

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Boating and Ocean Recreation
Honolulu, Hawaii 96819

March 27, 2026

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

Land Board Members:

SUBJECT: Approve Request by Maka Kai Charters, Inc. to Privately Finance Repairs to Slip 99, Mā'alaea Small Boat Harbor, Wailuku, Island of Maui, Hawaii.

APPLICANT:

Maka Kai Charters, Inc. (hereinafter "MKC"), a Domestic Profit Company.

LOCATION:

Slip 99, Mā'alaea Small Boat Harbor, Wailuku, Maui

LEGAL AUTHORITY:

Hawaii Revised Statutes (HRS) Section 200-19; Hawaii Administrative Rule (HAR) Section 13-232-43.

REMARKS:

MKC submitted a letter to DOBOR requesting approval to proceed with improvements to Slip 99 at Mā'alaea Small Boat Harbor. The letter dated January 8, 2026, and attached as **Exhibit A** includes permits from the Department of Health and the U.S. Army Corps of Engineers and asked that the request be brought to the Board of Land and Natural Resources for final authorization to begin construction.

MKC currently holds a DOBOR mooring permit for Slip 99. Due to funding limitations, DOBOR has been unable to complete the necessary repairs with State funds. MKC has therefore proposed undertaking the repairs at its own expense, which it estimates will cost approximately one hundred and thirty-one thousand two hundred and ninety-seven dollars and thirty-three cents (\$131,297.33).

HRS Section 200-19 provides that the Board of Land and Natural Resources ("Board")

Item J-1

may approve private financing of small boat harbor improvements. To offset costs associated with the work, MKC has requested to be reimbursed through reduced mooring fees. DOBOR has no objections to this reimbursement proposal and will work with MKC to reach an agreement on reimbursement. Because final costs will not be known until the work is completed, such discussions are premature at this time.

Pursuant to HAR Section 13-232-43, the repairs will become property of the State upon completion, and MKC shall have no expectation of exclusive use, except that DOBOR may grant MKC preferential use of Slip 99 for a period not to exceed ten (10) years.

CONSULTED AGENCIES:

Agency	Comments	Date Received	Received By
Division of Aquatic Resources (DAR)	No response by suspense date.	N/A	N/A
Department of Health (DOH)	Letter Attached	April 22, 2022	Letter
U.S. Army Corps of Engineers (USACE)	Letter Attached	January 7, 2026	Letter

PERMITS AND COMPLIANCE WITH STATE AND FEDERAL LAW:

MKC has obtained a Nationwide Permit from the U.S. Army Corps of Engineers (USACE) authorizing the repair work. Construction plans, prepared by a licensed structural engineer, have also been approved by DOBOR's Engineering Branch. The USACE Permit and approved construction plans are included in **Exhibit A**. MKC's USACE permit expires on March 14, 2026, but will be valid for up to 12 months after this date so long as MKC commences repair work or executes a contract to commence work prior to the expiration date. DOBOR understands that MKC has executed a contract for the work and is ready to notify its contractor to proceed if and when the Board approves this subject request.

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

The proposed work is exempt from the preparation of an Environmental Assessment under HRS Chapter 343 and Hawaii Administrative Rule Chapter 11-200.1 because it is de minimis and is included in the Exemption List for the Department of Land and Natural Resources, concurred on by the Environmental Council on March 3, 2020, Exemption Type 1, Part 1, Item 9:

“Operation, repair and maintenance of existing loading docks, piers, piles, boat launch ramps, offshore mooring facilities, and other similar support structures, as permitted by the U.S. Army Corps of Engineers, Honolulu District, under a Nationwide Permit.”

RECOMMENDATION:

That the Board:

1. Approve the request by Maka Kai Charters, Inc. to privately finance repairs to Slip 99, Mā'alaea Small Boat Harbor, Wailuku, Island of Maui, under the terms and conditions cited above, which are by this reference incorporated herein, and further subject to other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State; and
2. Delegate authority to the Chairperson to take any and all actions necessary to effectuate its decision.

Respectfully Submitted,



MEGHAN L. STATTS, Administrator
Division of Boating & Ocean Recreation

APPROVED FOR SUBMITTAL:



RYAN K.P. KANAKA'OLE, Acting Chairperson
Board of Land and Natural Resources

Attachments:

Exhibit A MKC's request for approval of repairs to Slip 99, MKC's approved plans, and Nationwide Permit Verification Letter from USACE

MAKA KAI CHARTERS, INC.
207 KUPUOHI ST., LAHAINA, HI 96761

January 8, 2026

Meghan Statts
Department of Land and Natural Resources
Division of Boating and Ocean Recreation
4 Sand Island Access Road
Honolulu, Hawai'i 96819
Re: Request for Approval of Construction, Slip 99 Repair, Mā'alaea Small Boat Harbor

Dear Ms. Statts:

Maka Kai Charters, Inc. ("Maka Kai") has received the necessary authorization from the U.S. Army Corps of Engineers for a construction project to repair Slip 99 located in Mā'alaea Small Boat Harbor. Maka Kai respectfully requests approval of the project from the Division of Boating and Ocean Recreation.

Maka Kai further requests that the project be submitted to the Board of Land and Natural Resources at the earliest opportunity for final authorization to proceed with construction.

In addition, Maka Kai requests approval to recover or amortize the capital costs associated with the construction of the slip improvements, consistent with HRS §200-19 and HAR §13-232-43, which authorize the department to approve privately constructed boating facility improvements and to establish appropriate terms and conditions, including those related to use, rates, and cost recovery. Upon completion of the project, Maka Kai will provide the DOBOR with detailed documentation of the total construction costs.

Please feel free to contact me if you have any questions or require additional information. I may be reached at (808) 283-2169 or denver.coon@sailtrilogy.com.

Sincerely,

Denver S. Coon
Secretary
Maka Kai Charters, Inc.

Enclosures:

- U.S. Army Corps of Engineers Authorization
- Project Plans Approved by DLNR-DOBOR



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT
230 OTAKE STREET, CEPOH-RO
FORT SHAFTER, HAWAII 96858-5440

January 7, 2026

SUBJECT: Nationwide Permit Verification for Maka Kai Charters, Inc., Slip 99 Piling Repair, Maalaea Harbor, Maalaea, Island of Maui, HI Department of the Army File No. POH-2025-00138

Denver Coon
Maka Kai Charters, Inc.
207 Kupuohi St.
Lahaina, HI 96761

Dear Mr. Coon:

The Honolulu District, U.S. Army Corps of Engineers (Corps), Regulatory Office has completed review of your Pre-Construction Notification dated October 3, 2025, requesting authorization for the proposed piling repair project located at Slip #99 in Maalaea Harbor, Maalaea, Island of Maui, Hawaii (20.79188°, -156.51148°). Please reference Department of the Army (DA) file number POH-2025-00138 in any future correspondence related to this permit.

This Nationwide Permit (NWP) verification letter is being issued pursuant to Section 404 of the Clean Water Act for the discharge of dredged and/or fill material into waters of the U.S. and Section 10 of the Rivers and Harbors Act of 1899 for work or structures in, over, under or affecting navigable waters of the U.S. You are authorized to conduct the following activities:

- The repair of the two southernmost steel pilings at slip #99 of Maalaea Small Boat Harbor below the Mean High Water (MHW) Mark and the removal of the wooden planks over the water which are attached to the pilings. Repairs include the installation of 16-inch-diameter metal sleeves over the top of the two 12-inch-diameter pilings and filling the gap between each piling and sleeve with 0.5 cubic yards (CY) of concrete (1 CY total). The wooden planks connecting three of the pilings in the slip will be removed and disposed in uplands. An existing wooden beam above the water will also be attached to the piling closest to shore.

Based upon the information and plans you provided, we hereby verify that the work described above, which would be performed in accordance with the enclosed plans (Enclosure 1), complies with the terms and conditions of and is authorized by NWP 3, (Maintenance) issued on February 25, 2022. The full text of NWP 3 and its associated Regional and General Conditions can be accessed at:

<https://www.poh.usace.army.mil/Missions/Regulatory/Permits/Nationwide-Permits/>. You

must comply with all terms and conditions associated with NWP 3, as well as with the special conditions listed below:

a. You must implement and abide by the applicable Pac-SLOPES BMPs (Enclosure 2) including completion of the monitoring form (Enclosure 3).

b. You must implement and abide by the applicable EFH Conservation Recommendations (Enclosure 4).

Verification of your project under this NWP is valid until **March 14, 2026**, unless this NWP is modified, reissued, or revoked prior to that date. If you commence or are under contract to commence this activity before the date that the NWPs are modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWPs to complete the activity under the present terms and conditions. It is incumbent upon you to remain informed of changes to the NWPs. If the Corps modifies, reissues, or revokes any NWP at an earlier date, we will issue a public notice announcing the changes. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of the Clean Water Act and/or Rivers and Harbors Act and subsequent enforcement action.

This authorization does not relieve you of the responsibility to obtain any other federal, state, and/or local authorizations required by law.

Your project complies with the requirements of the Clean Water Act, Section 401 Blanket Water Quality Certification (WQC) WQC1092 issued for this Nationwide Permit by the State of Hawaii Department of Health, Clean Water Branch. You are responsible for complying with the attached General Conditions of this WQC (Enclosure 5).

Your project complies with the requirements of the Coastal Zone Management Consistency Concurrence for this NWP issued by the State of Hawaii Department of Business, Economic Development and Tourism, Office of Planning during the NWP reissuance process in 2021.

Finally, General Condition 30 requires a signed certification be submitted to this office upon completion of work. Therefore, please sign, date and return the enclosed *Compliance Certification* form (Enclosure 6) within 30 days of completion of work to the email address specified below or to the mailing address indicated on the letterhead above.

Thank you for your cooperation with the Honolulu District Regulatory Program. Should you have any questions related to this authorization, please contact me at 808-551-5496 or via e-mail at Jeremy.K.Morgan@usace.army.mil and

CEPOH-RO@usace.army.mil, referencing the project number POH-2025-00138 in the email subject. For additional information about our Regulatory Program, please visit our website at <https://www.poh.usace.army.mil/Missions/Regulatory/>.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeremy Morgan".

