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 AN EXISTING OFFSHORE MOORING EXEMPT FROM

REQUIREMENTS OF CHAPTER 343, HAWAII REVISED STATUES, AND TITLE 11, CHAPTER 200, HAWAII ADMINISTRATIVE RULES AND APPROVE THE INSTALLATION AFTER-THE-FACT, MALA WHARF OFFSHORE MOORING

AREA, LAHAINA, ISLAND OF MAUI, FOR CHAD GERSTMAR

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 the Mala Wharf Offshore Mooring Area and declare the installation 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, Chad Gerstmar ("Applicant"), uses an existing offshore mooring installed within the Mala Wharf Offshore Mooring Area that has been in place for several years. He is requesting that the Board approve the installation of the offshore mooring and declare the installation 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. 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:

<u>Item No. 13 of Exemption Class 6</u>: "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 within the Mala Wharf Offshore Mooring Zone afterthe-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

Approve Existing Offshore Mooring and Declare Exempt from EA Requirements Chad Gerstmar Mala Wharf Offshore Mooring Area, Lahaina, Island of Maui

October 12, 2018 Item J-11

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

Chapter 11-200, HAR	0.001			
Project Title:	Offshore Mooring in Mala Wharf Offshore Mooring Area,			
	Lahaina, Island of Maui, for Mr. Chad Gerstmar			
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."			
Cumulativa Impact of				
Cumulative Impact of Planned Successive	No. There are no planned successive actions to be undertaken at			
Actions in Same Place	the same location.			
Significant?	No. The environment in the error of the evicting offshore magning			
Action May have	No. The environment in the area of the existing offshore mooring is sand bottom with no coral reefs or marine features that are			
Significant Impact on				
Particularly Sensitive Environment?	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			
C to I D c	existing uses of the ocean in the area.			
Consulted Parties:	- 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.			

EXHIBIT A

Chad M. Gerstmar PO Box 12894 Lahaina, HI 96761

(808) 250-4627

Request for Exemption from Requirement for Preparation of Environmental Assessment for and Approval for the Modification of an Existing Offshore Mooring within Mala Mooring Field, Lahaina on the Island of Maui.

Submitted in compliance with the Hawaii Revised Status Chapter 343 and HAR §§11-200-8; 11-200-8(b)

Submitted to:

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

Submitted by:

Chad M. Gerstmar Email: yerbanated@yahoo.com Phone: (808) 250-4627

Request:

Chad M. Gerstmar (hereinafter referred to as "Petitioner") requests approval for the modification of an existing offshore mooring within Mala Mooring Field and exemption from requirement for environmental assessment report associated with the proposed mooring modification, as the proposed mooring will have little to 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 requests exemption from requirement for environmental assessment report associated with the proposed 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 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 existing facilities on state and land waters.*

PROJECT DESCRIPTION-

Modification of a private offshore mooring buoy in Mala Mooring Field, Lahaina, Maui, HI.

Technical Description of Proposed Modification-

This project is in reference to an already installed single point mooring buoy for a recreational sailing vessel deployed in approximately 30-foot deep water, located approximately 500 feet from the

shoreline in the Mala Mooring Field near Lahaina, near the island of Maui at 20°53.322′N, 156°41.264′W. The existing anchoring mooring is comprised of a 9,000-lbs concrete block, attached to one ¾-inch galvanized shackle with seizing wire, attached to 35-feet of 5/8-inch galvanized chain, attached to one ¾-inch galvanized shackle with seizing wire, attached to one inflatable float at mid depth, attached to one ¾-inch galvanized shackle with seizing wire, attached to 25-feet of 1 ¼-inch blue steel rope, attached to one ¾-inch galvanized shackle with seizing wire, attached to one 1-inch galvanized swivel, attached to three ¾-inch galvanized shackles with seizing wire, attached to one existing mooring ball and two 20-feet sections of 1 ¼-inch double braided nylon rope. All of the mentioned hardware has replaced the old and is new per the drawings since 2017.

Location of Proposed Modification-

20°53.322'N, 156°41.264'W

Purpose of Proposed Modification-

The proposed mooring will be used by the petitioner solely for the purpose of mooring the Sailing Vessel Nimbus for recreational purposes.

Impact on Coastal EcoSystems-

NEGLIGIBLE- The proposed mooring site is 500 linear feet from the nearest shore and is not within the Special Management Area or Shoreline Setback Area, nor is the site within a State Conservation District. The site does not provide habitat for any known endangered species 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. The mooring is placed in an existing designated DLNR "Offshore" mooring area.



