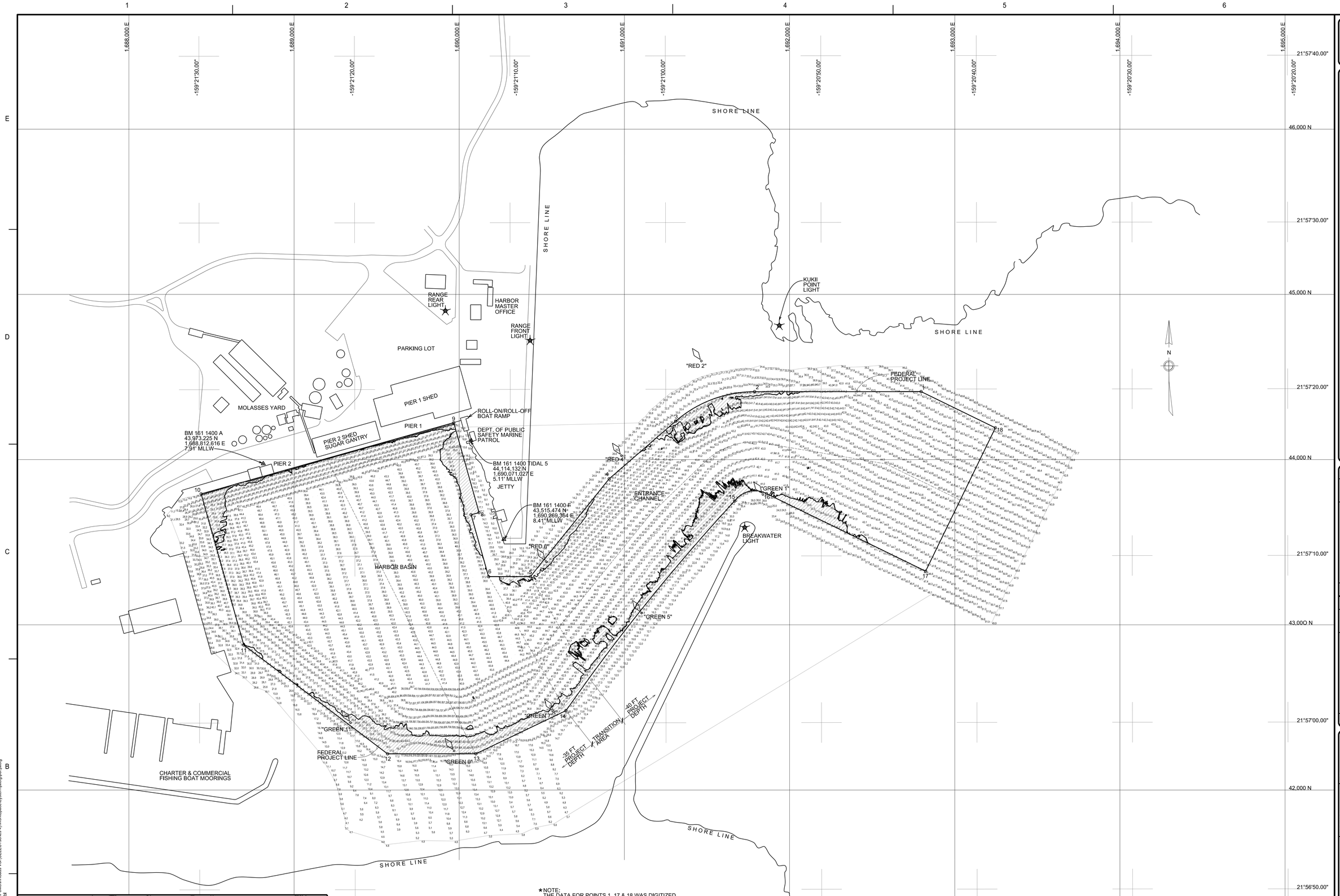

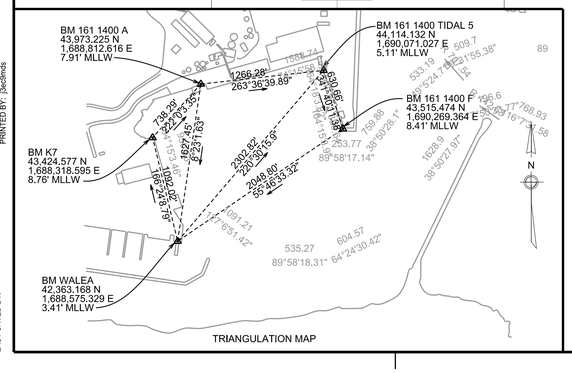

TRIANGULATION MAP

★NOTE:
THE DATA FOR POINTS 1, 17 & 18 WAS DIGITIZED FROM DRAWING TITLED "DESIGN MEMORANDUM PLAN" PLATE 1, DATED MARCH 1956 AND VERIFIED WITH ADDITIONAL DATA FOUND ON DRAWING TITLED "PORT ALLEN HARBOR- NAWILIWILI HARBOR- NAWILIWILI SMALL BOAT HARBOR- PROJECT LINES" A/E SHEET 782550 WITH NO DATE GIVEN. TAKING THE MOUTH OF THE CHANNEL OUT TO THE DAYLIGHT LOCATION AT 40 FEET DEEP.

