

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

June 22, 2018

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

Land Board Members:

SUBJECT: DECLARE AN EXISTING OFFSHORE MOORING EXEMPT FROM REQUIREMENTS OF CHAPTER 343, HAWAII REVISED STATUTES, AND TITLE 11, CHAPTER 200, HAWAII ADMINISTRATIVE RULES, AND APPROVE INSTALLATION OUTSIDE OF AN ESTABLISHED OFFSHORE MOORING AREA, KEAUKOU, ISLAND OF HAWAII, HAWAII, FOR WILLIAM MURTAGH

REQUEST

The Division of Boating and Ocean Recreation (“DOBOR”) is requesting that the Board of Land and Natural Resources (“Board”) approve the installation of an existing offshore mooring within Keauhou Bay on the Island of Hawaii, which is not an established offshore mooring area as defined in HAR 13-235. As required by HAR 13-235-9, any applicant requesting to moor a vessel outside of an established offshore mooring area must obtain approval from the Board.

Keauhou Bay is a designated offshore mooring area identified in the “Documentation of Facilities for the Boating Program Transfer to the Department of Land and Natural Resources,” when the Boating Program was transferred from the Department of Transportation to DLNR. However, Keauhou Bay was never established as an offshore mooring area in HAR 13-235. Therefore, as required by HAR 13-235-9, the installation of all moorings within Keauhou Bay must obtain approval from Board.

DOBOR is also requesting that the Board declare the installation of the existing offshore mooring exempt from the requirements of Chapter 343, Hawaii Revised Statutes, and Title 11, Chapter 200, Hawaii Administrative Rules, to prepare an Environmental Assessment (“EA”), due to the use of submerged State land.

The applicant, William Murtagh (“Applicant”), uses an existing offshore mooring installed in Keauhou Bay in Keauhou on the Island of Hawaii that has been in place for several years. He is requesting that the Board declare the installation of his privately owned and maintained mooring exempt from the requirement to prepare an EA, as required by Chapter 343, HRS, and Chapter 11-200, HAR due to the use of submerged State land. In addition, the Applicant is requesting that the Board approve the mooring installation outside of an established offshore mooring, as required by HAR 13-235-9, due to Reed’s Bay not being an established offshore mooring area as defined in HAR 13-235. The Applicant’s request is attached as Exhibit A.

#### PERMITS AND COMPLIANCE WITH STATE AND FEDERAL LAW:

In order to comply with Federal Law (Section 10 of the Rivers and Harbors act of 1899), DOBOR is requiring that all offshore moorings under their jurisdiction obtain a permit from the U.S. Army Corps of Engineers (“ACOE”). In addition, to ensure that the mooring system is structurally sound, DOBOR is requiring that all offshore mooring permittees submit an Offshore Mooring Installation Plan, prepared by a licensed structural engineer, for approval.

The Applicant has obtained a Nationwide Permit Verification from the ACOE authorizing the installation and use of the existing mooring. A Mooring Installation Plan, prepared by a licensed structural engineer, has also been submitted to and approved by DOBOR Engineering Branch. The ACOE Permit and approved Mooring Installation Plan are also attached with Exhibit A.

In accordance with HAR 13-235-6, the National Marine Fisheries Service (NMFS) and DLNR, Division of Aquatic Resources (DAR) must determine whether an offshore mooring is detrimental to the habitat or spawning ground of marine life. Through the ACOE permitting process, NMFS has been consulted and determined the offshore mooring has no detrimental effect to the habitat or spawning ground of marine life. DAR has also been consulted and concurred that the offshore mooring has no detrimental effect to the habitat or spawning ground of marine life.

#### ENVIRONMENTAL ASSESSMENT EXEMPTION:

In accordance with Hawaii Administrative Rule (HAR) Section 11-200-8(A) and the Exemption List for the Department of Land and Natural Resources (DLNR), approved by the Environmental Council, on June 5, 2015, it has been determined that the installation of the existing mooring is exempt from the preparation of an EA pursuant to the following exemptions:

Item No. 13 of Exemption Class 6: “Placement or construction of accessory structures such as utility sheds, storage or maintenance sheds, office trailers, trash enclosures, comfort stations or sanitation facilities and related individual wastewater disposal systems, bus shelters, pavilions or picnic shelters, parking and fee collection facilities, checking stations, interpretive kiosks and displays, dock boxes, mooring cleats, bumpers, and mooring buoys, blocks, and piles, and other similar structures accessory to existing facilities on state land and waters.”

