

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

October 12, 2018

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

Land Board Members:

SUBJECT: DECLARE INSTALLATION OF AN EXISTING OFFSHORE MOORING EXEMPT FROM REQUIREMENTS OF CHAPTER 343, HAWAII REVISED STATUTES, AND TITLE 11, CHAPTER 200, HAWAII ADMINISTRATIVE RULES AND APPROVE INSTALLATION AFTER-THE-FACT OUTSIDE OF AN EXISTING OFFSHORE MOORING AREA, LAHAINA, ISLAND OF MAUI, HAWAII, FOR ROGER MARLIN

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 outside of the Mala Wharf Offshore Mooring Zone. 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.

DOBOR is also requesting that the Board declare the installation exempt from the requirements of Hawaii Revised Statutes, Chapter 343 to prepare an Environmental Assessment (“EA”), due to the use of submerged State land.

The applicant, Roger Marlin (“Applicant”), uses an existing offshore mooring installed outside of the Mala Wharf Offshore Mooring Area in Lahaina on the Island of Maui that has been in place for several years. Applicant is requesting that the Board declare the installation of the offshore 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 the Mala Wharf Offshore Mooring Zone, as required by HAR 13-235-9, due to the water depths there being too shallow and congestion of vessels within the mooring zone, both of which present a risk of damage to his vessel and possible grounding during large storm and ocean swell events. The Applicant’s request is attached as **Exhibit A**.

PERMITS AND COMPLIANCE WITH FEDERAL AND STATE 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, in order 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 State of Hawaii, Office of Planning, Coastal Zone Management Program and State of Hawaii, DLNR, Office of Conservation and Coastal Lands for this EA Exemption have been conducted as required by HAR 11-200-8.

RECOMMENDATION

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 and approve the installation of the existing offshore mooring outside the Mala Wharf Offshore Mooring Zone after-the-fact.

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 Outside of Mala Wharf Offshore Mooring Area, Lahaina, Island of Maui, for Mr. Roger Marlin
Project / Reference No.:	N/A
Project Location:	Mala Wharf Offshore Mooring Area, Lahaina, Island of Maui
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 anchor.
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:	<ul style="list-style-type: none"> - State DLNR, Office Conservation and Coastal Lands - State Office of Planning, Coastal Zone Management
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.

Request for Exemption from Requirement for Preparation of Environmental Assessment of an Existing Offshore Mooring within Mala Bay, Lahaina, Maui.

Dated: 4/25/2018

Roger Marlin
4641 Little Uvas Road
Morgan Hill Ca. 95037

Local Address:
938 South Kiehi Unit 129
Kiehi, Maui HI.

Submitted to:

Board of Land & Natural Resources, State of Hawaii, Department of Land & Natural Resources (DLNR)
Division of Boating and Ocean Recreation, 4 Sand Island Access Road Honolulu HI 96819.
Email : Finn.d.mccall@hawaii.gov phone number: 808-587-3520

Submitted by:

Roger Marlin

Owner of "Zip-Purr", US Documented Vessel, Official number 963191
Email RWMarlin@yahoo.com and Sherryjet@yahoo.com
Tel: No. 408-472-3424 and 408-472-3425

Request:

Roger Marlin (herein referred to as "Petitioner") request approval of the offshore mooring permit for an existing offshore mooring within the Mala Bay, and exemption from the requirement for environmental assessment report associated with the existing offshore mooring within Mala Bay as the existing mooring will have little or no environmental impact, as will be discussed herein below:

Reasoning and Justification for Request:

Environmental Assessment Exemption

- 1) The reason for the Environmental Assessment is due the use of State submerged lands
- 2) Petitioner request exemption from requirement for environmental assessment report associated with the existing mooring as the mooring as little to no environmental impact in it's current location as the mooring is already installed and will not be altered.
- 3) The current exemption list for the department of Land and Natural Resources data June 5, 2015 provides as follows under exemption Class 6:

13. Placement or construction of accessory structures such as ... mooring, cleats, bumpers, and mooring buoys , blocks and piles, and other similar structures accessory to an existing facilities on State Land and waters.