NAWILIWILI HARBOR NAVIGATION AIDS		
AID NAME	LATITUDE	LONGITUDE
KUKII POINT LIGHT	21°57'23.800"	-159°20'52.700"
RANGE FRONT LIGHT	21°57'22.956"	-159°21'08.784"
RANGE REAR LIGHT	21°57'24.751"	-159°21'14.236"
BREAKWATER LIGHT	21°57'11.682"	-159°20'54.936"
ENTRANCE BUOY 1	21°57'13.681"	-159°20'53.754"
BUOY 2	21°57'21.698"	-159°20'57.704"
BUOY 4	21°57'16.023"	-159°21'02.856"
BUOY 5	21°57'06.581"	-159°21'01.612"
BUOY 6	21°57'09.670"	-159°21'07.701"
LIGHTED BUOY 7	21°57'00.667"	-159°21'07.225"
BUOY 9	21°56'58.319"	-159°21'13.636"
BUOY 11	21°57'00.023"	-159°21'20.297"

FEDERAL PROJECT LINE COORDINATES		
	EASTING	NORTHING
★1	1,692,796.44	44,411.58
2	1,691,788.11	44,411.25
3	1,691,310.58	44,233.02
4	1,690,907.63	43,883.85
5	1,690,431.07	43,291.99
6	1,690,177.29	43,291.86
7	1,690,071.81	43,665.92
8	1,690,119.45	43,679.34
9	1,689,966.56	44,223.30
10	1,688,437.35	43,792.49
11	1,688,695.34	42,877.64
12	1,689,565.51	42,219.20
13	1,690,100.78	42,219.47
14	1,690,646.04	42,480.61
15	1,691,667.63	43,749.35
16	1,691,859.82	43,790.75
★17	1,692,550.19	43,452.16
★18	1,693,113.86	44,256.88

CONDITION SURVEY

NOTES

APPROX. BANKLINE DIGITIZED FROM SATELLITE IMAGERY TAKEN IN 2003.

DEPTHS TAKEN FROM HYDROGRAPHICS SURVEY COMPLETED BY U.S. ARMY CORPS OF ENGINEERS, PORTLAND DISTRICT ON 23 MAY, 2016.

COORDINATES BASED ON NAD 83 HARN (1993), HAWAII STATE PLANE COORDINATE SYSTEM, ZONE 4, U.S. SURVEY FEET.

DATUM IS MEAN LOWER LOW WATER (MLLW). THE LOCAL TIDAL DATUM IS REFERENCED TO THE MOST RECENT EPOCH (1983-2001).

SOUNDINGS ARE SHOWN IN FEET AND INDICATED DEPTHS BELOW MLLW. ELEVATIONS ARE SHOWN THUS: +2. INDICATING HEIGHT IN FEET ABOVE MLLW. THE MLLW PLANE IS SHOWN THUS:

THE PROJECT DEPTH CURVE IS SHOWN THUS:

LONGITUDE/LATITUDE IS REFERENCED TO NAD 83 HARN (1993).

THIS CHART IS INTENDED FOR DREDGING PURPOSES ONLY.

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.

THE EXISTING PROJECT

PROVIDES FOR AN ENTRANCE CHANNEL 40 FEET DEEP AND A HARBOR BASIN AREA 35 FEET DEEP.

LEGEND

PRIMARY CONTROL POINT — BENCHMARKS
COORDINATED SURVEY POINT — GAGES STAFF — RECORDING
UNCOORDINATED SURVEY POINTS
DREDGING RANGES FRONT — REAR
RIVER MILEAGE FROM MOUTH

AIDS TO NAVIGATION

LIGHTHOUSES
LIGHTS — FIXED, FLASHING, OSCILLATING
LIGHTED RANGES — FRONT, REAR
LIGHTED BUOYS — STARBOARD, MID-CHANNEL, JUNCTION
UNLIGHTED BUOYS — PORT, STARBOARD
DAYBEACONS — PORT, STARBOARD
SEASONAL LIGHTS AND LIGHTED DREDGING RANGES

GRAPHIC SCALE

200 0 200 400 600

SCALE:1"=200'

NOTE: ALL UNITS ARE IN U.S. SURVEY FEET (FT) UNLESS INDICATED OTHERWISE.

PROJECTION: HAWAII STATE PLANE ZONE 4 (FEET)
HORIZONTAL DATUM: NAD83 HARN (1993)
VERTICAL DATUM: LOCAL TIDAL DATUM - MLLW (1983-2001)
GEOID: HAWAII 2009
TIDAL STATION: 1611400

BM NAME	NORTHING	EASTING	MLLW (FT)
161 1400 A	43,973,225	1,688,812,616	7.91
161 1400 F	43,515,474	1,690,269,364	8.41
161 1400 TIDAL 5	44,114,132	1,690,071,027	5.11

US Army Corps of Engineers® Honolulu District

MARK	REVISION	DATE	APPR.	MARK

PREPARED BY:		DATE: SEPTEMBER 19, 2016	
DRAWN BY:	CHECKED BY:	SOLICIT./ CONTRACT NO.:	
SUBMITTED BY:		LOCATION CODE	
PLOT SCALE: AS SHOWN	PLOT DATE: 9/19/2016	DRAWING NUMBER:	
SIZE: ANSI E	FILE NAME: 01_NWIQ_VH101_post_dredge.dgn		

U.S. ARMY CORPS OF ENGINEERS
HONOLULU DISTRICT
FT SHAFTER, HAWAII

CIVIL WORKS TECHNICAL BRANCH
DEPTH-ECT
BIRD, DAVID
FORT SHAFTER, HAWAII

FY16 HYDROSURVEYS
NAWILIWILI HARBOR
HYDROGRAPHIC SURVEY
LIHUE, HAWAII

SITE PLAN & SURVEY NOTES

SHEET IDENTIFICATION
VH101
SHEET 1 OF 1

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PEN TABLE: BW_and_Grayscale_Pen.tbl
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