Consultations with the U.S. Army Corps of Engineers for this EA Exemption have been conducted as required by HAR 11-200-8.

#### RECOMMENDATION:

That the Board approve:

The installation of the existing offshore mooring within Keauhou Bay, located outside of an established offshore mooring zone, and declare that, after considering the potential effects of the installed mooring as provided by Chapter 343, HRS, and Chapter 11-200, HAR, this project will probably have minimal or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.

Approve Existing Offshore Mooring and  
Declare Exempt from EA Requirements  
William Murtagh, Keauhou Bay, Keauhou, Island of Hawaii

June 22, 2018  
Item J-4

Respectfully Submitted,



EDWARD R. UNDERWOOD, Administrator  
Division of Boating & Ocean Recreation

APPROVED FOR SUBMITTAL:



SUZANNE D. CASE, Chairperson  
Board of Land and Natural Resources

Attachment:

- A. Applicant's request for approval of mooring, approved Mooring Installation Plan, Nationwide Permit Verification Letter from Army Corps of Engineers

### EXEMPTION NOTIFICATION

Regarding the preparation of an environmental assessment pursuant to Chapter 343, HRS and Chapter 11-200, HAR

Project Title:	Offshore Mooring in Keauhou Bay, Keauhou, Island of Hawaii, for Mr. Donald Kegler
Project / Reference No.:	N/A
Project Location:	Keauhou Bay, Keauhou, Island of Hawaii
Project Description:	Installation of an offshore mooring for a privately owned vessel
Chap. 343 Trigger(s):	Use of State (submerged) lands
Exemption Class No(s).:	Class No. 6, Item 13: "Placement or construction of accessory structures such as utility sheds, storage or maintenance sheds, office trailers, trash enclosures, comfort stations or sanitation facilities and related individual wastewater disposal systems, bus shelters, pavilions or picnic shelters, parking and fee collection facilities, checking stations, interpretive kiosks and displays, dock boxes, mooring cleats, bumpers, and mooring buoys, blocks, and piles, and other similar structures accessory to existing facilities on state land and waters."
Cumulative Impact of Planned Successive Actions in Same Place Significant?	No. There are no planned successive actions to be undertaken at the same location.
Action May have Significant Impact on Particularly Sensitive Environment?	No. The environment in the area of the existing offshore mooring is sand bottom with no coral reefs or marine features that are critical for aquatic species habitat or spawning areas in the proximity of the mooring anchors.
Analysis:	The materials installed for the offshore mooring are chemically inert and do not pose a threat to essential marine habitat or endangered species and do not pose any hazard or obstruction to existing uses of the ocean in the area.
Consulted Parties:	- U.S. Army Corps of Engineers, Honolulu District, Regulatory Branch. See attached Permit No. POH-2017-00087.
Declaration	The Board finds that this project will probably have minimal or no significant effect on the environment and declares that this project is exempt from the preparation of an environmental assessment.

Li'i Makau, Inc  
PO BOX 533  
Kailua Kona, Hawaii, 96745

May 7, 2018

Request for exemption from Requirement for Preparation of Environmental Assessment for Installation of an Existing Offshore Mooring, in Keauhou Bay Small Boat Harbor, Kona, on the Island of Hawaii.

Submitted in compliance with Hawaii Revised Statute Chapter 343 and HAR Sections 11-200-8; 11-200(b).

Submitted to:

Board of Land & Natural Resources, State of Hawaii, Department of Land & Natural Resources (DLNR), Division of Boating & Ocean Recreation (DOBOR), 4 Sand Island Access Road, Honolulu HI 96819.

Email: [finn.d.mccall@hawaii.gov](mailto:finn.d.mccall@hawaii.gov)

Phone: (808) 587-3520

Submitted by: Li'i Makau, Inc / Bill Murtagh, Owner, (808) 640-1016

Bill Murtagh (hereinafter referred to as "Petitioner") request approval for an existing offshore mooring in Keauhou Bay Small Boat Harbor, and exemption from requirement for environmental assessment report associated with the mooring installation, as the mooring will have little or no environmental impact as discussed herein below:

Reasoning and Justification for Request.  
Environmental Assessment Exemption.

