICRIS Project No. 2021PR00216 using the Project Supplement option.

Please contact Jessica Puff, Architecture Branch Chief, at Jessica.Puff@hawaii.gov for any matters regarding architectural resources, and Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov for any matters concerning archaeological resources or this letter.

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Aloha,

Susan A. Lebo

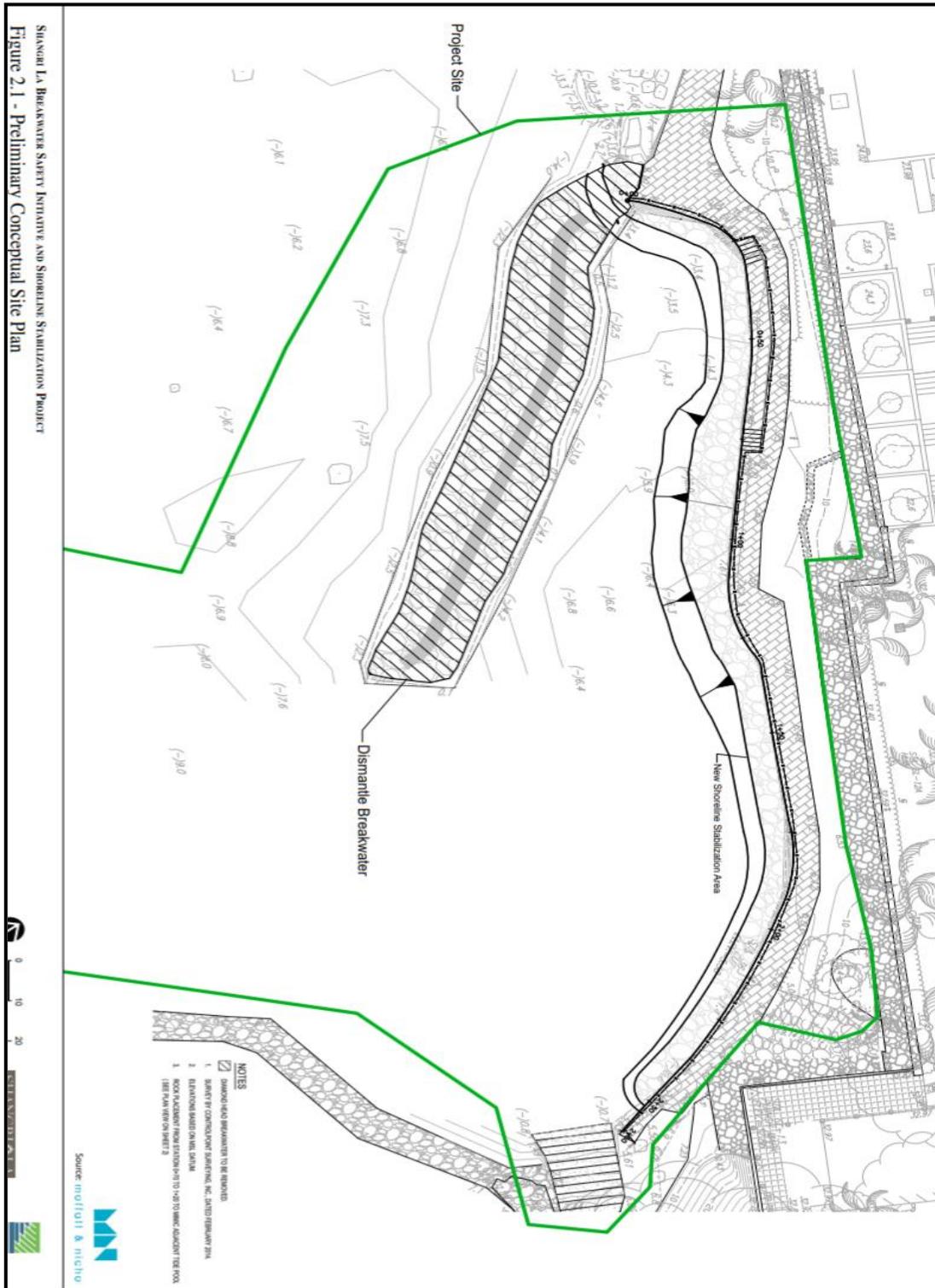
Signed For

Alan S. Downer, PhD

Administrator, State Historic Preservation Division

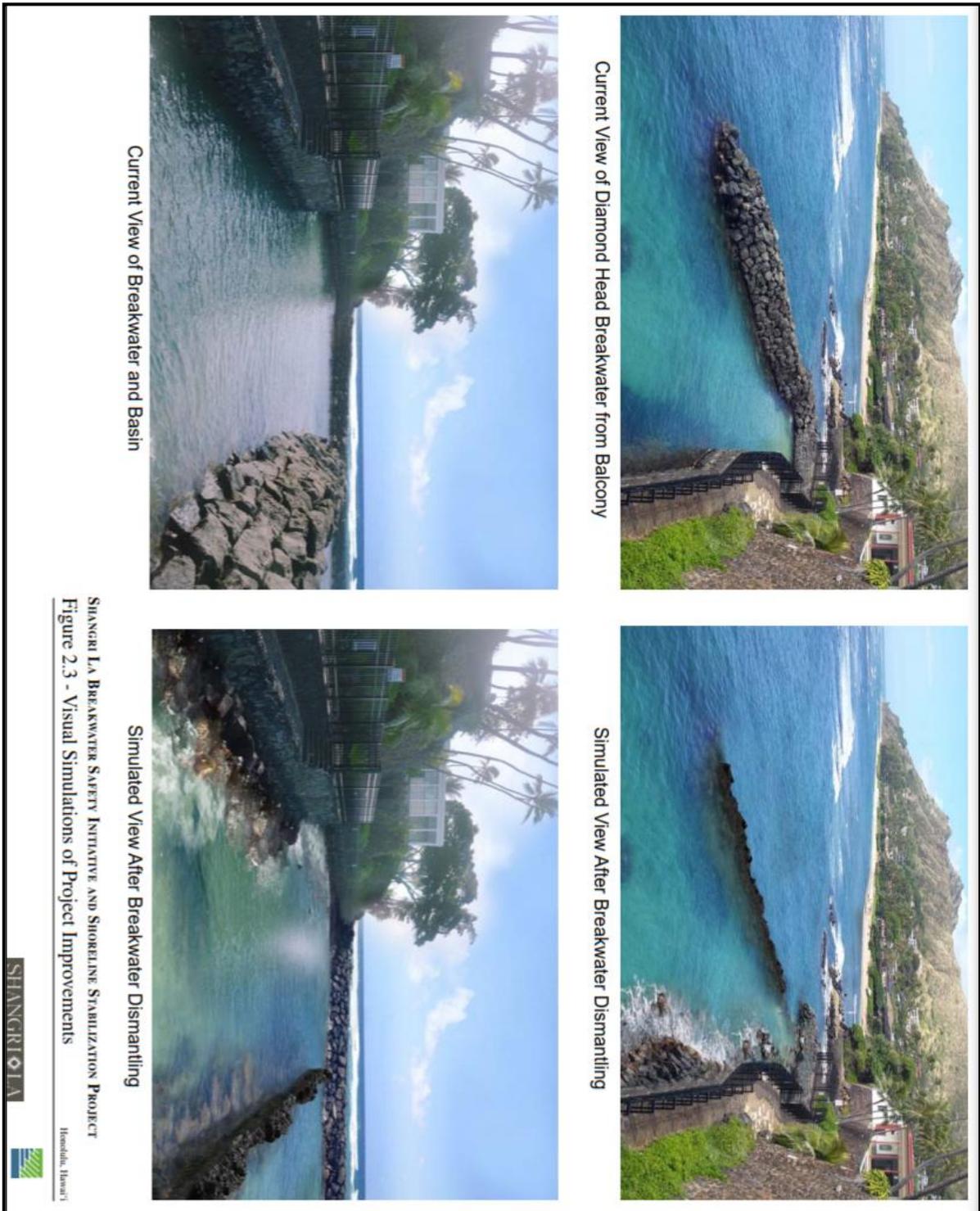
Deputy State Historic Preservation Officer