Jeremy Morgan
Regulatory Specialist, Regulatory Branch

Enclosures

cc:

State of Hawaii Department of Health, Clean Water Branch

CleanWaterBranch@doh.hawaii.gov, reef.migita@doh.hawaii.gov

State of Hawaii Office of Planning, Coastal Zone Management Program

Debra.L.Mendes@hawaii.gov

U.S. Coast Guard, SecHonoWaterWays@uscg.mil

USCG District 14 Waterways Management, d14-dg-pj-dpw@uscg.mil



US Army Corps of Engineers
Honolulu District
BUILDING STRONG®

DEPARTMENT OF THE ARMY PERMIT COMPLIANCE CERTIFICATION

File Number: POH-2025-00138

Project Title: Maka Kai Charters, Inc., Slip 99 Piling Repair, Maalaea Harbor,
Maalaea, Island of Maui, HI

PERMIT TYPE: Nationwide Permit #03, (Maintenance)

NAME OF PERMITTEE: Mr. Denver Coon, Maka Kai Charters, Inc., 207 Kupuohi St.,
Lahaina, HI 96761

DATE OF ISSUANCE: January 7, 2026

DATE OF EXPIRATION: March 14, 2026

The permittee must, upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address or via email within thirty (30) days of completion of work:

U.S. Army Corps of Engineers, Honolulu District
Regulatory Office
Building 230, CEPOH-RO
Fort Shafter, HI 96858-5440
Email: CEPOH-RO@usace.army.mil

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with the terms and conditions of this permit, you are subject to permit suspension, modification or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

ENCLOSURE 6



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

WQC1092.FNL.22

April 28, 2022

David S. Hobbie
Regional Regulatory Chief
Honolulu District
Department of the Army
U.S. Army Engineer District, Honolulu
Fort Shafter, Hawaii 96858-5440

Dear Mr. Hobbie:

**Subject: Blanket Section 401 Water Quality Certification (WQC) for
Certain 2021 Department of the Army (DA)
Nationwide Permits (NWP) and Activities
File No. WQC1092**

Purpose. This letter is a blanket Section 401 WQC (Blanket Certification) and sets forth applicable qualifications and activity-specific conditions to certain NWPs and activities, as described below. This Blanket Certification may be utilized by any applicant that is seeking authorization and/or verification from the U.S. Army Corps of Engineers (USACE), Honolulu District of the Pacific Ocean Division (POH) for work in Waters of the United States.

This Blanket Certification supersedes and replaces previous WQC0901.FNL.20 issued in May and November of 2020 (WQC0901). The following shall apply:

1. Requirements and conditions set forth in WQC0901 which are not set forth in this Blanket Certification shall no longer be applicable;
2. Activities covered under WQC0901 shall be subject to this Blanket Certification, including requirements and conditions different from or in addition to WQC0901;
3. Pending applications, including those currently under review by USACE or the Department of Health (DOH), shall be subject to this Blanket Certification.

Note: A previous version of this Blanket Certification was public noticed on September 23 and 24, 2020, for the proposed 2020 NWPs. Since the aforementioned public notices, the NWPs were reissued and modified in 2021, the federal Section 401 WQC regulations were revised, and the State Section 401 WQC rules were revised. This Blanket Certification incorporates these revisions.

Overview. The DA has published a list of NWP and applicable general conditions that attach to those NWPs.¹ Certain NWPs may require a Section 401 WQC from the State of Hawaii. The DOH has the authority to issue a Blanket Certification and may qualify or condition the Blanket Certification. The conditions in this Blanket Certification become additional conditions to the NWPs. The qualifications would set forth the applicability of the Blanket Certification to a NWP or other described activity.

The DOH reviewed the NWP and General Conditions published in the Federal Register: Final Rules and the additional comments submitted by USACE POH. DOH believes that when all requirements and conditions contained in this Blanket Certification are fully complied with, there is a reasonable assurance that the activities will be conducted in a manner which will not violate the applicable State water quality standards and will comply with the applicable provisions of the CWA, Sections 301, 302, 303, 306, and 307.

The NWPs and activities in Item 2.a below do not require a Section 401 WQC. The NWPs and activities in Item 2.b below are covered under this Blanket Certification. The DOH has determined that projects authorized by the USACE POH for the NWPs and activities in Item 2.b below, subject to the requirements of the General Conditions in Item 3 below, will not cause adverse environmental impacts or effects; are in the public interest; and represent the optimum balance between economic development and environmental quality.

1. Term of this Blanket Certification
 - a. This Blanket Certification becomes effective with respect to a specific project on **April 28, 2022**.
 - b. This Blanket Certification will expire at midnight, **March 14, 2026**.
 - c. This Blanket Certification's coverage is administratively extended to a certain project beyond midnight, March 14, 2026, when the USACE POH extends the project authorization/verification.
2. Coverage of this Blanket Certification
 - a. The NWPs and activities listed below do not require a Section 401 WQC.
 - NWP 1 – Aids to Navigation
 - NWP 8 – Oil and Gas Structures on the Outer Continental Shelf

¹ The DA NWP authorizes activities under 1) Section 404 of the Clean Water Act (CWA), 2) Section 10 of the Rivers and Harbors Act of 1899 (RHA), and/or 3) a Letter of Permission. The NWPs were published on September 15, 2020, in the Federal Register, Volume 85, Number 179 and December 27, 2021, Volume 86, Number 245 (Federal Register).

- Projects in response to a public emergency proclaimed by the President of the United States or Governor of Hawaii where HRS Chapter 342D has been suspended
 - Any emergency project as determined by the Director of Health
 - Projects granted an exemption under Act 048 of 2017 (temporary exemption of certain bridge rehabilitation projects)
 - Activities exempt under CWA, Section 404(f)(1)
 - Directional drilling under a waterbody where entry and exit pits are located on land and all slurry/spoils/runoff is contained on land
 - Structures over a waterbody where debris and other pollutants associated with the installation, construction, and operation do not enter the waterbody
 - Installation of temporary Best Management Practices (BMPs) with inert material in State waters, excluding material used to divert or dam stream flow
 - Comprehensive Environmental Response, Compensation, and Liability Act actions with oversight from DOH Hazard Evaluation and Emergency Response (HEER) Office and/or EPA
 - DOH HEER response actions
 - Bridge inspections
 - Improvements or modifications to Department of Land and Natural Resources, Division of Boating and Ocean Recreation permitted existing offshore moorings installed prior to October 4, 2017
 - Coral transplant with National Oceanic and Atmospheric Administration oversight
 - Fireworks where visible debris is collected after event
 - Lanterns and rubber duckies collected after event
 - Ashes from funeral ceremonies 3 miles away from shore
 - After-The-Fact applications for USACE POH enforcement actions²
- b. The NWP's and activities listed below are hereby granted coverage under this Blanket Certification in the State of Hawaii if the applicant of the activity/discharge complies with the General Conditions (Item No. 3) and USACE POH provides notification (Item No. 4). Any person, including any public body, conducting activities authorized by these NWP's and activities that cannot or will not comply with this Blanket Certification must apply for and obtain an individual Section 401 WQC from DOH Clean Water Branch (CWB).
- NWP 2 – Structures in Artificial Canals
 - NWP 3 – Maintenance

² DOH has decided not to process After-The-Fact applications so the USACE POH can proceed with their enforcement action.

- NWP 4 – Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities
- NWP 5 – Scientific Measurement Devices
- NWP 6 – Survey Activities
- NWP 7 – Outfall Structures and Associated Intake Structures
- NWP 9 – Structures in Fleeting and Anchorage Areas
- NWP 10 – Mooring Buoys
- NWP 11 – Temporary Recreational Structures
- NWP 12 – Oil or Natural Gas Pipeline Activities
- NWP 13 – Bank Stabilization
- NWP 14 – Linear Transportation Projects
- NWP 15 – U.S. Coast Guard Approved Bridges
- NWP 16 – Return Water from Upland Contained Disposal Areas
- NWP 17 – Hydropower Projects
- NWP 18 – Minor Discharge
- NWP 19 – Minor Dredging
- NWP 20 – Response Operations for Oil or Hazardous Substances
- NWP 22 – Removal of Vessels
- NWP 23 – Approved Categorical Exclusions
- NWP 25 – Structural Discharges
- NWP 27 – Aquatic Habitat Restoration, Establishment, and Enhancement Activities
- NWP 28 – Modifications of Existing Marinas
- NWP 29 – Residential Developments
- NWP 31 – Maintenance of Existing Flood Control Facilities
- NWP 32 – Completed Enforcement Actions
- NWP 33 – Temporary Construction, Access and Dewatering
- NWP 35 – Maintenance Dredging of Existing Basins
- NWP 36 – Boat Ramps
- NWP 37 – Emergency Watershed Protection and Rehabilitation
- NWP 38 – Cleanup of Hazardous and Toxic Waste
- NWP 39 – Commercial and Institutional Developments
- NWP 40 – Agricultural Activities
- NWP 41 – Reshaping Existing Drainage Ditches
- NWP 42 – Recreational Facilities
- NWP 43 – Stormwater Management Facilities
- NWP 45 – Repair of Uplands Damaged By Discrete Events
- NWP 46 – Discharges in Ditches
- NWP 48 – Commercial Shellfish Mariculture Activities
- NWP 51 – Land-Based Renewable Energy Generation Facilities
- NWP 53 – Removal of Low-Head Dams
- NWP 54 – Living Shorelines

- NWP 55 – Seaweed Mariculture Activities
- NWP 56 – Finfish Mariculture Activities
- NWP 57 – Electric Utility Line and Telecommunications Activities
- NWP 58 – Utility Line Activities to Water and Other Substances
- NWP 59 – Water Reclamation and Reuse Facilities
- Letters of Permission – Section 10 only activities with no discharge of fill material
- Any activity conducted in compliance with DOH pre-approved Standard Operating Procedures

c. Limitations on Coverage

This Blanket Certification shall not cover:

- (1) Discharge(s) regulated under CWA, Section 402.
- (2) Any project that may result in downstream/downdrift post construction impacts to the physical, chemical, and/or biological environment.
- (3) Concrete lining any section of natural streambed or bank.³
- (4) Projects involving the removal of dams, impoundments, structures, or sand bars that will result in the downstream/downdrift mobilization of material, sediment, and/or water pollutants.
- (5) Waste Discharges to natural lakes and anchialine pools as specified in HAR 11-54 or any State waters.
“Waste” means sewage, industrial and agricultural matter, and all other liquid, gaseous, or solid substance, including radioactive substance, whether treated or not, which may pollute or tend to pollute the waters of this State. Hawaii Revised Statutes (HRS) §342D-1.
Non-contaminated and suitable dredge and fill material authorized under a 2021 NWP is not considered waste.
- (6) New sewage discharges and new industrial discharges to estuaries as specified in HAR 11-54. New industrial discharges do not include the repair and/or replacement within the footprint of an existing structure.
- (7) New sewage and industrial discharges to Embayments: Class AA and Class A as identified in HAR 11-54. New industrial discharges do not include the repair and/or replacement within the footprint of an existing structure.

³ This type of activity is prohibited as it will result in adverse post construction impacts by eliminating ground water recharge, raising pH, and lowering dissolved oxygen or causing downstream bank erosion.