- 1) The reason for the Environmental Assessment is due to the use of State submerged lands.
- 2) Petitioner request exemption from requirement of Environmental Assessment report associated with the proposed existing mooring installation, as the proposed installation will have little or no impact on the environment in the proposed location.
- 3) The current exemption list for the DLNR dated June 5, 2015, provides as follows under Exemption Class 6;  
13. Placement or construction of accessory structures such as.... mooring, cleats, bumpers, mooring buoys, blocks and piles, and other similar structures accessory to existing facilities non state land and waters."

Project Description -

Modification of existing offshore commercial mooring in Keauhou Bay Small Boat Harbor, Kona, Hawaii.

Location of Proposed Installation - See attached mooring diagram in accordance with Army Corps of Engineers Permit.

The existing mooring are located at;

Primary Bow - N 19.33.669, W 155.57.832

Secondary Bow - N 19.33.672, W 155.57.835      Stern - N 19.38.668, W 155.57.821

Purpose of Proposed Installation -

The existing mooring will be used by the Petitioner for the purpose of conducting commercial activity.

Impact on Coastal Ecosystems -

NEGLIGIBLE. The proposed site is not within the Special Management Area or Shoreline Setback Area, nor is the site within a State Conservation District. This site does not provide habitat for any known endangered species of plants, birds, or mammals. The site is not within and does not border any National Area Reserve, Marine Conservation District, or estuary. The site is not on or close to any reef or coral colonies. No material will be placed or discharged in the project area. No dredge or fill activities will be involved in the modification of the mooring. The mooring is within an existing designated DLNR "Offshore" mooring area within Keauhou Bay Small Boat Harbor.

Impact on Marine Resources -

NONE. The existing mooring does not involve or affect the use or development of any marine or coastal resources.

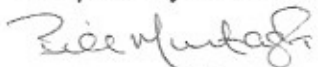
Impact on Historic Resources -

NONE. The project site is not within a designated historic or cultural district and has not been listed or nominated for the Hawaii or National Register of Historic Places. The existing site contains no known historic or archaeological resources and is not within or adjacent to any Hawaiian fishpond or historic settlement area.

Impact on Scenic and Open Space Resources -

NEGLIGIBLE. A sport fishing vessel will be located at the existing mooring location and will be visible. The mooring buoys will be visible floating on the surface of the water.

Respectfully submitted by:

 5/7/18

Bill Murtagh / Li'i Makau, Inc  
(808) 640-1016



**DEPARTMENT OF THE ARMY**  
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
FORT SHAFTER, HAWAII 96858-5440

September 19, 2017

SUBJECT: Nationwide Permit Verification for Existing Offshore Mooring for Li'i Makau Inc., Keauhou Bay, Kona, Island of Hawaii, Hawaii, Department of the Army File No. POH-2017-00087

Mr. Bill Murtagh  
Nainoa Sportfishing Li'i Makau, Inc  
PO Box 533  
Kona, Hawaii 96745

Dear Mr. Bill Murtagh:

The Honolulu District, U.S. Army Corps of Engineers (Corps), Regulatory Branch has completed review of your Pre-Construction Notification dated May 12, 2017 requesting authorization for the proposed Existing Offshore Mooring for Li'i Makau Inc. located at Keauhou Bay, Kona, Island of Hawaii, Hawaii. Please reference Department of the Army (DA) file number POH-2017-00087 in any future correspondence related to this permit.

This letter verifies your activity complies with the terms and conditions of Nationwide Permit (NWP) #9, (Structures in Fleeting or Mooring Areas) issued on March 19, 2017 (82 FR 1860, January 6, 2017). This NWP verification letter is being issued pursuant to Section 10 of the Rivers and Harbors Act of 1899 for work or structures in or affecting navigable waters of the U.S. You are authorized to conduct the following work as described below and as depicted on the enclosed drawings (Enclosure 1):