Request for Exemption from Requirement for Preparation of Environmental Assessment of an Existing Offshore Mooring within Mala Bay, Lahaina, Maui.

Dated: 4/25/2018

Project Description

Secure approval of existing offshore mooring for permit for offshore mooring for pleasure Catamaran "Zip-Purr" This existing mooring location has been used for the mooring for over 5 years with no are little environmental impact.

Technical Description of Mooring Installation:

One block of concrete Anchor approximate weigh of 4,800 lbs. with 5/8 inch 20 ft length of Galvanized chain anchored to a 300 lbs Galvanized steel anchor . From the main 4800 lb Anchor there is a 5/8 inch 85 Ft. of galvanized chain running to the surface that attaches to a 1" swivel and shackled to a 36" mooring Buoy by the way of a 1" thick Master link and 7/8 inch shackles.. Along the chain length are two 18" floats to keep the chain off the seafloor.

Location of Mooring

The Mooring buoy is located at center coordinates: Latitude: 20°53.591 N & 156°41.481 W

Purpose of Mooring

The mooring will be used by the Petitioner solely for the purpose of mooring a Catamaran for private pleasure purposes.

Impact on Coastal Ecosystems

NEGLIGIBLE- The mooring site was approved by the DLNR and the petitioner is holding a valid mooring permit. The mooring is located within the existing designated DLNR "Offshore" mooring area.

Impact on Marine Resources

NONE- the mooring does not involve or affect the use or development of any marine or costal resources.

Impact on Historic Resources

NONE- The mooring site was approved by DLNR for offshore mooring.

Impact on Scenic and Open Spaces

NEGLIGIBLE- A Catamaran will be moored at the mooring location and will be visible. The Mooring ball is visible floating on the water surface

**Request for Exemption from Requirement for Preparation of Environmental
Assessment of an Existing Offshore Mooring within Mala Bay, Lahaina, Maui.**

Dated: 4/25/2018



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

July 13, 2018

SUBJECT: Nationwide Permit Verification for Marlin, Mala Harbor, Lahaina, Maui, Hawaii, Department of the Army File No. POH-2018-00129

Mr. Roger Marlin
4641 Little Uvas Road
Morgan Hill, CA 95037

Dear Mr. Marlin:

The Honolulu District, U.S. Army Corps of Engineers (Corps), Regulatory Branch has completed review of your Pre-Construction Notification requesting authorization for an existing offshore mooring buoy in Mala Harbor, near Lahaina, Maui, Hawaii. Please reference Department of the Army (DA) file number POH-2018-00129, Pacific Ocean in any future correspondence related to this permit.

This letter verifies your activity complies with the terms and conditions of Nationwide Permit (NWP) #10, (Mooring Buoys) 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, over, under, 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 after-the-fact installation of an existing single point mooring buoy for a single personal recreational vessel deployed in approximately 50-foot deep water over sand ocean substrate, approximately 2,112 feet from the shoreline in Mala Bay in Lahaina, Island of Maui at 20.8932° N; 156.6914° W. The existing mooring anchoring system is comprised of one 4'x4'x26" concrete block attached to a 300-lb Danforth anchor via 20 feet of ¾" galvanized chain and one 50-lb Danforth anchor via 20 feet of ¾" galvanized chain. One 36" mooring buoy is attached to the concrete block via 85 feet of 5/8" galvanized chain. Two 18" inflatable float are affixed to this chain; one each at the 1/3 and 2/3 point. Two 1 ¼" 3-strand nylon pendants, 30 feet in length, are attached to the mooring buoy master link.

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*, the *Honolulu District Regional Conditions* (Enclosures 2 & 3), and the following project-specific Special Conditions:

1. 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.
 - 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).
2. Navigation
- a) Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the U.S.
 - b) You must install and maintain, at your expense, any safety lights and signals prescribed by the U.S. Coast Guard (USCG), through regulations or otherwise, on your authorized facilities.
 - c) The permittee understands and agrees that, if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

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 Mr. Ben Polley via e-mail at Benjamin.L.Polley@usace.army.mil or by phone at 907-753-2689. 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.