3. General Conditions

The applicant of the activity/discharge shall:

- a. Report any non-compliance with the conditions of this Blanket Certification to the USACE POH. Do not report or submit compliance related information to DOH. This Blanket Certification is a condition of the USACE POH permit.⁴
- b. Maintain records at the project site or in the nearby field office demonstrating that all Blanket Certification requirements have been fully complied with.
- c. Ensure that all activities are conducted in a manner that will comply with the "Basic Water Quality Criteria Applicable to All Waters" as specified in HAR 11-54.
- d. Ensure that all material(s) placed or to be placed in State waters are free of waste metal products, organic materials, debris, and any pollutants at toxic or potentially hazardous concentrations to aquatic life as specified in HAR 11-54.
- e. Ensure that the activities will not permanently interfere with or become injurious to any designated uses and/or existing uses of the receiving State water. Any permanent adverse impacts to the designated uses and/or existing uses of the receiving State water is a violation of HAR Chapter 11-54.
- f. Ensure that pollution control measures and BMPs are utilized that prevent water pollutants from leaving the in-water work area authorized by the USACE POH permit.⁵ Any visual plume emanating from the authorized in-water work area is a violation of HAR Chapter 11-54.
- g. Ensure that all construction debris from any portion of the activities (including but not limited to debris caused by hydraulic saws, water jets, or drilling equipment) are contained and prevented from entering or re-entering State waters. All construction debris and sidecast material shall be properly removed from the aquatic environment and disposed of at an upland State and county approved site. Before the start of the activities, a Solid Waste Disclosure Form for Construction Sites shall be completed and returned to the DOH's Solid and Hazardous Waste Branch,

⁴ With respect to USACE projects granted coverage under Item 2.c above, non-compliance reports from USACE POH should be submitted to DOH CWB.

⁵ With respect to USACE projects granted coverage under Item 2.c above, the relevant in-water work area is identified in the USACE project.

Office of Solid Waste Management. No construction material or construction related materials shall be stockpiled in the aquatic environment or stored or placed in ways that will disturb the aquatic environment. The Solid Waste Disclosure Form for Construction Sites is available online at:

<https://health.hawaii.gov/shwb/files/2018/04/swdiscformapr2018.pdf>.

- h. Utilize only BMPs that are inert and not sources of pollution themselves. Examples of inappropriate in-water porous material BMPs include but are not limited to: compost biosocks since they are a source of nutrients; and a soil berm since the soil particles will erode.
- i. Collect activity/discharge related water pollutants utilizing appropriate catchment/detention devices (e.g. construction debris, airborne particulates, dust, concrete slurry, concrete chips, concrete surface preparation washing effluent, excess water and overflow from boring related activity, horizontal directional drilling slurry, etc.) from localized work areas and minimize or prevent the release of these water pollutants into State waters, including the in-water work area.
- j. Utilize BMPs for all upland project activity to minimize the discharge of water pollutants into State waters, including the designated in-water work area.
- k. For a stream, ditch, or gulch: Allow unimpeded flow around the in-water work area to allow for aquatic animal migration and/or to prevent work site and downstream flooding situations. The unimpeded flow shall be equivalent to a 2-year, 24-hour duration storm event and/or the existing flow capacity of the stream, ditch, or gulch. Pumped diversions may be utilized if the stream, ditch, or gulch is dry or there is only standing/ponded water without the existence of living aquatic animals.
- l. Not discharge any type of wash water and/or effluent into State waters without first obtaining from DOH a National Pollutant Discharge Elimination System (NPDES) permit authorizing such type of water pollutant discharge to State waters.
- m. Not allow any concrete truck wash water to be disposed by percolation into the ground.
- n. Ensure that all areas temporarily impacted, either directly or indirectly, by the project construction activities are fully restored to its pre-construction conditions. For example: Incidental construction debris is cleaned up prior to removal of BMPs; remove all scientific measurement devices and any other structures or fills associated with installation and use of these

devices (e.g., foundations, anchors, buoys, lines, etc.) when no longer in use; etc.

- o. When projects involve dredging/excavation activities:
- (1) Be required to check the DOH, HEER Office Sites, Incidents and Records through the “Viewer” in iHEER at: <https://eha-cloud.doh.hawaii.gov/iheer>.⁶
 - (2) Be required to contact the HEER Office at (808) 586-4249 and through e-permitting Form “Notification of Construction Activities” at Form Finder <https://eha-cloud.doh.hawaii.gov/epermit/finder> if contaminated soil, sediment, vapor, or groundwater is known to be present at your project site. The applicant shall notify the HEER Office at least 90 days prior to surface and subsurface disturbing activities that may disturb the ground surface at HEER sites. If the 90-days prior notification is missed, the applicant shall notify the HEER Office as soon as possible to avoid any potential delays regarding the covered project.
 - (3) Contain return flow or runoff from upland dredged spoils dewatering site(s)/disposal site(s), including the confined disposal facility (CDF), which shall be contained on land and not allowed to discharge and/or re-enter any State waters without first obtaining the required discharge permit from USACE POH or CWB. Unless authorized by a USACE POH or NPDES permit, the applicant shall not allow any runoff, return flow, or airborne particulate pollutants from the excavated or dredged material dewatering or stockpiling site, including the CDF, to enter or re-enter State waters.
 - (4) Properly deploy warning signs, which shall be maintained until the portion of the in-water work is completed and the affected area water quality has returned to its preconstruction condition and turbidity control devices have been removed from the waterway.
- p. When projects involve moorings:
- (1) Avoid locating moorings (including anchors and floats) in sensitive aquatic habitats such as coral reefs, fish spawning areas, and submerged aquatic vegetation (unless location is acceptable to the Department of Land and Natural Resources, Division of Aquatic Resources or the National Oceanic Atmospheric Administration);
 - (2) Ensure moorings (including anchors and floats) are made of clean, inert material. Treated lumber shall not be used as it may contain

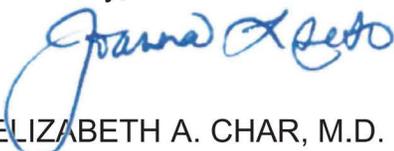
⁶ The HEER Office is currently updating site information for sites. Most, but not all, sites may be displayed on the viewer map. Site Document data upload is ongoing and not all documents may be currently available via this website. To get the complete record for the site, a record request form can be filled and submitted to the HEER Office. Users will then be notified when they are able to download all information via the iHEER system website.

- compounds that can be released into the water and become toxic to the aquatic environment;
- (3) Pre-cast and cure concrete anchors, if required, away from State waters prior to use to prevent seepage of potentially toxic substances into the waterbody;
 - (4) Locate moorings in depths that allow structures and vessels to remain afloat at the lowest possible water levels and that prevent propellers from disturbing bottom sediments;
 - (5) Select mooring anchors of an adequate size to secure vessels or structures and prevent the anchor from shifting or dragging along the bottom of the State water;
 - (6) Size the length of mooring lines, chains, or cables to avoid excess line, chain, or cable accumulation on the bed of the State water;
 - (7) Ensure native beach material such as logs, sand, gravel, and boulders that are important components of fish habitat are not used as mooring structures and are left in place on the foreshore;
 - (8) Properly dispose of derelict or unused floats, lines, chains, or cables in accordance with appropriate laws and rules; and
 - (9) Ensure moorings are kept in good repair by regularly inspecting and maintaining the structure. Mooring maintenance must be performed into perpetuity (or until it is properly disposed of) or it will itself become a pollution source.
4. USACE POH shall e-mail to CWB (cleanwaterbranch@doh.hawaii.gov and darryl.lum@doh.hawaii.gov) a pdf copy of all issued final verifications. This Blanket Certification coverage shall become valid with respect to an activity only when USACE POH notifies CWB via email of a project authorization/verification and conditions of this Blanket Certification have been incorporated as part of the USCE POH final verification; provided, that this email notification requirement shall not apply to activities that do not require a pre-construction notification, and this Blanket Certification shall automatically become valid with respect to such activities.

If you agree with the terms and conditions of this Blanket Certification, please sign and date below; make a copy for your administrative record; and submit this entire letter with your original signature to CWB within 14 calendar days from your signature date.

If you have any questions, please contact Mr. Darryl Lum of the Engineering Section, CWB, at (808) 586-4309.

Sincerely,


for
ELIZABETH A. CHAR, M.D.
Director of Health

- c: Regulatory Office, POH, COE [via e-mails linda.speerstra@usace.army.mil only]
- Ms. Debra Mendes, CZM Program, Office of Planning, DBEDT
[via e-mail debra.l.mendes@hawaii.gov only]
- U.S. Fish and Wildlife Service [via e-mail pifwo_admin@fws.gov only]
- U.S. National Marine Fisheries Service [via e-mail pirohonolulu@noaa.gov only]
- Division of Aquatic Resources, DLNR [via e-mail dlnr.aquatics@hawaii.gov only]
- CWRM, DLNR [via e-mail dlnr.cwrms@hawaii.gov only]
- OCCL, DLNR [via e-mail dlnr.occl@hawaii.gov only]
- DHO (Hawaii, Maui, Kauai) and EHS, Molokai/Lanai [via e-mail only]

I AGREE WITH THE TERMS AND CONDITIONS OF THIS LETTER:

David S. Hobbie
Regional Regulatory Chief
Honolulu District

DATE

EFH Conservation Recommendations

A. Conservation Recommendations for Physical Impacts to Benthic Communities

1. Equipment, anchors, structures, or fill shall not be deployed in project areas containing live corals, seagrass beds, or visible benthic organisms. Perform pre-deployment reconnaissance (e.g., divers, drop cameras, etc.) to ensure these resources are avoided.
2. Minimize direct impact (direct or indirect contact causing damage) by divers and construction related tools, equipment, and materials with benthic organisms, regardless of size, especially corals and seagrass.
3. Prevent trash and debris from entering the marine environment during the project.
4. Maintain all structures, gear, instrumentation, mooring lines, and equipment to prevent failures.
5. All objects lowered to the bottom shall be lowered in a controlled manner. Note: This can be achieved by the use of buoyancy controls such as lift bags, or the use of cranes, winches, or other equipment that affect positive control over the rate of descent. This often requires skilled in-water observation.
6. Select work platforms based on the following preferential hierarchy:
 - a. conduct all work from land or an existing structure;
 - b. use a barge with auto-positioning systems where thrusters will not cause increased turbidity;
 - c. anchor barges to (1) shoreline infrastructure; (2) nearby existing moorings; and, (3) anchors or spuds on sand only (as possible, have SCUBA divers lay anchors by hand in sand areas).
7. Ensure new structures minimize shading impacts to marine habitats. Note: Shade minimization measures include: maximizing the height of the structure and minimizing the width of the structure to decrease shade footprint; grated decking material; using the fewest number of pilings necessary to support the structures; and, aligning the boardwalk in a north-south orientation for the path of the sun to cross perpendicular to the length of the structure to reduce the duration of shading.
8. Mooring systems (e.g., buoys, chains, ropes) must:
 - a. be kept taut to the minimum length necessary.