The work under review is for the after-the-fact installation of a mooring buoy for a single commercial vessel deployed in 15-foot deep, sandy bottom, with no growing coral or seagrass. The mooring has been in place for 12 years, however, the applicant would like to perform maintenance on one part of the anchor by moving the stern mooring block 25-feet. No other changes will be made. The mooring consists of three mooring blocks. Each block is 4-feet x 4-feet x 3-feet, constructed of concrete and reinforced 1/2-inch steel rebar, a 1 1/2-inch x 1-foot galvanized eye bolt, and a capped PVC pipe through the center of the block ending on both sides. One block is used as a stern mooring and the other two are used for the bow moorings. There is one primary bow block the vessel is attached to, and the second block is connected by approximately sixteen (16) feet of 3/4-inch galvanized chain. In both the stern and bow mooring system, the 1 1/2-inch eyebolt is connected to a 1-inch galvanized swivel with approximately 22-feet of 5/8-inch galvanized long-link chain. Approximately 5 feet above the block, attached to the chain with a 1/2-inch galvanized shackle, is an A-3 Red Buoy. A second A-3 buoy is attached to the chain with a 1/2-inch galvanized shackle at the ocean surface. Connected to the last 2 feet of chain is a 1/2-inch galvanized shackle,

connected to a 1/2-inch galvanized swivel. The swivel has 2 1/2-inch shackles connecting to the mooring lines.

Maintenance work will involve moving the mooring block 25-feet to a location with a similar ocean bottom, with no seagrass or living coral. This will be done by divers, lifting the block above the seabed with an airbag to ensure the block does not drag. No discharge of dredged or fill material will be required. See plans for details.

In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the *Nationwide Permit General Conditions* (Enclosure 2), the *Honolulu District Regional Conditions* (Enclosure 3), and the following project-specific Special Conditions:

1. **Pre-Construction Meeting.** You must extend an invitation to the Corps to attend a pre-construction meeting to discuss the terms and conditions of this permit. The pre-construction meeting must be scheduled a minimum of 7-days prior to commencement of the authorized work. The pre-construction meeting must be attended by the following individuals, the permittee or duly authorized agent (as identified on your PCN) and your construction contractor. The Corps may attend the pre-construction meeting in person or via teleconference. The intent of the pre-construction meeting is to ensure all parties are aware of the permit terms and conditions and so the Corps may obtain verbal confirmation from the permittee and construction contractor of the ability to comply with the permit terms and conditions. Any modifications to the scope of work must be identified at this meeting so the Corps may determine if the proposed modification requires modification of your permit.

Rationale: The intent of the pre-construction meeting is to ensure all parties are aware of the permit terms and conditions and so the Corps may obtain verbal confirmation from the permittee and construction contractor of the ability to comply with the permit terms and conditions. Meeting prior to commencement allows the Corps to

2. **Notification.** You must notify this office of your intent to proceed with the authorized work in waters of the U.S. a minimum of 3 days prior to commencement. Your notification should be transmitted via email or phone number using the contact information provided on your verification letter.

Rationale: The intent of this special condition is to ensure the Corps is informed of the construction start date to afford the Corps the opportunity to schedule an on-site compliance inspection during construction.

3. **Endangered Species.** You must comply with the following conditions to avoid and/or minimize adverse impacts to threatened and endangered species, including designated critical habitat:



- a) Incidents where any individuals of Green Sea Turtle (*Chelonia mydas*), Hawksbill Turtle (*Eretmochelys imbricata*), Loggerhead Sea Turtle (*Caretta caretta*), Hawaiian Monk Seal, (*Monachus schauinslandi*) listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the U.S. or structures or work in navigable waters of the U.S. authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources at (301) 713-1401 and the Regulatory Branch of the Honolulu District, U.S. Army Corps of Engineers at (808) 835-4303. The finder should leave the animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved and, if possible take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measurements to ensure that evidence intrinsic to the specimen is preserved.

*Rationale:* This is a required permit condition serving as a protective measure listed in the ASA(CW)'s 6 March 2014 letter to NOAA modifying the proposed action for the re-initiated programmatic Endangered Species Act Section 7 consultation on the 2012 and 2017 NWPs with NOAA Fisheries Service. While the biological opinion expires at the expiration of the 2012 NWPs, March 18, 2017, direction from HQUSACE is to continue to include the condition to notify

- b) You must comply with the attached Standard Local Operating Procedures for Endangered Species in the Central and Western Pacific Region (Pac-SLOPES) general conditions and best management practices (BMPs) (Enclosure 4).

*Rationale:* This is a requirement under the Pac-SLOPES ESA Section 7 programmatic agreement between the Corps and NMFS.

4. Water Quality Certification. By email dated 7 September 2017 this office received the necessary state Water Quality Certificate waiver.