Sincerely,



Randal P. Vigil
Acting Chief, Southeast Section

Enclosures

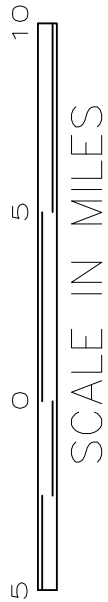
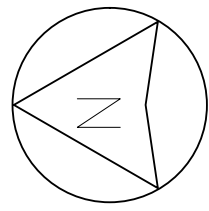
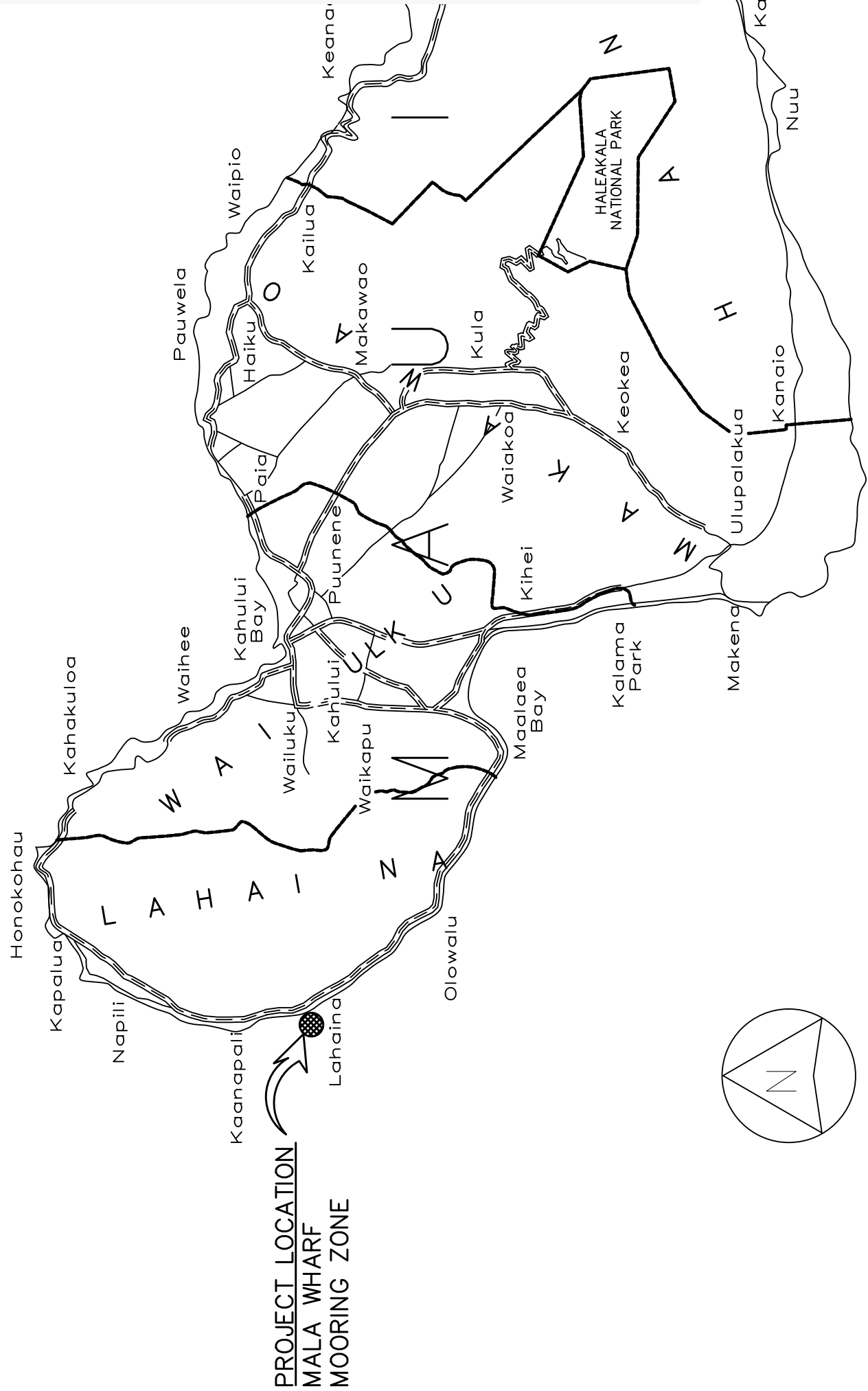
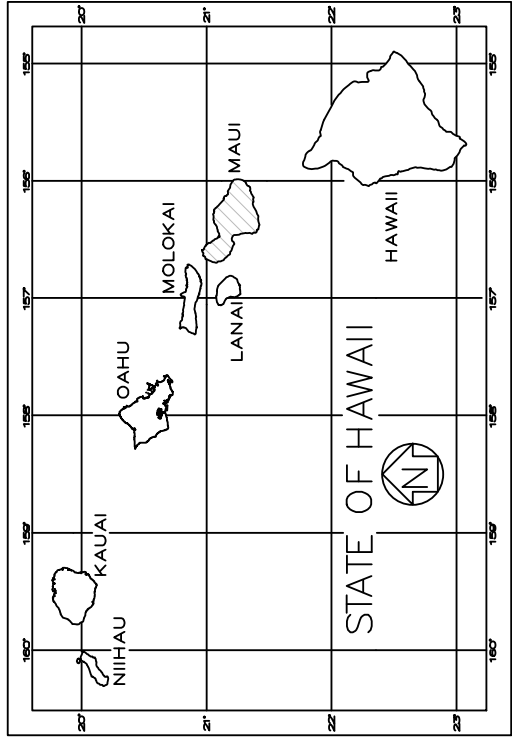
cc:

USCG (John Bannon, Jason Olney)	John.E.Bannon@uscg.mil Jason.R.Olney@uscg.mil
State of Hawaii Department of Health, Clean Water Branch (DOH-CWB) (Darryl Lum)	Darryl.Lum@doh.hawaii.gov
State of Hawaii Office of Planning, Coastal Zone Management Program (Hawaii CZM Program)	John.D.Nakagawa@hawaii.gov

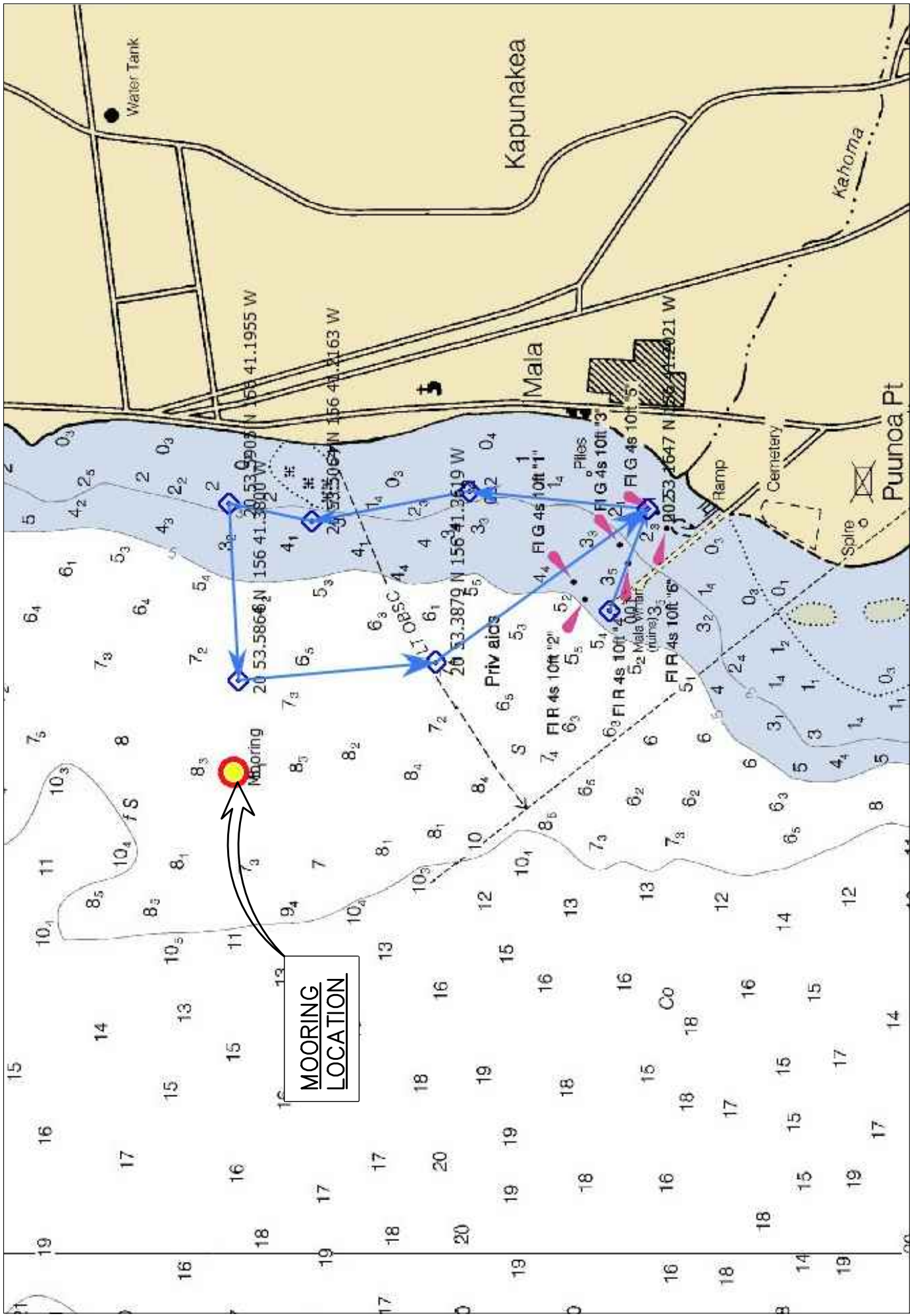
MALA WHARF OFFSHORE MOORING

FOR: ROGER MARLIN

GPS COORDINATES OF MOORING : 20°53.591'N, 156°41.481'W
APPROXIMATE WATER DEPTH : 50'



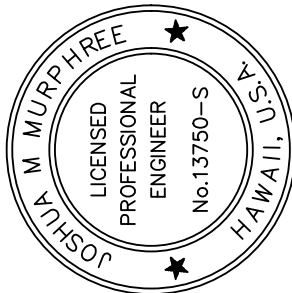
VICINITY MAP



LOCATION MAP

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

PHREE
CREATIONS, LLC.
61-655 KAMEHAMEHA HIGHWAY
HALEIWA, HAWAII 96712 • (808) 349-4990



[Signature]
THIS WORK WAS PREPARED BY
JOSHUA M. MURPHY, LICENSED
PROFESSIONAL ENGINEER
AND CONSTRUCTION OF THIS PROJECT
WILL BE UNDER MY OBSERVATION

GENERAL NOTES
CONTRACTOR/OWNER SHALL CHECK AND VERIFY ALL DIMENSIONS
AND CONDITIONS AT THE URGEST BEFORE PROCEEDING WITH THE WORK
AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
ALL CONSTRUCTION SHALL CONFORM TO THE 2005 INTERNATIONAL
BUILDING CODE AND THE LATEST COUNTY OF MAUI/STATE OF HAWAII
AMENDMENTS AND ORDINANCES AND/OR THE CITY AND COUNTY OF WHERE
THIS PROJECT IS LOCATED AND HAWAII JURISDICTION.

REVISION MARK • DATE • DESCRIPTION

PROJECT
EXISTING
MALA WHARF OFFSHORE MOORING
FOR:

ROGER MARLIN

PHONE: (408) 472-3424

GPS COORDINATES: 20°53.591'N
156°41.481'W

SHEET TITLE

TITLE SHEET

JOB NO. 2015-0007.83 DRAWING NO.
DRAWN JMM
CHECKED JMM
DATE APRIL 26, 2018 SHEET 1 OF 3

T-1

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.

- 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.