- b. employ the minimum line length necessary to account for expected fluctuations in water depth due to tides or waves.
 - c. use a mid-line floats or other buoyancy devices to prevent contact with the ocean floor.
 - d. be properly maintained.
9. All temporary structures must be removed at the completion of construction and this timeframe will be defined as aligned with General Condition #30 of the Nationwide Permit Program.

B. Conservation Recommendations for Increase in Sedimentation and/or Turbidity

1. Appropriate silt containment devices must be properly installed, monitored and maintained.
2. Debris and sediment that is removed from the water shall be disposed of at an appropriate upland location. Sediment and debris must be contained while in transit or on the shore.
3. Project operations must cease under unusual conditions, such as large tidal events, storms, and high surf conditions.
4. Conduct intertidal work at low and/or slack tide to the greatest extent feasible.
5. To minimize impacts to coral larvae, you shall avoid in-water work during mass-coral spawning times or peak coral spawning seasons. Permittees shall coordinate with local NMFS Habitat Conservation Division representatives to determine the exact period when coral spawning would occur for the given year at the project site.
6. Maintain baseline water flow, volume, and velocity of the waterbody.
7. Use natural or bio-engineered solutions when feasible.
8. Fully stabilize disturbed upland areas prior to removing silt fences and erosion prevention measures.
9. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction conditions and elevations.
10. Utilize environmental clamshell buckets for mechanical dredging.

C. Conservation Recommendations for Increase in Nutrients, Pesticides and Herbicides, Contaminants, and/or Freshwater

1. Conduct work during the dry season when possible; stop work during storms or heavy rains.
2. Prevent discharges into the water.
3. Inspect all equipment prior to beginning work each day to ensure the equipment is in good working condition, and there are no contaminant (e.g., oil, fuel) leaks. Work must be stopped until leaks are repaired and equipment is cleaned. Equipment should always be stored in appropriate staging area designed to be preventative in terms of containing unexpected spills when equipment is not in use or during fueling.
4. Fueling of project-related vehicles and equipment shall take place at least 50 feet, or the maximum distance possible, from the water and within a containment area, preferably over an impervious surface.
5. Use of treated wood⁸ that would be in contact with the water is not authorized.
6. Use diffusers on the end of subtidal discharge pipes to minimize impacts from discharges.
7. Prevent bentonite and other drilling fluids from contacting benthic organisms.

D. Conservation Recommendations for Increase in Acoustic Impacts

1. Use a vibratory hammer to install piles when possible. Under conditions where impact hammers are required, when possible, drive as deep as possible with a vibratory hammer prior to the use of an impact hammer.
2. Implement measures to attenuate the sound or minimize impacts to aquatic resources during pile installation. Methods to mitigate sound

⁸ Treated wood must exclude treatment using any chemicals and/or compounds that have been banned by the EPA or banned for use in marine waters of the U.S. by the EPA or local or state agency. Other chemicals and/or compounds used to treat wood of concern include, but are not limited to: copper-based treatments such as Ammoniacal copper zinc arsenate (ACZA) and Copper Chromium Arsenate (CCA), polycyclic aromatic hydrocarbons (PAHs) in creosote treated wood, borate, Propiconazole-Tebuconazole-Imidicloprid (PTI), sodium silicate, potassium silicate, fire-retardant based, and acetylated wood. For a list of chemicals that have been shown to negatively impact coral processes in the water column, see Nalley et al. (2021).

impacts include, but are not limited to, the following: surround the pile with a dewatered cofferdam and/or air bubble curtain system.

E.Conservation Recommendations for Increase in Invasive Species

1. Prior to in-water work, sanitize equipment or dive gear that has been previously used in an area known to contain invasive species.
 - a. In-water tool and dive gear (e.g., wetsuit, mask, fins, snorkel, BC, regulator, weight belt, booties) shall be disinfected by one of the following ways: a 1:52 dilution of commercial bleach in freshwater, a 3 percent free chlorine solution, or a manufacturer's recommended disinfectant-strength dilution of a quaternary ammonium compound in "soft" (low concentration of calcium or magnesium ions) freshwater.
 - b. Small boats that have been deployed in the field will be cleaned and inspected daily for organic material, including any algal fragments or other organisms. Organic material, if found, will be physically removed and disposed of according to the ship's solid- waste disposal protocol or in approved secure holding systems. The internal and external surfaces of vessels will be rinsed daily with freshwater and always rinsed and be allowed to dry before redeployment.
2. Vegetated areas impacted during construction must be revegetated with appropriate native species.

Instructions	
Data Attribute	Definition
Project Name	Indicate the name of the project.
Location	Specify the project location or observation station. This is extremely important if there are multiple observation stations.
Observer(s)	Indicate the observer(s) at the station during monitoring effort. If the observer(s) switch in the middle of the day indicate the time of the switch.
Agency record numbers	POH number for the Corps and the ECO number for NMFS PIRO
Project Activities	
Start and end times	Record start and end times of all in-water activities. Make sure to record breaks in any in-water activities. Military time is preferable.
Type of Activity	Specify the type of in-water activity and make sure to indicate specifics such as bubble curtain use. Types of activities may include soft-start, impact pile installation (w/ or w/o bubble curtain), vibratory pile installation or removal (w/ or w/o bubble curtain), down the hole drilling, dredging, vessel activity, anchor handling, fill placement, or other sources of in-water disturbance.
ESA-listed Animals Sighting	
Species	Identify the species observed. (FKW) false killer whale, (MS) monk seal, (UW) unidentified cetacean, (BW) blue whale, (FW) fin whale, (SEW) sei whale, (SPW) sperm whale, (NPRW) north pacific right whale, (HW) humpback whale, (HT) hawksbill sea turtle, (GT) green sea turtle, (OR) olive ridley sea turtle, (LHT) loggerhead sea turtle, (LBT) leatherback sea turtle, (SHS) scalloped hammerhead shark, (OWT) oceanic whitetip shark, (GR) giant manta ray, (AG) acropora globiceps, (ARE) A. retusa, (AS) A. speciosa, (EP) Euphyllia paradivisa, (IC), Isopora crateriformis.
Quantity	Document the number of animals seen per sighting (e.g. 1 turtle, 3 whales, etc.)

Behavior	<p>(T) traveling - moving in a linear or near-linear direction without interruption</p> <p>(M) milling - moving in a non-linear, weaving or circular pattern within an area</p> <p>(HO) hauled out - hauled out on land</p> <p>(D) diving - moving downward through the water column (rapidly or slowly), often showing tail fluke before dive</p> <p>(V) vocalizing - snorting, whistling, or chirping</p> <p>(BR) breaching - leaps clear out of water</p> <p>(SH) spyhopping - holding body vertically with head out of water for several seconds or more</p> <p>(ST) startled - rapidly changing behavior, dispersing or travelling that indicates a response to external event (must describe disturbance in the notes)</p> <p>(F) flush from haulout - enters water in response to disturbance (must describe disturbance in the notes)</p> <p>(CH) change direction - sudden change in direction that may be caused by disturbance (must describe in notes)</p> <p>(A) avoidance - avoiding an area (must describe in notes)</p> <p>(O) unclassified behavior (must describe in notes)</p> <p>(U) unknown - behavior indistinguishable due to monitoring conditions and/or lack of ability to watch marine mammal for length of time to determine (no comment is necessary)</p> <p>(S) sessile - for corals</p> <p>(All behavioral changes caused by the project activities or other activities must be described in the notes. Include a detailed description of activities/animal’s behavior before and after potential project related behavior change)</p>
Location (inside/outside shutdown zone) and duration	<p>Location – indicate if the species was inside or outside the shutdown zone.</p> <p>Duration – record the length of time if the ESA species was inside the shutdown zone.</p>
Action taken by project	<p>Indicate if a shutdown or delay was implemented due to marine mammals, sharks, rays, or sea turtles being observed.</p>
NOTES EXAMPLES	
Duration of Shutdown or Delay	<p>If a shutdown or delay occurred due to ESA-listed animal presence, indicate how long the shutdown or delay lasted.</p>
Sighting Notes	<p>Include any additional information, include specifics about ESA-listed animals behavioral changes from project activities.</p>

Table 2

Project Name:										
Location:										
Observer(s):										
Corps and NOAA Project numbers:		POH-202__ - _____, PIRO-202__ - _____								
Date	Start time	End time	Activity type(s)	ESA-listed animal sighted	Quantity	Behavior	Location (i.e. inside/outside shutdown zone)	Duration	Action taken by project	No sightings this day
										<input type="checkbox"/>
										<input type="checkbox"/>
										<input type="checkbox"/>
										<input type="checkbox"/>
										<input type="checkbox"/>
										<input type="checkbox"/>
										<input type="checkbox"/>
Notes:										

7.0 Pac-SLOPES BMPs

The Corps will include applicable BMPs for the activities identified in Section 2.0 as permit conditions:

A. General BMPs

1. The Corps will retain the right of reasonable access to projects authorized under Pac-SLOPES to monitor the compliance with and effectiveness of permit conditions.
2. For in-water work where ESA corals may occur, structures and substrate that could be affected by the proposed activity must be surveyed by personnel qualified to identify ESA-listed corals. Where divers are to be used, before entering the water, all divers shall be made aware of ESA-listed corals, and the requirement to avoid contact with the corals while performing their duties. This shall include taking measures to avoid kicking corals with fins and to secure dive and survey equipment in a manner that will prevent the equipment from being dragged across the substrate.
3. To minimize impacts to coral larvae, notably the listed species covered in this programmatic consultation, the permittee shall avoid in-water work during mass-coral spawning times or peak coral spawning seasons June 1 to September 30 if practicable. The Corps must consult with their local NMFS HCD biologist to determine the period and dates when coral spawning will occur for the given year.
4. Constant vigilance shall be kept for the presence of ESA-listed marine species (sea turtles, marine mammals, sharks, rays) during all aspects of the proposed action.
5. A responsible party (i.e. permittee/site manager/project supervisor) shall designate an appropriate number of competent trained observers⁴ to survey the areas adjacent to the authorized work area (i.e. proposed action) for ESA-listed marine species. The competent observer will not be simultaneously engaged in any other activity (e.g. captaining, operating equipment, etc).
6. Surveys shall be made prior to the start of work each day, and prior to resumption of work following any break of more than one half hour. Additional periodic surveys throughout the work day are strongly recommended.
7. All work shall be postponed or halted when ESA-listed marine species are within 50 meters (54.7 yards, 164 feet) of the proposed work, and will only begin/resume after the animals have voluntarily departed the area.
 - a. If ESA-listed marine species are noticed within 50 meters (54.7 yards, 164 feet) after work has already begun, that work may continue only if, in the best judgement of a biologist, the activity will not adversely affect (i.e. disturb or harm) the animal(s). For example: divers performing underwater work (excluding the use of toxic

⁴ NMFS staff are not available to serve as an observer.

chemicals) such as surveys would likely be permissible, whereas operation of heavy equipment is not.