*Rationale:* This conditions is required per 33 CFR 330.4(c)(6)

5. Coastal Zone Management Consistency Determination.

You must implement and abide by the conditions of the Coastal Zone Management Consistency Concurrence issued for this NWP on 22 February 2017 by the State of Hawaii Department of Health, Clean Water Branch and expiring on 18 March 2022. Expiration of your CZM Consistency Concurrence invalidates this authorization.

*Rationale:* This conditions is required per 33 CFR 330.4(d)(6)

Verification of your project under this NWP is valid until **March 19, 2022** unless this NWP is modified, reissued, or revoked prior to that date. 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 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.

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 5) within 7 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 808-835-4307 or via e-mail at [rebecca.m.fragar@usace.army.mil](mailto:rebecca.m.fragar@usace.army.mil). You are encouraged to provide comments on your experience with the Honolulu District Regulatory Office by accessing our web-based customer survey form at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=136:4:0](http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0).

Sincerely,

Becca Frager  
Project Manager, Regulatory Branch

Enclosures

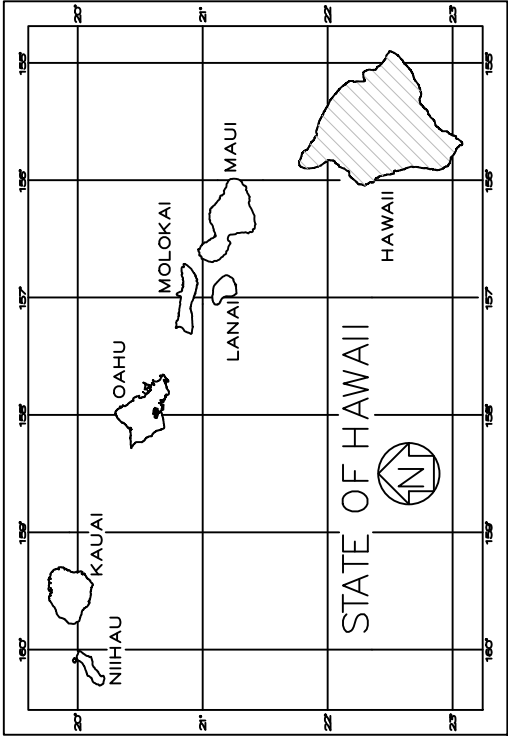
cc:

USCG (John Bannon, Jason Olney)  
State of Hawaii Department of Health, Clean Water Branch (DOH-CWB)  
State of Hawaii Office of Planning, Coastal Zone Management Program (Hawaii CZM Program)