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 KNOT
- D. WAVES AND TIDAL VARIATIONS:
1. PEAK WAVE HEIGHT: 5 FEET
- DESIGN VESSEL: 47' CATAMARAN
1. LOA: UP TO 47'-0"
2. BEAM: UP TO 28'-0"
3. DRAFT: UP TO 2'-1"
4. DISPLACEMENT: UP TO 7 GR

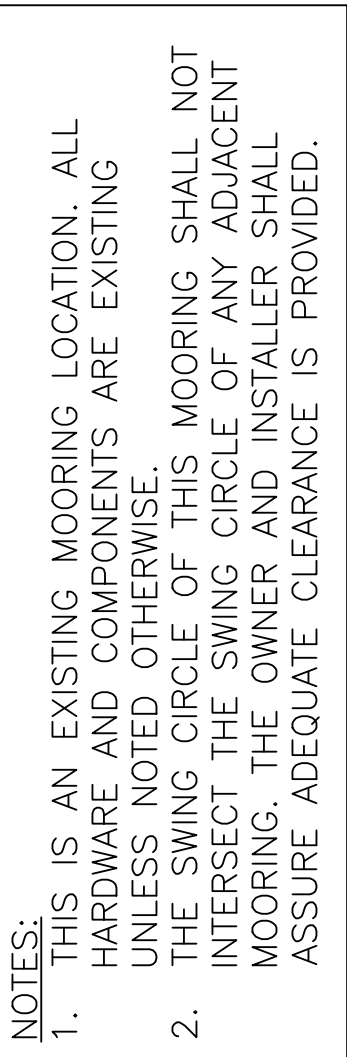
CHAIN, HARDWARE, ROPE, AND MOORING COMPONENTS

- 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.

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.

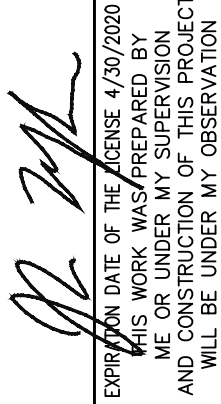
- C. THE VESSEL OWNER IS RESPONSIBLE FOR INSTALLING AND MAINTAINING CHAFING GEAR ON ALL MOORING LINES.



WATER DEPTH 50'±

NOT TO SCALE

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



CONTRACTOR/OWNER BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOBSITE 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 MAUI/STATE OF HAWAII AMENDMENTS AND ORDINANCES AND/OR THE CITY AND COUNTY OF WHERE THIS PROJECT IS LOCATED AND HAVING JURISDICTION.

[illegible]

EXISTING
MALA WHARF OFFSHORE MOORING
PROJECT
FOR:

ROGER MARLIN

PHONE: (408) 472-3424

GPS COORDINATES: 20°53.591'N
156°41.481'W

SHEET TITLE

MOORING NOTES AND DETAILS

JOB NO. 2015-0007.83

DRAWING NO.

DRAWN JMM

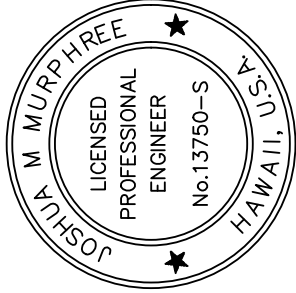
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CHECKED JMM

SHEET 2 OF 3

PHREE
CREATIONS, LLC.

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



JM

EXPIRATION DATE OF THE LICENSE 4/30/2020
THIS WORK WAS PREPARED BY
ME OR UNDER MY CLOSE PERSONAL
SUPERVISION AND I AM AWARE THAT
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 JOB SITE BEFORE PROCEEDING WITH THE WORK
AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.

ALL CONSTRUCTION SHALL CONFORM TO THE 2008 INTERNATIONAL
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AMENDMENTS AND ORDINANCES AND/OR THE CITY AND COUNTY OF WHERE
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REVISION MARK • DATE • DESCRIPTION

PROJECT
EXISTING
MALA WHARF OFFSHORE MOORING
FOR:

ROGER MARLIN

PHONE: (408) 472-3424

GPS COORDINATES: 20°53.591'N
156°41.481'W

SHEET TITLE

MOORING PLAN

MOORING PLAN

SCALE: 1/8" = 1'-0"

JOB NO. 2015-0007.83

DRAWING NO.