8. Project-related personnel shall NOT conduct activities resulting in a take of an ESA-listed species, a species proposed for listing, or listed or proposed critical habitat. “Take” as defined under the ESA means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct”. Activities that would qualify as take include attempting to disturb, touch, ride, feed, or otherwise intentionally interact with any protected species.
9. Sensitive resource areas, such as corals, coral reefs and seagrass beds known to occur within a project area must be identified on project figures. Project staff must be instructed to avoid the sensitive resource areas to the greatest extent practicable, including avoiding anchoring in these areas, flagging the areas if appropriate, and securing all in-water equipment in a manner that will prevent the equipment from being dragged across the substrate.
10. Project construction must cease under unusual conditions, such as large tidal events and high surf conditions, except for efforts to avoid or minimize resource damage.
11. When a diver is involved in the action, the diver will do their best to avoid ESA-listed species. If an animal traverses within 50 m, however, the diver will take into account his/her own personal safety. The diver will report the interaction via the reporting requirement in BMP A 13.b.
12. If an ESA-listed species is adversely affected as a result of the project, all work must stop until coordination with the Corps and NMFS has been completed.
13. Reporting
 - a. Any monk seal sightings:
 - i. At the time of observation, the observer will report the sighting to the NOAA Statewide Hawaii Marine Wildlife Hotline at 888-256-9840. The observer will be prepared to provide information to the hotline operator about the sighting location and other site-specific information to help the operator determine the most appropriate response, if any.
 - ii. The observer will email documentation of Hawaiian monk seal sightings (e.g., photos, video, reports, etc.) to: pifsc.monksealsighting@noaa.gov, with the subject line indicated as: “Monk seal sighting documentation per Pac-SLOPES ESA section 7 consultation.” Documentation will always include the specific sighting location and the contact information of the reporting party.
 - b. Observer logs. All non-take interactions with listed species (e.g. a species entering the shut-down zone and work is shut down correctly) must be documented and reported to the Corps and NMFS in monitoring logs (Table 2 in Appendix B).
 - i. Monitoring logs shall be completed daily. If no ESA-listed species are observed, the observer will record “0” in the daily report.
 - ii. The monitoring logs will be submitted in a digital and queryable to the NMFS reporting contact(s) in Table 1.
 1. total hours and dates of monitoring

2. identification of which ESA species were observed and in what location and circumstances, including date, numbers of individuals of species observed, the outcome of the species observance relative to the authorized project, and any factors which may have affected visibility,
 3. if applicable, observed ESA species behaviors and movement types relative to the project activity at time of observation
- iii. All monitoring logs must be submitted to the NMFS within 90 calendar days of the completion of the project. The Corps will provide final reports to NMFS as part of the annual report. The final report will be comprised of summaries of monitoring efforts including:

B. BMPs for waste and discharge

1. A stormwater management plan, commensurate to the size of the project, must be prepared and carried out for any project that will produce any new impervious surface or a land cover conversion that will slow the entry of water into the soil to ensure that effects to water quality and hydrology are minimized.
2. An erosion control plan for the project site and adjacent areas must be prepared and carried out. Erosion controls must be properly installed before any alteration of the project area may take place.
3. A pollution control plan for the project site and adjacent areas must be prepared and implemented. At a minimum, this plan shall include:
 - a. Proper installation and maintenance of equipment diapers, or drip pans.
 - b. A contingency plan to control and clean spilled petroleum products, hydraulic leaks, and other toxic materials.
 - c. Appropriate materials to contain and clean potential spills will be stored at the work site and be readily available.
 - d. All project-related materials and equipment placed in the water will be free of pollutants.
 - e. Daily pre-work inspections of heavy equipment and vessels for cleanliness and leaks, with all heavy equipment operations and vessel use postponed or halted until leaks are repaired and equipment is cleaned.
 - f. Fueling of land-based vehicles and equipment shall take place at least 50 feet (15 meters) away from the water, preferably over an impervious surface.
 - g. All construction discharge water (e.g., concrete washout, pumping for work area isolation, vehicle wash water, drilling fluids) must be treated before discharge.
 - h. Debris and other wastes will be prevented from entering or remaining in the marine environment during the project.
4. Temporary access roads and drilling pads must avoid steep slopes, where grade, soil types, or other features suggest a likelihood of excessive erosion or failure; existing access routes must be utilized or improved whenever possible, in lieu of construction of new access routes.

5. Temporary fills must be removed in their entirety. All areas impacted by construction must be returned to pre-construction elevations. The affected areas must be stabilized and revegetated with native species as appropriate.
6. All disturbed areas must be immediately stabilized following cessation of activities for any break in work longer than 4 days.
7. Drilling and dredging are restricted to uncontaminated areas, and any associated waste or spoils must be completely isolated and disposed of in an approved upland disposal location.

C. BMPs for Activities that may result in Direct Physical Impact

1. Before any equipment, anchor(s), or material enters the water, a responsible party, i.e., permittee/site manager/project supervisor, shall verify that no ESA-listed marine animals are in the area where the equipment, anchor(s), or materials are expected to contact the substrate. If practicable, the use of divers to visually confirm that the area is clear is preferred.
2. Equipment operators shall employ “soft starts” when initiating work each day and after each break of 30 minutes or more that directly impacts the bottom. Buckets and other equipment shall be sent to the bottom in a slow and controlled manner for the first several cycles before achieving full operational impact strength or tempo.
3. All objects lowered to the bottom shall be lowered in a controlled manner. This can be achieved by the use of buoyancy controls such as lift bags, or the use of cranes, winches, or other equipment that affect positive control over the rate of descent.

D. BMPs for activities that may result in Entanglement

1. Temporary in-water tethers, as well as mooring lines for vessels and marker buoys shall be kept taut to the minimum length necessary, and shall remain deployed only as long as needed to properly accomplish the required task.
2. Mooring systems shall employ the minimum line length necessary to account for expected fluctuations in water depth due to tides and waves.
3. Mooring systems shall be designed to keep the line as tight as possible, with the intent to eliminate the potential for loops to form.
4. Mooring lines shall consist of a single line connected to the buoy float. No additional lines or material capable of entangling marine life may be attached to the mooring line or to any other part of the deployed system.
5. Mooring systems shall be designed to keep the gear off the bottom, by use of a mid-line float when appropriate.

6. Any permanent or long-term deployments shall include an inspection and maintenance program to reduce the likelihood of failures that may result in loose mooring lines lying on the substrate or hanging below a drifting buoy.
7. Mooring systems, including those used for temporary markers, scientific sensor buoys, or vessel moorings, shall be completely removed from the marine environment immediately at the completion of the authorized work or the end of the mooring's service life. The only exceptions to this rule shall be mooring anchors such as eyebolts that are epoxied into the substrate and which pose little or no risk to marine life.

E. BMPs for activities that may result in Exposure to Elevated Noise Levels

1. Maintenance dredging, in-water excavation, movement of large armor stones, and benthic core sampling shall not be undertaken if any ESA-listed marine animals are within 50 meters (54.7 yards, 164 feet) of the authorized work, and those operations will immediately shut-down if an ESA-listed marine animal enters within 50 meters (54.7 yards, 164 feet) of the authorized work. This condition is intended to ensure that no ESA-listed marine animals are exposed to sound levels anywhere near the TTS threshold isopleths.
2. Operation of buoy acoustic release systems shall cease when ESA-listed marine animals are within 250 meters (273 yards) (safety zone). It is further recommended that the permittee carefully survey the safety zone around the vessel/buoy from 30 minutes prior to activating the acoustic release, to 30 minutes following the end of transducer operations.

F. BMPs for activities that may result in Collision with Vessels:

1. When piloting vessels, vessel operators shall alter course to remain at least 100 meters (109 yards) from whales, and at least 50 meters (54.7 yards, 164 feet) from other ESA-listed marine animals.
2. Reduce vessel speed to 10 knots or less when piloting vessels in proximity of ESA-listed marine mammals, sharks, and rays.
3. Reduce vessel speed to 5 knots or less when piloting vessels in areas of known or suspected sea turtle activity.
4. If despite efforts to maintain the distances and speeds described above, a marine mammal or turtle approaches the vessel, the vessel operator will put the engine in neutral until the animal is at least 15 meters (~50 feet) away, and then slowly move away to the prescribed distance.
5. Marine mammals, sea turtles and other ESA-listed motile species shall not be encircled or trapped between multiple vessels or between vessels and the shore.
6. The Corps and NMFS contacts in Table 1 will be notified within 48 hours of a vessel grounding or abandonment during the proposed action.

G. Marina or Harbor Repair and Improvement Activities:

1. Repair and replacement of over-water and in-water structures (such as piers, docks, and launch ramps) under Pac-SLOPES is expressly limited to their existing footprints.
2. Replacement decking should be designed to reduce in-water shading to the greatest extent practicable.
3. Repair and removal work will be accomplished in a manner that minimizes the potential spread of invasive species that may reside on the pilings such as immediate removal from the water upon extraction or other appropriate approved containment methods.
4. Removed materials must be disposed of at an approved upland disposal site.

H. Piling Installation, Repair, Replacement and/or Removal:

1. Repair and removal work will be accomplished in a manner that minimizes the potential spread of invasive species.
2. Removed pilings must be disposed of at an approved upland disposal site.
3. Pac-SLOPES cannot be used if the distance to the TTS isopleth is greater than 50 m for sea turtles, 100 m for monk seals, 1000 m for cetaceans, or 250 m for sharks and rays. The Corps will provide calculations and details (including number of piles per day, minutes per pile, pile size, etc.) to NMFS to verify the distances to the TTS isopleths. Applicants can 1) use the publicly available User Spreadsheet tool available on the NMFS marine mammal sound calculator website (<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance>) to conduct their own analyses and have the Corps submit the spreadsheet and results to NMFS, or 2) the Corps may request technical assistance for help determining the TTS isopleths from NMFS as part of a Pac-SLOPES verification request. For non-Federal permit applicants, all analyses and information would be submitted to NMFS through the Corps as part of Pac-SLOPES verification. Should the applicant request technical assistance, the applicant must provide the following: pile size (diameter in inches), pile material (wood, concrete, or steel), number of piles installed within a 24-hour period, duration to drive a single pile (in minutes), water depth (feet or meters), and, if possible, the substrate type and type of vibratory hammer.