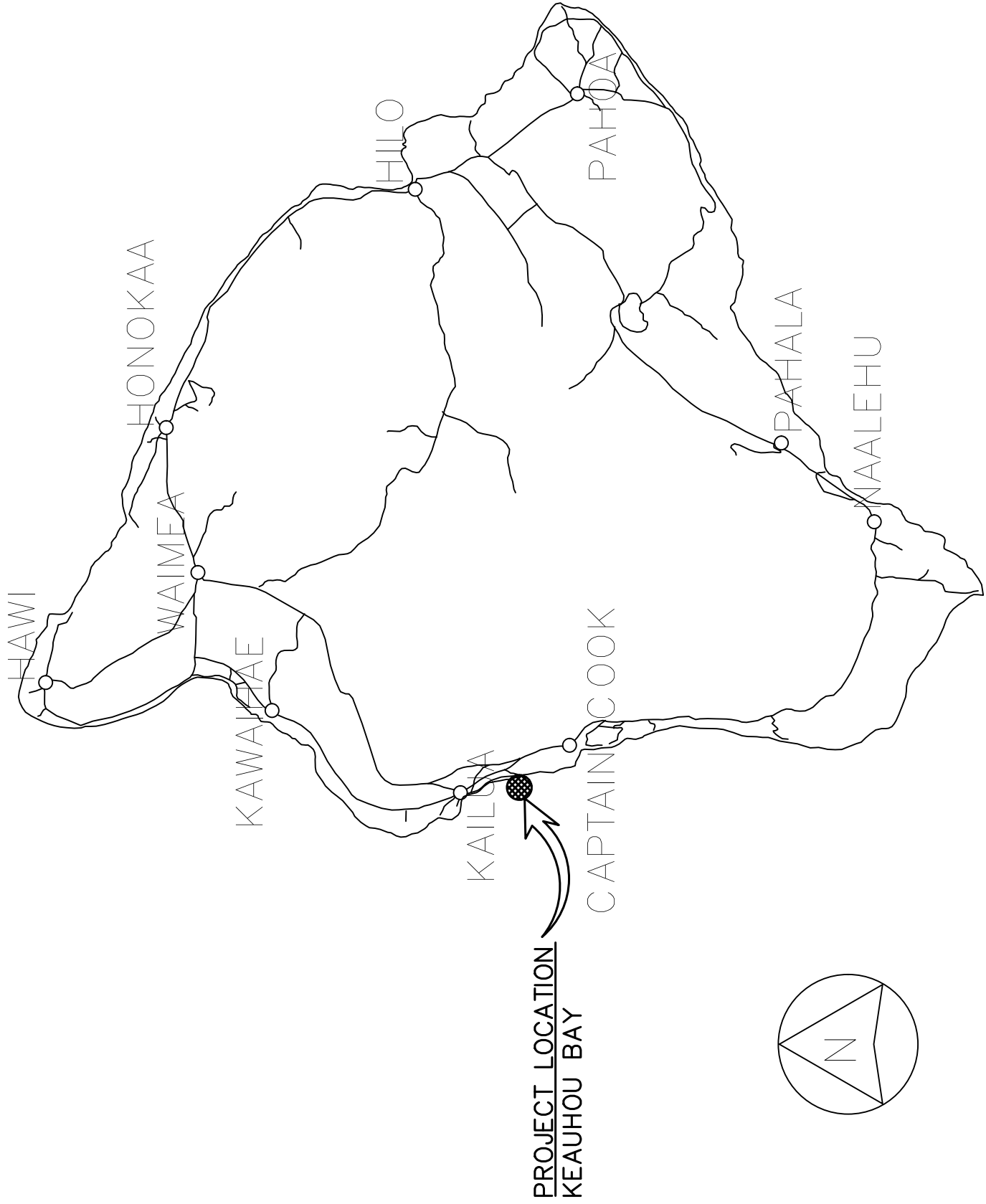


# OFFSHORE MOORING - KEAUHOU BAY

## FOR BILL MURTAGH - NAINOA SPORTFISHING



GPS COORDINATES OF MOORING : 19°33.6664'N, 155°57.8294'W  
APPROXIMATE WATER DEPTH : 15'