DEPARTMENT OF THE ARMY

ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P.O. BOX 22270
JUNEAU, ALASKA 99802-2270
June 19, 2018

SUBJECT: Nationwide Permit Verification for Chad Gerstmar, Mala Mooring Zone Existing Mooring Buoy, Lahaina, Island of Maui, Hawaii, Department of the Army File No. POH-2018-97

Mr. Chad Gerstmar P.O. Box 12894 Lahaina, HI 96761

Dear Mr. Gerstmar:

The Alaska District in support of the Honolulu District, U.S. Army Corps of Engineers (Corps), Regulatory Branch has completed a review of your Pre-Construction Notification dated April 26, 2018 requesting authorization for the proposed Mooring Buoy located at Latitude: 20.888742, Longitude: -156.687749, in the Mala Mooring Zone, near Lahaina, Island of Maui, Hawaii. Based upon a review of the information you submitted to this office, we have verified that your proposed activity complies with the terms and conditions of Nationwide Permit (NWP) 10, Mooring Buoys and the overall NWP Program issued on March 19, 2017. Please reference Department of the Army (DA) file number POH-2018-97 in any future correspondence related to this permit.

We have determined your proposed work involves work in or affecting navigable waters and requires prior authorization from the Corps in accordance with Section 10 of the Rivers & Harbors Act of 1899 (Section 10). This letter verifies your use of this NWP pursuant to Section 10, authorizing 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 buoy for a private vessel deployed in approximately 30-feet deep water over flat lava rock covered in two to three feet of sandy ocean substrate, approximately 500-feet from the shoreline in Mala Mooring Zone, Island of Lahaina, Maui, Hawaii at 20.888742, -156.687749. The existing mooring anchoring system is comprised of, one 9,000-lb 4.5-foot by 4.5-foot by 3-foot concrete block, attached to one $\frac{3}{4}$ -inch $\frac{1}{2}$ galvanized shackle with seizing wire, attached to 35-feet of $\frac{5}{8}$ -inch $\frac{1}{2}$ galvanized chain, attached to one $\frac{3}{4}$ -inch $\frac{1}{2}$ galvanized shackle with seizing wire, attached to one inflatable float at mid depth, attached to one $\frac{3}{4}$ -inch $\frac{1}{2}$ galvanized shackle with seizing wire, attached to three $\frac{3}{4}$ -inch $\frac{1}{2}$ galvanized shackles with seizing wire, attached to one existing mooring buoy and two 20-feet sections of $\frac{1}{4}$ -inch $\frac{1}{2}$ 12-strand double braided nylon rope.

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

- 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 enclosed Standard Local Operating Procedures for Endangered Species in the Central and Western Pacific Region (Pac-SLOPES) general conditions and best management practices (BMPs).

Verification of your project under this NWP is valid until <u>March 19, 2022</u> 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 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.

Thank you for your cooperation with the Honolulu District Regulatory Program. Should you have any questions related to this determination, please contact Mr. Matthew Brody by phone at (907) 790-4493, by mail at the address above or via e-mail at Matthew.T.Brody@usace.army.mil. You are encouraged to provide comments on your experience with the Honolulu District Regulatory Office by accessing our webbased customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0.

Sincerely,

Randal Vigil

Chief, Southeast Section

Enclosure(s)

CC:

Mr. Chad Gerstmar – <u>Yerbanated@Yahoo.com</u>

U.S. Coast Guard – John Bannon – John.E.Bannon@uscg.mil

U.S. Coast Guard – Jason Olney – <u>Jason.R.Olney@uscg.mil</u>

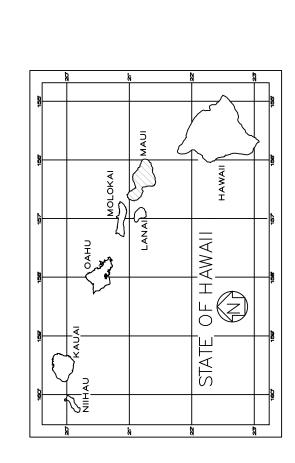
State of Hawaii Department of Health, Clean Water Branch (DOH-CWB) – CleanWaterBranch@doh.hawaii.gov