I. Installation and/or Repair of Buoys and Other Similar Structures:

1. Anchoring locations and moorings must be designed to avoid, to the greatest extent practicable, impacts to live corals, sea grass, and other benthic organisms.

2. Deployment of moored active acoustic devices must operate in frequency bands well outside the hearing ranges of ESA-listed marine animals (such as certain wave and current monitoring systems operating above 200 kHz), and moorings with acoustic release devices may only transmit a brief signal during deployment and during recovery of the mooring.
3. Should a mooring break free and ground, the permittee will notify the Corps about the grounding, including date and exact location. See Table 1 for Corps and NMFS reporting contact(s).

J. Maintenance Dredging:

1. With the exception of the actual dredging apparatus (e.g. clamshell buckets, or the scoop and articulated arm of a backhoe, hydraulic head, etc.), heavy equipment will be operated from above and out of the water.
2. Use of hydraulic dredging must include the installation of excluder devices adequate to prevent the entrainment or impingement of protected marine species such as sea turtles and juvenile scalloped hammerhead sharks.
3. The applicant will not use a Trailing Suction Hopper Dredge (or hopper dredge) to conduct dredging. There have been numerous observed mortalities of sea turtles and sharks associated with these vessels.
4. The applicant will not use Dustpan dredges, which use high velocity water jets to loosen material before sucking it into their apparatus. This technique causes high turbidity and the effects of water velocities from water jets to listed species have not been evaluated.
5. The applicant may use cutterhead dredges that are equipped with suction heads of 36 inches diameter or less, and a maximum intake velocity of 4.6 meters per second (15 feet per second), and an intake velocity of 95 cm per second (3.1 feet per second) at 1 meter away from the suction head.
6. The applicant may use pipeline dredges with openings no larger than 36 inches diameter, and intake velocities of 4.6 meters at the source and 95 cm per second at 1 meter. To avoid lethal entrainment or dismemberment of sea turtles, hammerhead sharks, or marine mammals, suction head openings larger than 12 inches must be either screened with 2-inch mesh or less, operated or monitored by a diver, or behind a barrier (e.g., coffer dams or silt curtains).
7. To minimize exposure to listed animals in the water column, the applicant will avoid moving the suction head through the water column while the pump is turned on. The applicant will turn on suction only when the suction heads are at the bottom and in contact with the sediment and turn it off before lifting the suction head up to the surface.

8. In known scalloped hammerhead shark nursery areas, the applicant will conduct all suction dredging behind barriers (e.g., coffer dams or silt curtains), or with a diver operating or monitoring the suction head and screening.
9. The portions of the equipment that enter the water will be clean and free of pollutants.
10. Appropriate silt containment devices must be used and properly installed to avoid degradation of adjacent coral reefs, and aquatic vegetation.
11. Dredged material must be deposited at upland sites, or at EPA designated ocean disposal sites provided sediment standards are met.

In the modified Blanket Water Quality Certification for the State of Hawaii 0901, dated November 30, 2020, General Condition f states “Ensure that pollution control measures and BMPs are utilized that prevent water pollutants from leaving the in-water work area authorized by the USACE [Corps] POH permit. Any visual plume emanating from the authorized in-water work area is a violation of HAR Chapter 11-54”.

K. Other Minor Discharges and Dredging/Excavations:

1. The dredged or discharged material will be free of contamination.
2. The site of excavation or discharge will contain no known forage or resting habitat for ESA-listed marine species.

L. Utility Line Installation and Repair:

1. Utility line placement location and method must be designed to avoid to the greatest extent practicable, impacts to live corals, submerged aquatic or marine vegetation and other benthic organisms, and wetlands.

M. Maintenance of Existing Bank Stabilization Structures:

1. No material will be discharged into special aquatic sites.
2. Bank stabilization will be limited to replacement within the current footprint only and will not extend waterward from the present site.
3. No new bank stabilization.
4. An activity will involve no more than 500 feet in total length along the bank.
5. The maximum amount of material placed shall not exceed the minimum needed for erosion protection.

6. No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the United States.
7. All material will be placed in a manner that will avoid erosion by normal or expected high flows.

N. Road Repairs and/or Improvements:

1. No new road construction.
2. Maximum road width shall be limited to the minimum width necessary.
3. Roads shall be designed and constructed in a manner that minimizes adverse impacts on surface and marine waters due to runoff and erosion, including adequate stormwater treatment. Erosion control BMPs will be checked daily during the construction period.
4. Roads shall be constructed as near as possible to pre-construction contours and elevations.
5. Roads must be bridged or culverts installed based on present or future (based on climate change data) 100-year flood flows, and in a manner that maintains surface flows with minimal modification to flow direction or velocity.

O. Bridge Repair and Replacement:

1. Temporary fills must consist of stable materials, and be placed in a manner, that will not be eroded by expected high flows.
2. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations within 30 days of project completion.

P. Stranded, Injured, Sick or Dead Marine Mammal or Turtle

1. If observers become aware of any injured, sick, or dead marine mammal or turtle (whether or not it may be related to the proposed action), they will immediately call the NOAA Statewide Hawaii Marine Wildlife Hotline at 888-256-9840. The observer will be prepared to provide information to the hotline operator about the animal's condition, location, and other information specific to the situation to help the operator determine the most appropriate response.
2. The observers will submit photos and data as soon as possible regarding stranded, injured, sick, or dead marine animals that NMFS may use to inform NMFS-directed field responses and/or further analysis to determine whether a taking resulted (see 3. below).. Photos and data submitted to NMFS regarding stranded, injured, sick, or dead marine animals will include date, time, location, species, and number of animals, as well as a description of the animal's condition, event type (e.g., entanglement, dead, floating), and behavior of live-stranded marine animals. The observers will email this documentation to: respectwildlife@noaa.gov, with the subject line indicated as: "Stranded animal information per Pac-SLOPES ESA section 7 consultation."

3. If NMFS responders determine the proposed action resulted in the taking, re-initiation of ESA consultation is warranted. The Corps will collect the following information and include it in the re-initiation request:
 - a. Number of individuals and species of listed animals affected;
 - b. The date, time, and location of each event (provide geographic coordinates);
 - c. Description of the event;
 - d. The time the animal(s) was first observed or entered the shutdown zone, and, if known, the time the animal was last seen or exited the zone, and the fate of the animal;
 - e. Mitigation measures implemented prior to and after the take; and
 - f. If a vessel struck a marine mammal, the contact information for the observer on duty, or the contact information for the individual piloting the vessel if there was no observer on duty;
 - g. Photographs or video footage of the animal(s) (if available).

R. Contact Information

Table 1. Summary of agency contact information.

Reason for Contact	Contact Information
Consultation Questions	ESA email inbox (efhesaconsult@noaa.gov), and Consultation Biologist: @noaa.gov
Reports & Data Submittal (please include ECO tracking number in subject line)	efhesaconsult@noaa.gov , and CEPOH-RO@usace.army.mil
NOAA Fisheries Hawai'i Statewide Marine Stranding, Entanglement, and Reporting Hotline <i>(not related to project activities)</i>	Stranding Hotline (24/7 coverage): (888) 256-9840
Oil Spill & Hazardous Materials Response	U.S. Coast Guard National Response Center: 1-800-424-8802
Illegal Activities <i>(not related to project activities; e.g., feeding, unauthorized harassment, or disturbance to marine mammals)</i>	NMFS Office of Law Enforcement: 1-800-853-1964

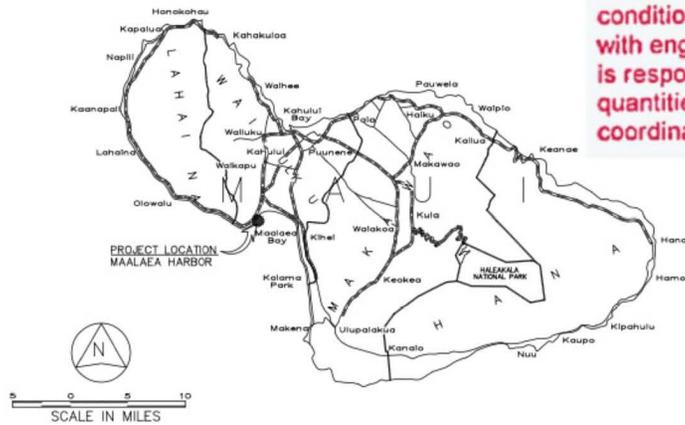
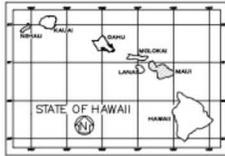
NMFS Pacific Islands Regional Office	808-725-5000
Corps Honolulu District Regulatory Office	CEPOH-RO@usace.army.mil 808-835-4303

**Department of Land and Natural Resources
Division of Boating and Ocean Recreation
PLAN REVIEW:**

- Approved
 Rejected
 Approved, as noted
 Revise & Resubmit

By: J. J. J. Date: 09/22/2023

Corrections, comments or approval of plans shall not relieve the contractor from other local, state, federal or other agency regulations or permit conditions. This review is for general conformance with engineering design guidelines. The contractor is responsible for confirming all dimensions, quantities, fabrication requirements, and coordination with all other trades.



VICINITY MAP



LOCATION MAP

61-655 KAMEHAMEHA HIGHWAY
HALEIUA, HAWAII 96712 • (808) 349-4990



THESE PLANS OR ANY PART THEREOF ARE THE PROPERTY OF THE ENGINEER OR ARCHITECT AND ARE TO BE KEPT IN HIS OR HER OFFICE. NO REPRODUCTION OR CONSTRUCTION OF THIS PROJECT WILL BE UNDER HIS OR HER SUPERVISION.

GENERAL NOTES

CONTRACTOR/OWNER BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE WORK BEFORE PROCEEDING WITH THE WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
ALL CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AND THE LATEST COUNTY OF HAWAII AMENDMENTS AND ORDINANCES AND/OR THE CITY AND COUNTY OF WHERE THE PROJECT IS LOCATED AND BEING APPROVED.