VICINITY MAP

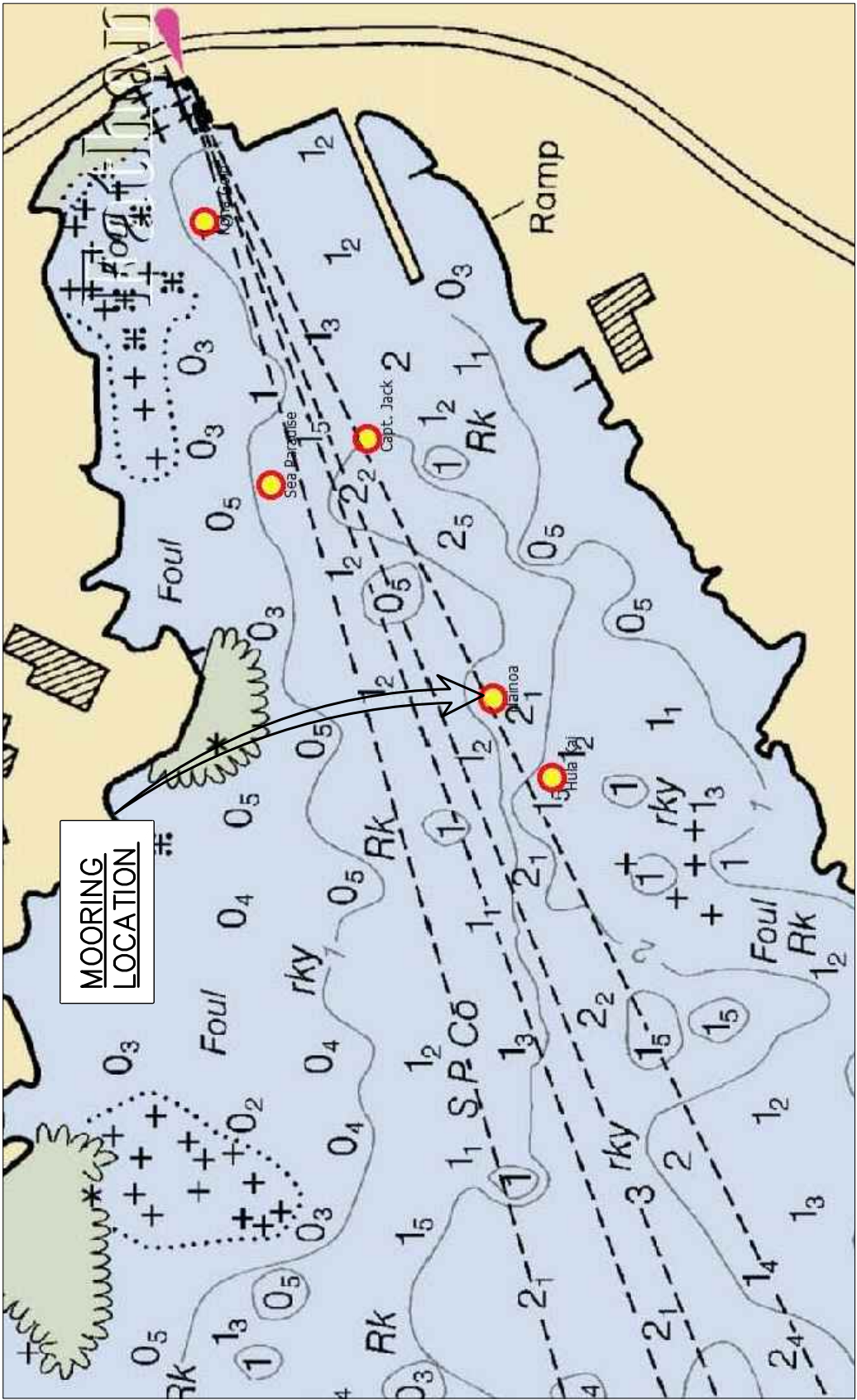
**Department of Land and Natural Resources**  
**Division of Boating and Ocean Recreation**  
**PLAN REVIEW:**

☒ Approved  
☐ Rejected

☐ Approved, as noted  
☐ Revise & Resubmit

By: 1-16 Date: 5/12/17

**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.**

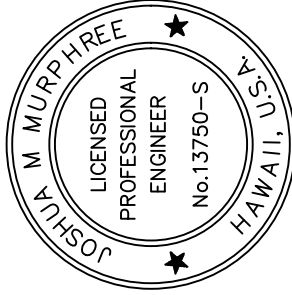


LOCATION MAP

INDEX TO DRAWINGS	
SHEET NUMBER	DRAWING NUMBER DESCRIPTION
1	T-1 TITLE, INDEX TO DRAWINGS, AND VICINITY MAP
2	S-1 MOORING NOTES AND ELEVATION
3	S-2 MOORING ELEVATION AND PLAN

PHREE  
CREATIONS, LLC.

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



*Joshua M. Murphree*  
EXPIRATION DATE OF THE LICENSE 4/30/2018  
THIS WORK WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

GENERAL NOTES  
CONTRACTOR/OWNER/BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT THE URSITE BEFORE PROCEEDING WITH THE WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.  
ALL CONSTRUCTION SHALL CONFORM TO THE 2006 INTERNATIONAL BUILDING CODE AND THE LATEST COUNTY OF HAWAII/STATE OF HAWAII AMENDMENTS AND ORDINANCES AND/OR THE CITY AND COUNTY OF WHERE THIS PROJECT IS LOCATED AND HAVING JURISDICTION.

REVISION MARK • DATE • DESCRIPTION

PROPOSED  
OFFSHORE MOORING  
KEAUHOU BAY  
FOR:

BILL MURTAGH

NAINOA SPORTFISHING LTD. MAKUA, INC  
78-6831 ALII DRIVE STE. 144  
KAILUA KONA, HI 96740  
PHONE: (808) 895-0003

GPS COORDINATES: 19°33.6664'N  
155°57.8294'W

SHEET TITLE  
TITLE SHEET

JOB NO. 2015-0007.37 DRAWING NO.  
DRAWN JMM  
CHECKED JMM  
DATE APRIL 20, 2017 SHEET 1 OF 3

T-1



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. COUNTY OF HAWAII AMENDED IBC, 2006
- B. 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.

- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHODS OF CONSTRUCTION, WORKMANSHIP AND JOB SAFETY.