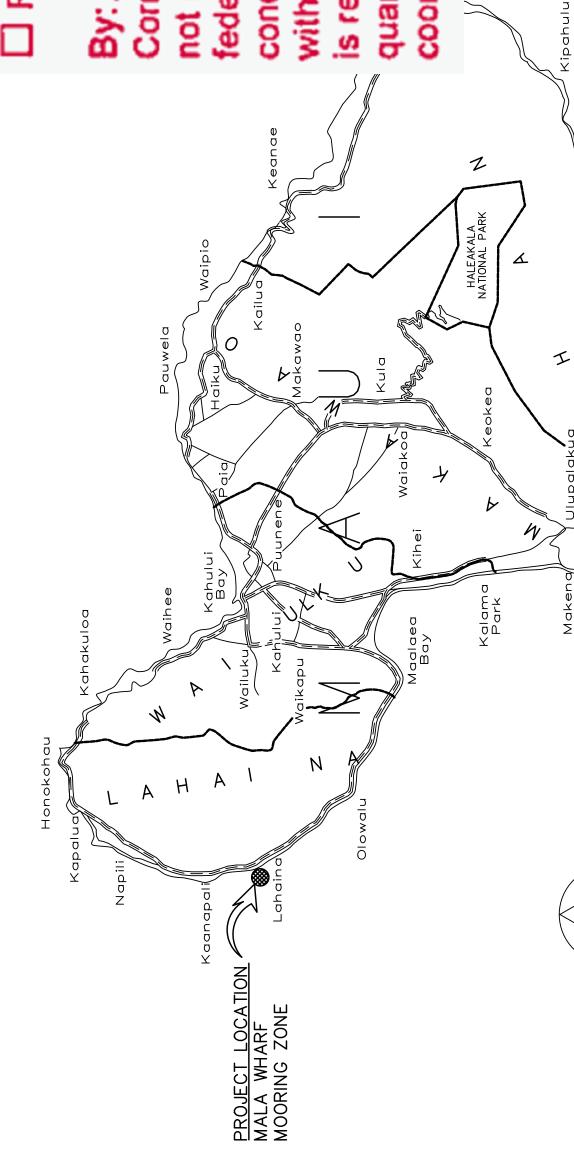
State of Hawaii Office of Planning, Coastal Zone Management Program (Hawaii CZM Program) – <u>John.D.Nakagawa@hawaii.gov</u>

A WHARF OFFSHORE MOORING

GERS.

20°53.322'N, 156°41.264'W 30' GPS COORDINATES OF MOORING: APPROXIMATE WATER DEPTH:



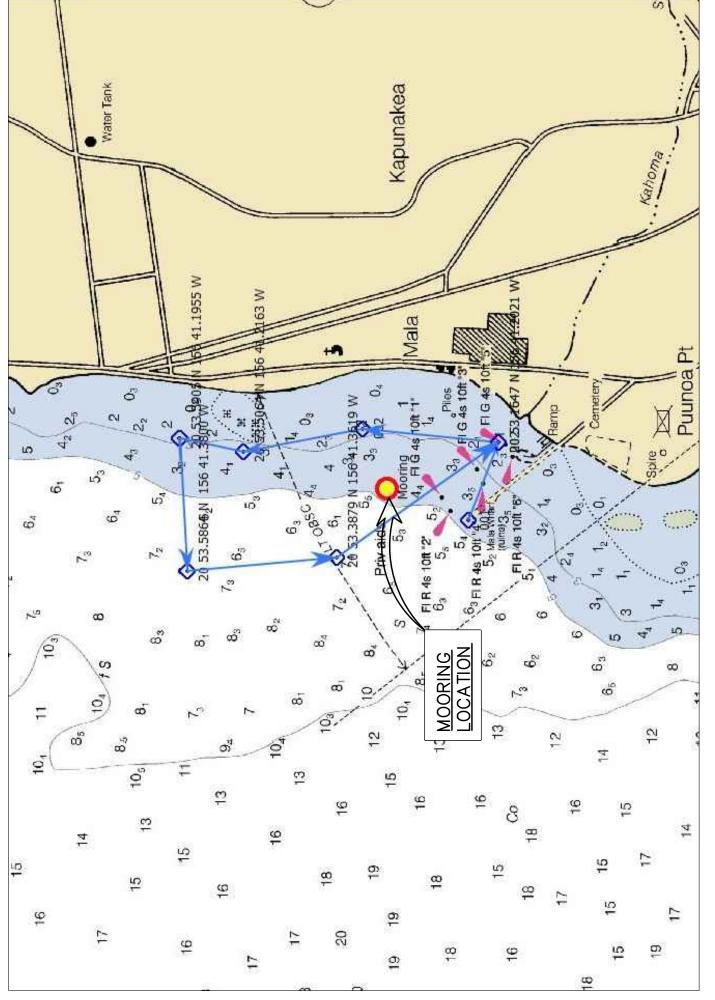


with engineering design guidelines. The contractor conditions. This review is for general conformance Corrections, comments or approval of plans shall not relieve the contractor from other local, state, of Boating and Ocean Recreation federal or other agency regulations or permit ☐ Approved, as noted ☐ Revise & Resubmit is responsible for confirming all dimensions, 4/11/18 quantities, fabrication requirements, and Date: coordination with all other trades. PLAN REVIEW: Approved Rejected Division By: _

VICINITY MAP

SCALE IN

Kanajo



DRAWINGS INDEX

DESCRIPTION	TITLE, INDEX TO DRAWINGS, AND VICINITY MAP	MOORING NOTES AND DETAILS	MOORING PLAN	
DRAWING NUMBER	T-1	S-1	S-2	
SHEET		7	2	