cc: Suzanne Case, DLNR Chair, Suzanne.Case@hawaii.gov
Russell Y. Tsuji, Land Division, Russell.Y.Tsuji@hawaii.gov
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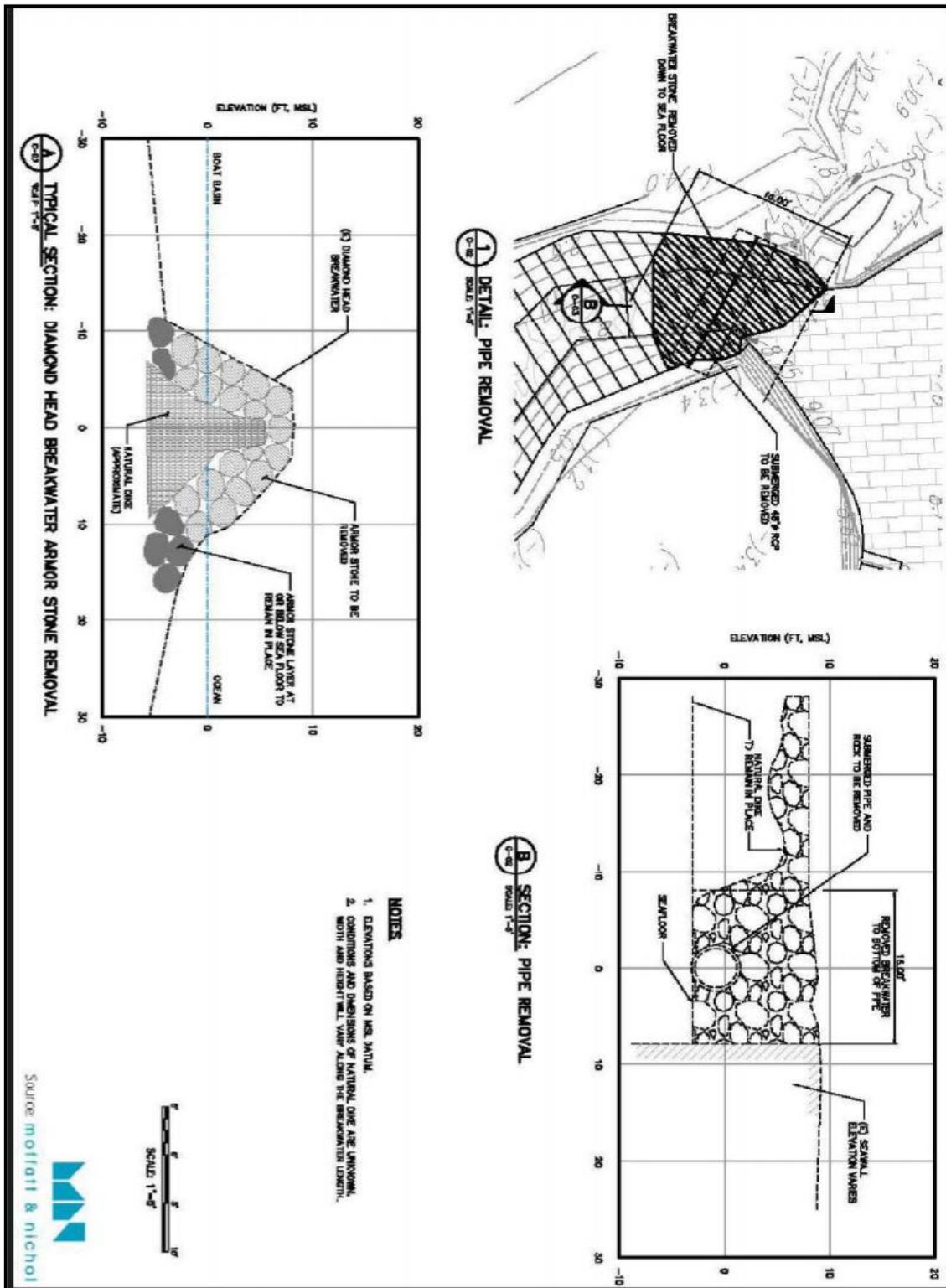
Note: Preliminary construction plan.