REVISION MARK • DATE • DESCRIPTION

PROJECT

MAALAEA HARBOR
SLIP #99 PILE REPAIRS

TRILOGY EXCURSIONS
MAALAEA RD, SLIP #99
WAILUKU, HI 96793

SHEET TITLE

TITLE SHEET

JOB NO. 2025-0065 DRAWING NO.
DRAWN JMM
CHECKED JMM
DATE 10/7/2025 SHEET 1 OF 3

INDEX TO DRAWINGS

SHEET NUMBER	DRAWING NUMBER	DESCRIPTION
1	T-1	TITLE, INDEX TO DRAWINGS, AND VICINITY MAP
2	S-1	WATER QUALITY PROTECTION PLAN
3	S-2	GENERAL NOTES, PILE REPAIR PLANS, AND DETAILS

NOTES:

1. TURBIDITY CONTAINMENT BARRIERS AND ON-LAND SILT FENCES SHALL BE OF SUFFICIENT DESIGN, STRENGTH, AND SUITABILITY FOR THEIR INTENDED APPLICATION AND THE OCEAN ENVIRONMENT.
2. SILT FENCE FILTER FABRIC SHALL BE MIRAFI SILT FENCE, AMOCO SILT STOP, OR APPROVED EQUAL.
3. FLOATING TURBIDITY CONTAINMENT BARRIERS SHALL GENERALLY BE COMPOSED OF A WATER SURFACE FLOATATION BOOM WITH A MINIMUM FREEBOARD OF 4 INCHES, A SKIRT HANGING VERTICALLY TO THE REQUIRED DEPTH, BALLAST WEIGHT AT THE SKIRT BOTTOM, AND SUFFICIENT ANCHORS TO MAINTAIN THE CURTAIN IN PLACE.
4. THE FLOATING TURBIDITY CONTAINMENT BARRIER SKIRT MATERIAL SHALL BE MONOFILAMENT WOVEN POLYPROPYLENE WITH THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS:

PROPERTY	VALUE	TEST METHOD
GRAB STRENGTH	200 LBS	ASTM D 4832
PUNCTURE	90 LBS	ASTM D 4833
TRAPEZOID TEAR	90 LBS	ASTM D 4533

PERVIOUS GEOTEXTILE SKIRT MATERIAL SHALL HAVE A MAXIMUM APPARENT OPENING SIZE (AOS) AND PERCENT OPEN AREA (POA) CAPABLE OF RETAINING FINE SUSPENDED SEDIMENTS 0.004 MM OR LARGER IN DIAMETER.

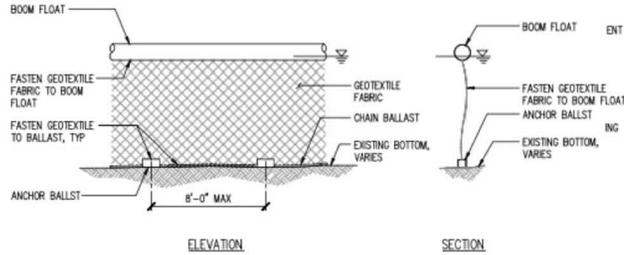
5. A DESCRIPTION OF THE TURBIDITY CONTAINMENT BARRIER(S), THEIR MATERIALS AND DESIGN, AND THE PROPOSED DEPLOYMENT METHODOLOGY SHALL BE INCLUDED IN THE CONTRACTOR'S ENVIRONMENTAL PROTECTION PLAN AND APPROVED BY THE STATE PRIOR TO THEIR USE.
6. TURBIDITY CONTAINMENT BARRIERS AND FENCES SHALL BE INSPECTED DAILY, AND IMMEDIATELY REPAIRED OR REPLACED AS NECESSARY TO ENSURE THEIR EFFECTIVENESS.

DOCK CONSTRUCTION AREA (IN-WATER):

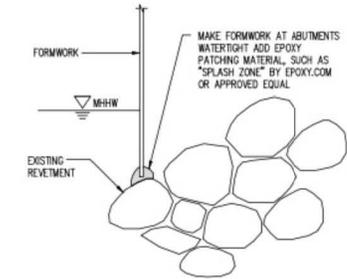
1. A TURBIDITY CONTAINMENT BARRIER SHALL BE DEPLOYED TO COMPLETELY SURROUND THE AREA OF ACTIVE IN-WATER CONSTRUCTION.
2. SHOULD WEATHER OR SEA CONDITIONS PROHIBIT PROPER PLACEMENT AND FUNCTION OF THE TURBIDITY CONTAINMENT BARRIER, CONSTRUCTION SHALL CEASE UNTIL CONDITIONS PERMIT PROPER DEPLOYMENT.

WORKSITE AND EQUIPMENT/MATERIALS STAGING AREAS (ON LAND):

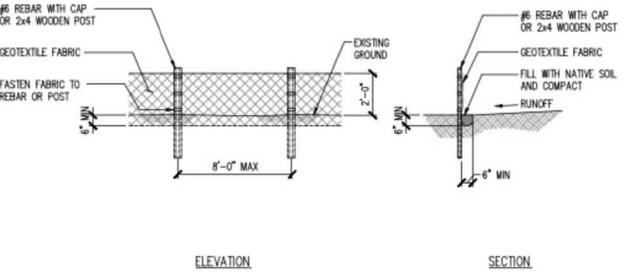
1. A SILT FENCE SHALL BE INSTALLED AND MAINTAINED ALONG THE OCEAN SIDE OF THE WORKSITE AND EQUIPMENT/MATERIALS STAG AREAS.



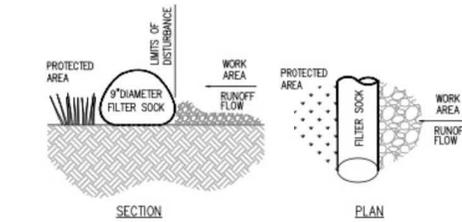
1
S-1 NOT TO SCALE



2
S-1 NOT TO SCALE



3
S-1 NOT TO SCALE



NOTE:
USE 9-INCH DIAMETER FILTER SOCK FOR PERIMETER CONTROL. INSTALL FILTER SOCK ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

4
S-1 NOT TO SCALE

61-855 KAMEHAMEHA HIGHWAY
HALEIWA, HAWAII 96712 • (808) 349-4990



GENERAL NOTES
CONTRACTOR/OWNER/BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS OF THE EXISTING BEFORE PROCEEDING WITH THE WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
ALL CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AND THE LATEST COUNTY OF HAWAII CODE OF ORDINANCES AND ORDINANCES ADOPTED BY THE CITY AND COUNTY OF HONOLULU. THIS PROJECT IS LICENSED AND HAVING JURISDICTION.

REVISION MARK • DATE • DESCRIPTION

PROJECT

MAALAEA HARBOR
SLIP #99 PILE REPAIRS

TRILogy EXCURSIONS
MAALAEA RD. SLIP #99
WAILUKU, HI 96793

SHEET TITLE

WATER QUALITY
PROTECTION PLAN

JOB NO. 2025-0065 DRAWING NO.
DRAWN JMM
CHECKED JMM
DATE 10/7/2025 SHEET 2 OF 3

GENERAL:

- A. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE BUILDING CODE AS STATED BELOW. HOWEVER, WHERE REFERENCE IS MADE TO PERFORMANCE CONFORMING TO OTHER STANDARDS THE MORE STRINGENT SHALL APPLY.
 - 1. CITY AND COUNTY OF MAUI: AMENDED IBC, 2018
- B. THE CONTRACTOR SHALL COMPARE ALL THE CONTRACT DOCUMENTS WITH EACH OTHER AND REPORT IN WRITING TO THE ENGINEER ALL INCONSISTENCIES AND OMISSIONS.
- C. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND SHALL COMPARE SUCH FIELD MEASUREMENTS AND CONDITIONS WITH THE DRAWINGS BEFORE COMMENCING WORK. REPORT IN WRITING TO THE ENGINEER ALL INCONSISTENCIES AND OMISSIONS.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.
- E. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHODS OF CONSTRUCTION, WORKMANSHIP AND JOB SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED FOR STABILITY OF STRUCTURAL MEMBERS AND SYSTEMS.
- F. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE ADJACENT PROPERTIES, STRUCTURES, STREETS AND UTILITIES DURING THE CONSTRUCTION PERIOD.
- G. DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED.

CONCRETE:

- A. CONCRETE CONSTRUCTION SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE ACI 318-05.
- B. CONCRETE SHALL BE REGULAR WEIGHT CONCRETE AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
- C. CONCRETE DELIVERY TICKETS SHALL RECORD ALL FREE WATER IN THE MIX AT BATCHING BY PLANT, FOR CONSISTENCY BY DRIVER AND ANY ADDITIONAL REQUEST BY CONTRACTOR IF PERMITTED BY THE MIX DESIGN.
- D. ALL ANCHOR BOLTS AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE 316 STAINLESS STEEL UNLESS OTHERWISE NOTED.
- E. REINFORCING BARS, ANCHOR BOLTS, INSERTS AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE SECURED IN POSITION PRIOR TO PLACEMENT OF CONCRETE.
- F. A CORROSION INHIBITING ADMIXTURE SHALL BE INCLUDED IN THE CONCRETE MIX FOR ALL CONCRETE. THE ADMIXTURE SHALL BE RHODECOR ON CORROSION INHIBITOR FROM BASF, DO S CORROSION INHIBITOR FROM GRACE CONSTRUCTION PRODUCTS OR AN APPROVED EQUAL. ADDITION RATE OF CORROSION INHIBITING ADMIXTURE SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

STRUCTURAL STEEL:

- A. PLATES, ANGLES, AND CHANNELS SHALL CONFORM TO ASTM A36, UNLESS NOTED OTHERWISE.
- B. ALL PLATES AND OTHER SHAPES SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A153 UNLESS OTHERWISE NOTED.
- C. PIPE PILING SHALL BE ASTM A252 GRADE 3. COATING FOR PILES SHALL BE AS FOLLOWS:
 - 1. COATING STANDARD: PLANT-APPLY FUSION BONDED EPOXY (FBE) TO AWWA C213-22 / CSA Z245.20; BLAST TO SP 10; 2.5 4.0 MIL PROFILE. DFT: 16 20 MIL.
 - 2. SUBMERGED/DRIVEN ZONE: APPLY ARO 8 12 MIL OVER FBE (E.G., SCOTCHKOTE ARO 8352)
 - 3. SPLASH/TIDAL ZONE: APPLY UV-RESISTANT FBP TOPCOAT 4 8 MIL OVER FBE (E.G., PIPECLAD PT50057) OR SUPPLY AN INTEGRATED DUAL-LAYER FBE SYSTEM WITH UV-PROTECTIVE OVERCOAT (E.G., JOTAPRE D.L.).
 - 4. FIELD JOINTS/REPAIRS: USE COMPATIBLE FBE REPAIR MATERIALS PER MANUFACTURER (E.G., 3M SCOTCHKOTE 226N/226N+ GUIDES) AFTER WELDS; HOLDAY TEST AND REPAIR.
 - 5. WELDS AND WELDING PROCEDURES SHALL CONFORM TO THE STRUCTURAL WELDING CODE AWS D1.1 OF THE AMERICAN WELDING SOCIETY.
 - 6. WELDING SHALL BE PERFORMED BY WELDERS PREQUALIFIED FOR WELDING PROCEDURES TO BE USED.
 - 7. WELDING ELECTRODES SHALL BE E70XX.
 - 8. BOLTS SHALL CONFORM TO ASTM F593, 316 STAINLESS STEEL, UNLESS OTHERWISE NOTED.
 - 9. NUTS AND WASHERS SHALL CONFORM TO ASTM F594, 316 STAINLESS STEEL, UNLESS OTHERWISE NOTED.