MAP OCATION

CREATIONS, LLC. PHREE

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

Department of Land and Natural Resource



LL CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK SCREPANCIES FOR RESOLUTION. GENERAL NOTES

DATE

EXISTING F OFFSHORE MOORING FOR: PROJECT MALA WHARF

GERSTMAR CHAD

PHONE: (808) 250-4627

20°53.322'N 156°41.264'W GPS COORDINATES:

SHEET TITLE

TITLE SHEET

DRAWING	F	<u>-</u>
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MAR. 13, 2018

DATE

- 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 MAUI AMENDED IBC, 2006
- 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. $\dot{\mathrm{m}}$
- OF. RESPONSIBLE FOR METHODS AND JOB SAFETY. OR SHALL BE RE WORKMANSHIP / THE CONTRACTOR CONSTRUCTION, W $\ddot{\circ}$
- DETAILS NOTED AS TYPICAL ON THE STRUCTURAL DRAWINGS SHALL APPLY IN ALL CONDITIONS UNLESS SPECIFICALLY SHOWN OR NOTED. \Box
- PRIOR PRODUCT DATA REQUIRED BY THESE NOTES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL TO FABRICATION.

NOTES:

1. THIS IS AN EXISTING MOORING LOCATION. ALL HARDWARE AND COMPONENTS ARE EXISTING UNLESS NOTED OTHERWISE.

2. 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.

CRITERIA:

- MINIMUM DESIGN CRITERIA FOR MOORING IN ACCORDANCE WITH UFC 4-159-03: 1. TYPE IIB STORM MOORING
 - PE IIB STORM MOORING DESIGN DATA: T. TY $\dot{\mathrm{m}}$
- SPEED: 105 MPH MIN BASIC
- CURRENT:

 1. MAX CURRENT: 2 KNOT

 1. AND TIDAL VARIATIONS: WAVES \Box
- 1. PEAK WAVE HEIGHT: 5 FEET DESIGN VESSEL: "NIMBUS" 1. LOA: UP TO 35'-0" BEAM: UP TO 9'-1"
- DRAFT: UP TO 5'-2"

 DISPLACEMENT: UP TO 7 GRT

 CREASE IN THE MOORED VESSEL SIZE REQUIRES *ANY INCREASE ANALYSIS.

AND MOORING COMPONENTS CHAIN, HARDWARE, ROPE,

WATER DEPTH 30'±

- ALL CHAIN AND HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.
- \forall SHALL BE USED WITH ROPES R CHAFE GUARDS OF CONTACT. THIMBLES OR ALL POINTS C
- SUBMIT PRODUCT DATA OF ALL CHAINS, HARDWARE, ROPE, A MOORING COMPONENTS TO ENGINEER FOR APPROVAL PRIOR FABRICATION.

INSPECTION AND MAINTENANCE HARDWARE, MOORING

- 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.
- 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 INSPECTION OWNER. $\dot{\mathrm{m}}$

(EXISTING) 34"ø GALVANIZED SHACKLE WITH SEIZING WIRE

THE VESSEL OWNER IS RESPONSIBLE FOR INSTALLING AND MAINTAINING CHAFING GEAR ON ALL MOORING LINES. $\ddot{\circ}$

- (EXISTING) 4.5'x4.5'x3' CONCRETE BLOCK, APPROXIMATE WEIGHT 9,000 LBS.

 \equiv

MOORING

TO SCALE

CREATIONS, LLC. PHREE

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

(EXISTING) 1¼"ø 12—STRAND DOUBLE BRAIDED NYLON PENDANT, 20' LONG

(EXISTING)
MOORING
BUOY



(EXISTING) EYE SPLICE W/THIMBLE

(EXISTING) 34"0 GALVANIZED SHACKLE WITH SEIZING WIRE

¾"ø

- (EXISTING) 1"
EYE-EYE SWIVEL

(EXISTING) EYE SPLICE W/THIMBLE

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. GENERAL NOTES

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.

(EXISTING) EYE SPLICE W/THIMBLE

(EXISTING)
INFLATABLE
FLOAT AT
MID-DEPTH-

(EXISTING) 11/4" Ø BLUE STEEL ROPE, 25' LONG

-(EXISTING) 34"ø GALVANIZED SHACKLE WITH SEIZING WIRE

(EXISTING) 34"0 GALVANIZED SHACKLE WITH SEIZING WIRE

(EXISTING) %"ø GALVANIZED CHAIN, 35' LONG -

%..%

DATE

PROJECT MOORING EXISTING
: OFFSHORE FOR: MALA WHARF

GERSTMAR CHAD

PHONE: (808) 250-4627

20°53.322'N 156°41.264'W GPS COORDINATES:

SHEET TITLE

MOORING NOTES AND DETAILS

2015-0007.75 JMM CHECKED JMM JOB NO.

DATE MAR. 13, 2018

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OF 3 SHEET