- D. DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED.

- E. PRODUCT DATA REQUIRED BY THESE NOTES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

DESIGN CRITERIA:

- A. MINIMUM DESIGN CRITERIA FOR MOORING IN ACCORDANCE WITH UFC 4-159-03:

1. TYPE IIB STORM MOORING

- B. WIND DESIGN DATA:

1. BASIC WIND SPEED: 105 MPH

- C. CURRENT:

1. MAX CURRENT: 2 KNOTS

- D. WAVES AND TIDAL VARIATIONS:

1. PEAK WAVE HEIGHT: 6 FEET

DESIGN VESSEL: NAINOA

1. LOA: 30'-0"

2. BEAM: 12'-9"

3. DRAFT: 3'-0"

4. WEIGHT: 9,500 LBS.

\*MOORING IS DESIGNED FOR DESIGN VESSEL ONLY, ANY CHANGE IN MOORED VESSEL REQUIRES RE-ANALYSIS.

CHAIN, HARDWARE, ROPE, AND MOORING COMPONENTS

- A. ALL CHAIN AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.

- B. THIMBLES OR CHAFE GUARDS SHALL BE USED WITH ROPES AT ALL POINTS OF CONTACT.

- C. SUBMIT PRODUCT DATA OF ALL CHAINS, HARDWARE, ROPE, AND MOORING COMPONENTS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

MOORING HARDWARE, MAINTENANCE AND INSPECTION

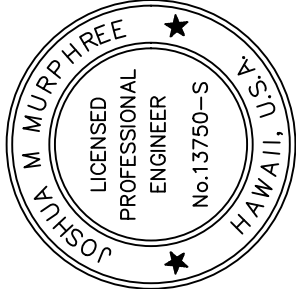
- A. THE VESSEL OWNER SHALL BE RESPONSIBLE FOR MAINTAINING THE VESSEL'S MOORING HARDWARE. ANY FAILURE RESULTING FROM NON MAINTAINED COMPONENTS OR UNREPAIRED DAMAGE OF THE MOORING RESULTING FROM NORMAL USE SHALL BE THE RESPONSIBILITY OF THE VESSEL OWNER.

- B. THE VESSEL OWNER SHALL INSPECT ALL MOORING HARDWARE, ROPES, AND CHAINS FROM SEA FLOOR TO PENDANT FOR SAFETY AND SECURITY NO LESS THAN TWO TIMES PER YEAR. INSPECTION REPORT/RECORDS SHALL BE KEPT BY VESSEL OWNER.

- C. THE VESSEL OWNER IS RESPONSIBLE FOR INSTALLING AND MAINTAINING CHAFING GEAR ON ALL MOORING LINES.

PHREE  
CREATIONS, LLC.

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



*Joshua M. Murphree*

EXPIRATION DATE OF THE LICENSE 4/30/2018  
THIS WORK WAS PREPARED BY  
PHREE CREATIONS, LLC  
FOR THE CONSTRUCTION OF THIS PROJECT  
AND WILL BE UNDER MY OBSERVATION

GENERAL NOTES

CONTRACTOR/OWNER/BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE BEFORE PROCEEDING WITH THE WORK AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.

ALL CONSTRUCTION SHALL CONFORM TO THE 2006 INTERNATIONAL BUILDING CODE AND THE LATEST COUNTY OF HAWAII/STATE OF HAWAII AMENDMENTS AND ORDINANCES AND/OR THE CITY AND COUNTY OF WHERE THIS PROJECT IS LOCATED AND HAVING JURISDICTION.

REVISION MARK • DATE • DESCRIPTION

PROJECT  
PROPOSED  
OFFSHORE MOORING  
KEAUHOU BAY  
FOR:

BILL MURTAGH

NAINOA SPORTFISHING LTD. MAKUA, INC  
78-6831 ALI DRIVE STE. 144  
KAILUA KONA, HI 96740  
PHONE: (808) 895-0003

GPS COORDINATES: 19°33.6664'N  
155°57.8294'W

SHEET TITLE

MOORING NOTES  
AND ELEVATION

BOW MOORING ELEVATION

NOT TO SCALE

JOB NO. 2015-0007.37 DRAWING NO.

DRAWN JMM

CHECKED JMM

DATE APRIL 20, 2017 SHEET 2 OF 3

S-1