EPOXY ANCHORS:

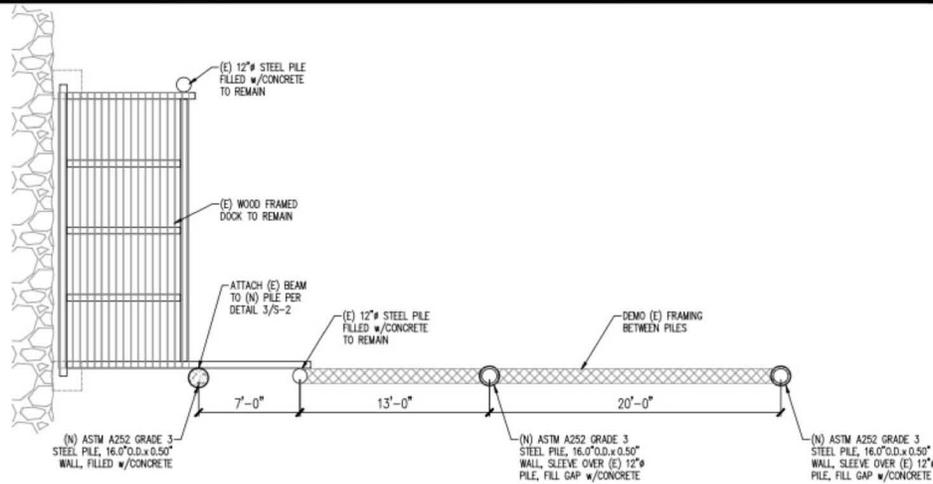
- A. EPOXY FOR ALL EMBEDDED BOLT ANCHORAGES SHALL BE HULTI HT-RE 500 V3, OR APPROVED EQUAL.
- B. DRILLED HOLE DIAMETER, INSTALLATION PROCEDURES, AND INSTALLATION TORQUE REQUIREMENTS SHALL BE PER MANUFACTURERS RECOMMENDATIONS.

BMP NOTES:

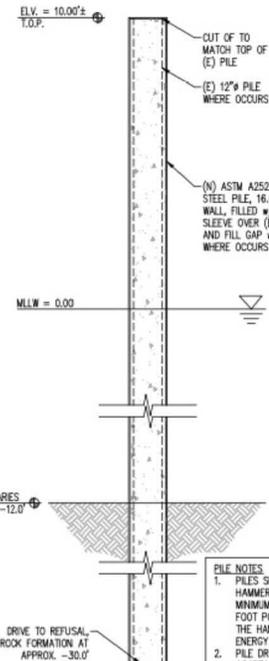
- A. TURBIDITY AND SILTATION FROM PROJECT-RELATED WORK SHALL BE MINIMIZED AND CONTAINED TO WITHIN THE VICINITY OF THE SITE THROUGH THE APPROPRIATE USE OF EFFECTIVE SILT CONTAINMENT DEVICES AND THE CURTAILMENT OF WORK DURING ADVERSE TIDAL AND WEATHER CONDITIONS.
- B. ALL PROJECT-RELATED MATERIALS AND EQUIPMENT (BARGES, ETC) TO BE PLACED IN THE WATER SHALL BE CLEANED OF POLLUTANTS PRIOR TO USE.
- C. NO PROJECT-RELATED MATERIALS SHALL BE STOCKPILED IN THE WATER (INTERIAL ZONES, REEF FLATS, STREAM CHANNELS, WETLANDS ETC.).
- D. ALL DEBRIS REMOVED FROM THE MARINE/AQUATIC ENVIRONMENT SHALL BE DISPOSED OF AT AN APPROVED UPLAND OR OCEAN DUMPING SITE.
- E. NO CONTAMINATION (TRASH OR DEBRIS DISPOSAL, NON-NATIVE SPECIES INTRODUCTIONS ATTRACTION OF NON-NATIVE PESTS ETC.) OF ADJACENT MARINE/AQUATIC ENVIRONMENTS (REEF FLATS, CHANNELS, OPEN OCEAN, STREAM CHANNELS, WETLANDS, BEACHES, FORESTS ETC.) SHALL RESULT FROM PROJECT-RELATED ACTIVITIES.
- F. FUELING OF PROJECT-RELATED VEHICLES AND EQUIPMENT SHALL TAKE PLACE AWAY FROM THE WATER AND A CONTINGENCY PLAN TO CONTROL PETROLEUM PRODUCTS ACCIDENTALLY SPILLED DURING THE PROJECT SHALL BE DEVELOPED. ABSORBENT PADS AND CONTAINMENT BOOMS SHALL BE STORED ON-SITE, IF APPROPRIATE, TO FACILITATE THE CLEAN-UP OF ACCIDENTAL PETROLEUM RELEASES. COMPANY VEHICLES AND EQUIPMENT SHALL BE WELL MAINTAINED AND FREE FROM ANY TYPE OF FLUID LEAKS. VEHICLES SHOULD NOT BE SERVICED, FUELED, OR WASHED WHILE ON THE PROJECT SITE OR ADJACENT STATE PROPERTY.
- G. THERE SHALL BE NO DISCHARGE OF CONCRETE SAW CUT SLURRY TO STATE WATERS.
- H. THERE SHALL BE NO DISCHARGE OF CONCRETE CURING WATER TO STATE WATERS.
- I. WATER TIGHT FORMS SHALL BE USED FOR TREME CONCRETE POURING PRACTICES.
- J. APPLICABLE MONITORING AND ASSESSMENT PLAN (AMAP) SHALL BE DESIGNED AND IMPLEMENTED TO ENSURE THE ADEQUACY OF THE BMPs MEASURES THAT ARE IMPLEMENTED AND TO DEMONSTRATE THAT THE PROPOSED CONSTRUCTION WILL NOT CAUSE APPLICABLE STATE WATER QUALITY STANDARDS ESTABLISHED IN HAWAII ADMINISTRATIVE RULES FOR MAALAEA HARBOR TO BE VIOLATED. CONTRACTOR SHOULD MAKE EVERY EFFORT NECESSARY TO PREVENT CONSTRUCTION DEBRIS FROM REACHING STATE WATERS. THESE EFFORTS SHOULD ADDRESS AREAS SUCH AS THE LEADING EDGE OF THE PIERS DIRECTLY ADJACENT TO THE WATER AND STORM DRAINS IN THE IMMEDIATE AREA OF THE PROJECT SITE. ALL REASONABLE TYPES OF BEST MANAGEMENT PRACTICE (BMP) DEVICES AND PROCEDURES SHOULD BE IMPLEMENTED AS NEEDED. CONTRACTOR SHOULD PREPARE A SITE-SPECIFIC BMP PLAN TO ADDRESS ALL SOURCES OF POLLUTION THAT COULD REASONABLY BE EXPECTED TO OCCUR DURING PROJECT ACTIVITIES. THE PLAN SHOULD BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE STARTING WORK.

CLEAN UP:

- A. ALL ACCUMULATED MATERIALS, DEBRIS, ABANDONED OR UNUSED MATERIALS, ETC., SHALL BE COMPLETELY REMOVED FROM THE PROJECT SITE. THE WORK AREA AND ACCESS TO THE WORK AREA SHALL BE RESTORED TO THE EXISTING OR BETTER CONDITION. ALL THIS WORK SHALL BE CONSIDERED INCIDENTAL AND NO DIRECT PAYMENT SHALL BE MADE.

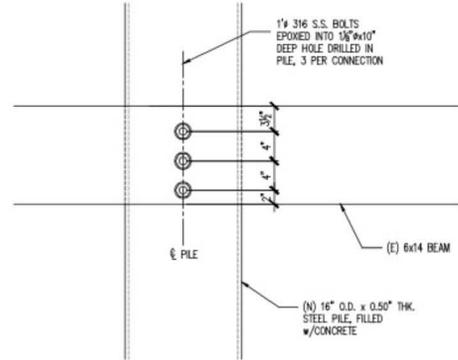


1
S-2 SCALE: 1/4" = 1'-0"



2
S-2 SCALE: 1/2" = 1'-0"

- PILE NOTES**
1. PILES SHALL BE DRIVEN WITH A HAMMER CAPABLE OF DELIVERING A MINIMUM RATED ENERGY OF 40,000 FOOT POUNDS OF ENERGY PER BLOW. THE HAMMER SHALL BE EQUIPPED WITH ENERGY CONTROL LEVEL.
 2. PILE DRIVING MAY BE TERMINATED WHEN AGGREGATE BLOW COUNTS REACH THE FOLLOWING TERMINATION CRITERIA:
 - a. RESISTANCE (BLOWS PER FT): 25
 - b. RESISTANCE (BLOWS PER IN FOR LAST 6 INCHES): 3



3
S-2 SCALE: 1-1/2" = 1'-0"

61-655 KAMEHAMEHA HIGHWAY
HALEIWA, HAWAII 96712 • (808) 349-4990



DATE OF SEAL: 04/26/2025
THIS SEAL IS VALID FOR THE STATE OF HAWAII
IF THE WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
AND CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION

GENERAL NOTES

CONTRACTOR/OWNER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOINTS BEFORE PROCEEDING WITH THE WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
ALL CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE AND THE LATEST COUNTY OF MAUI/STATE OF HAWAII AMENDMENTS AND ORDINANCES AND/OR THE CITY AND COUNTY OF MAUI THE PROJECT IS LOCATED AND HAVING JURISDICTION.

REVISION MARK: • DATE • DESCRIPTION

PROJECT

MAALAEA HARBOR
SLIP #99 PILE REPAIRS

TRILogy EXCURSIONS
MAALAEA RD. SLIP #99
WAILUKU, HI 96793

SHEET TITLE

GENERAL NOTES,
PILE REPAIR PLANS,
AND DETAILS

JOB NO. 2025-0065	DRAWING NO.
DRAWN JMM	
CHECKED JMM	
DATE 10/7/2025	SHEET 3 OF 3