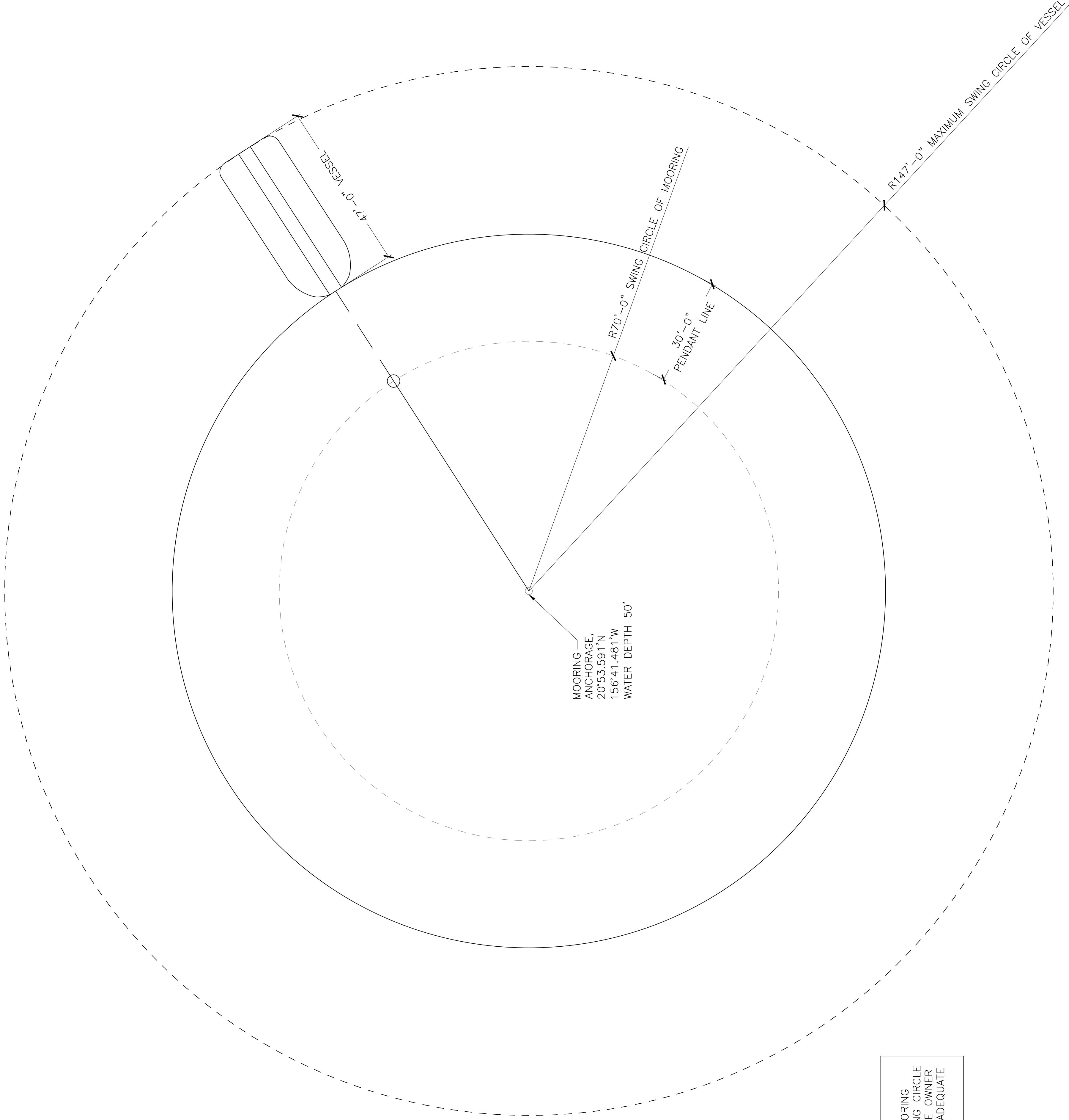
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S-2

CHECKED JMM

DATE APRIL 26, 2018

SHEET 3 OF 3



NOTE:
THE SWING CIRCLE OF THIS MOORING
SHALL NOT INTERSECT THE SWING CIRCLE
OF ANY ADJACENT MOORING. THE OWNER
AND INSTALLER SHALL ASSURE ADEQUATE
CLEARANCE IS PROVIDED.