Exhibit 6



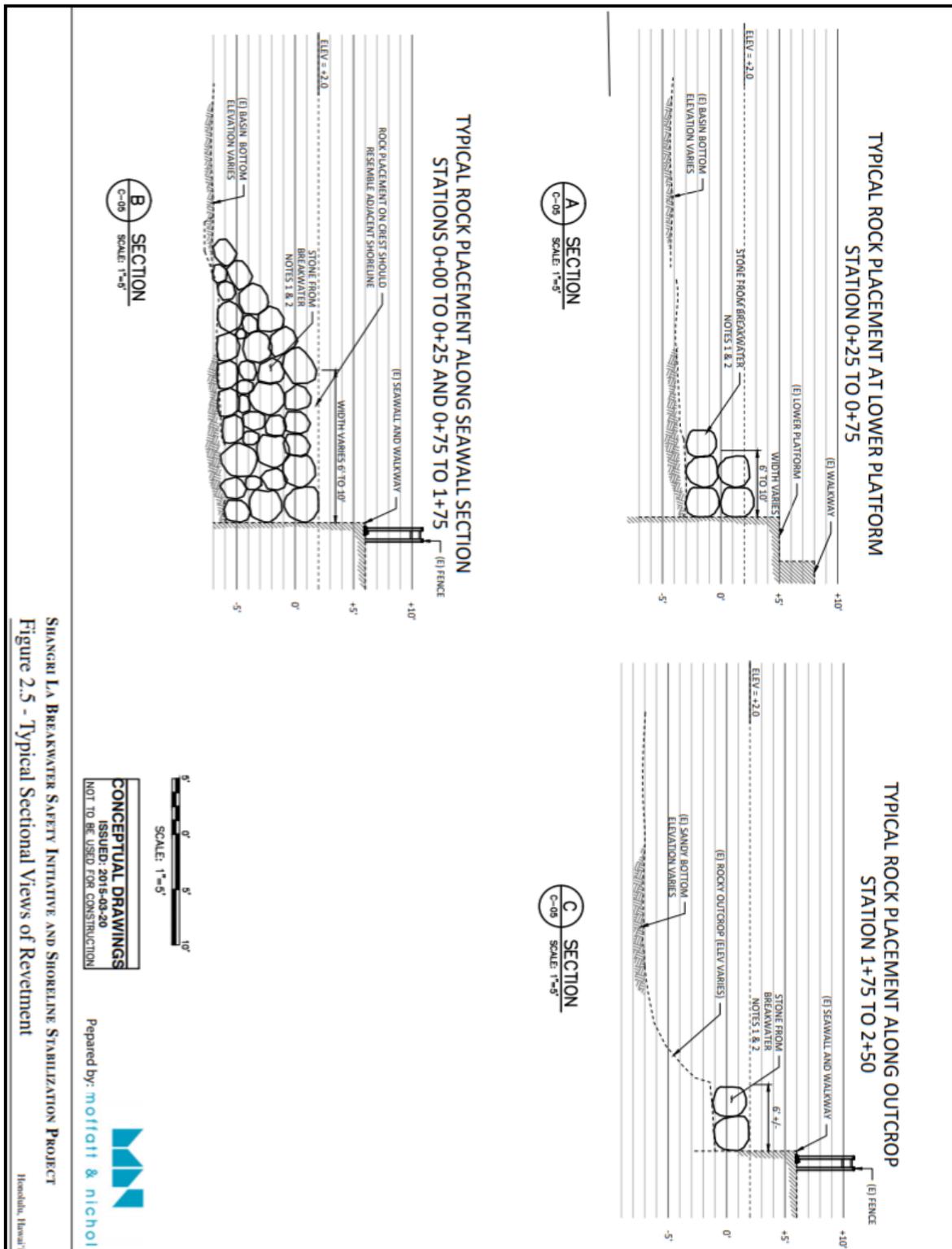
Note: Current view and simulated after view of the breakwater project.

Exhibit 7



Note: Sectional view of the breakwater and drainage pipe.

Exhibit 8



Note: Sectional view of the proposed shoreline structure.

U.S. Fish and Wildlife Services BMPs:

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats beyond the planned project area.
2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, if practicable. Because these periods are variable throughout the Pacific islands, the relevant local, state, or federal fish and wildlife resource agency should be contacted for site-specific guidance.
3. Project-related work should be curtailed during flooding or adverse tidal and weather conditions.
4. BMPs should be maintained for the duration of work until turbidity and siltation within the project area are stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.
5. All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to, marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use.
6. Project-related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter control plan and a Hazard Analysis and Critical Control Point plan can help to prevent attraction and introduction of non-native species.
7. Fueling of project-related vehicles and equipment should take place in a location equipped with primary and secondary spill prevention and control measures to protect fuels and other equipment fluids from entering the marine environment. A plan should be developed and implemented to control petroleum products accidentally spilled during the project. The plan should be retained on-site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored onsite to facilitate the clean-up of accidental petroleum releases.
8. The construction project manager and heavy equipment operators will perform daily pre-work equipment inspections for cleanliness and leaks. All heavy equipment operations will be postponed or halted should a leak be detected, and will not proceed until the leak is repaired and equipment cleaned.

Project Design BMPs:

1. Visual observation by qualified personnel for the presence of Federally-protected marine species (e.g. green turtles potentially present around the breakwater) during in-water activities.
2. During the barge mooring process, divers would first inspect the mooring area to identify suitable locations for barges to ensure that spuds dropped do not seat on living corals. During the actual spudding of barge(s), divers would be present to monitor the location and activities.
3. A contingency plan can be developed for the removal and adequate securing of equipment in the event of approaching storms.

Note: US Fish and Wildlife Services standard BMPs.

4. The contractor will designate an appropriate number of competent observers to survey the project area for Federally-protected marine species prior to the start of work each day, and prior to resumption of work following any break of more than a half hour (30 minutes). All work will be postponed or halted when Federally-protected marine species are within 50 yards of the work area, and will only begin/resume after the marine species have voluntarily departed the area. If marine species are noticed within 50 yards after work has already begun, that work may continue if, in the best judgment of the project supervisor, the activity would not adversely affect the species. For example, divers performing surveys, or workers conducting over-water work would likely be permissible, whereas operation of heavy equipment to remove or place rock underwater is not.