

L O C A T I O N M A P

ARECIBO HARBOR ARECIBO, PUERTO RICO PROJECT CONDITION SURVEY FY22 25-FOOT PROJECT

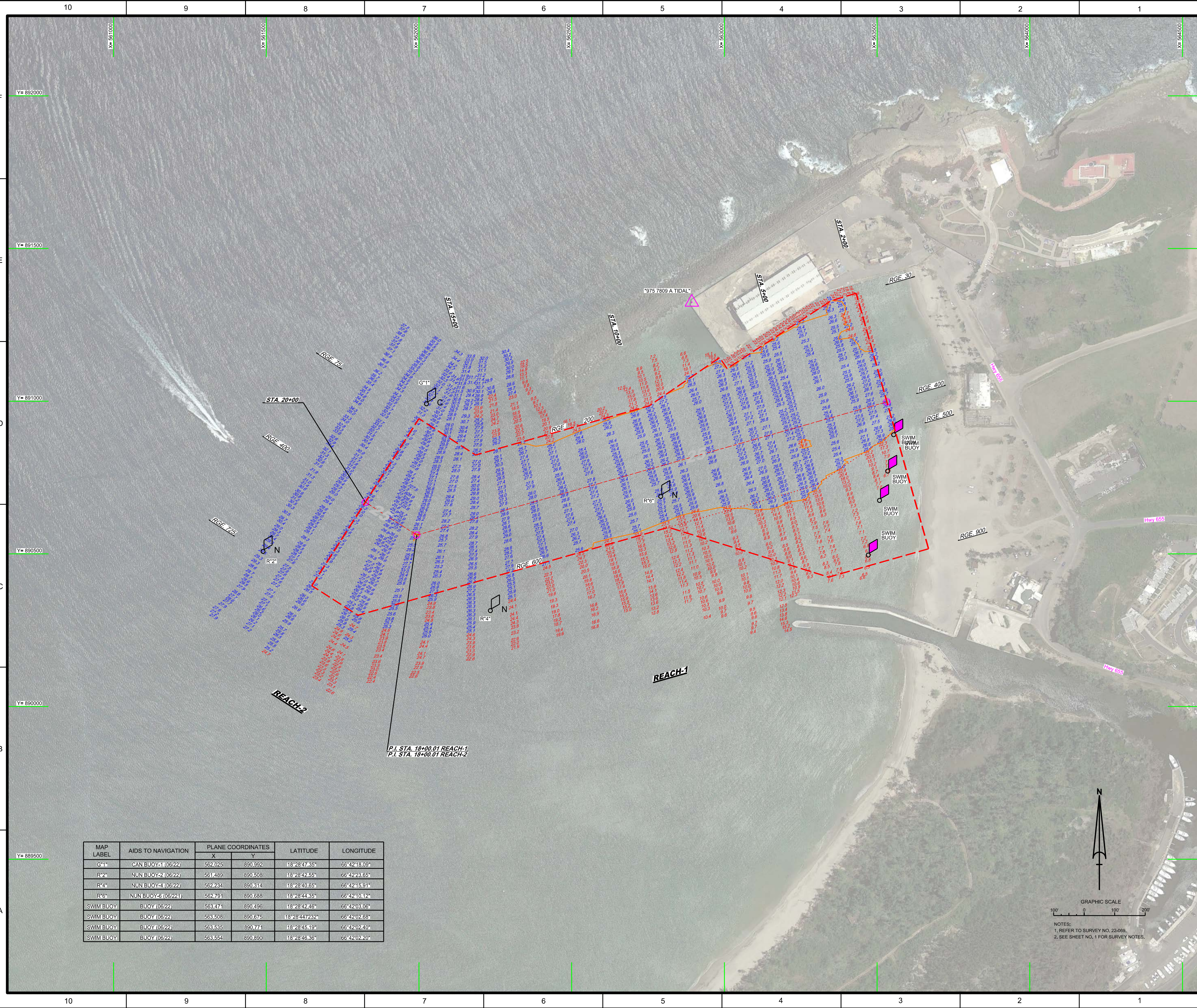
SURVEY NOTES

1. REFER TO SURVEY NO. 22-069.
 2. TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW USING A KINEMATIC TIDAL DATUM MODEL (KTD) CALLED: "ARECIBO-20180607.KTD". A MEASURE DOWN POINT FROM SURVEY MONUMENT "975 7809 B TIDAL" (PID: DO1528), LOCATED AT THE SW CORNER OF THE SEAWALL, WAS USED TO VERIFY RTK TIDES PRIOR TO SURVEYING.
 3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
 4. PLANE COORDINATES ARE BASED ON THE LAMBERT CONIC PROJECTION FOR PUERTO RICO AND THE U.S. VIRGIN ISLANDS AND REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83).
 5. THE NGS FIRST-ORDER ELEVATION AT "975 7809 B TIDAL" AND THE KTD FILE "ARECIBO-20180607.KTD" WAS USED TO CALCULATE THE MLLW ELEVATION AT THE STATION $(5.76' + 0.85' = 6.61')$.
 6. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
 7. THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:
REFERENCE BASE LOCATED AT "975-7809 A TIDAL" (PID: DO1529)
 8. DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MLLW, TIDAL EPOCH 1983-2001, AS REPORTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). NOAA'S DATUM MODEL WAS USED AND CALIBRATED TO THE PUBLISHED MLLW HEIGHTS OF THE BENCH MARK ASSOCIATED WITH THE TIDE GAGE SITE SPECIFIED BELOW:
NOAA TIDAL STATION 975-7809 B TIDAL FOR REACH 1 AND 2 (PID: DO1528)
 9. VERTICAL MEASUREMENTS WERE MADE USING A TELEDYNE ODOM ECHO-TRAC E20 DUAL-FREQUENCY 28/200 KHZ SINGLE-BEAM TRANSDUCER. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY (200KHZ).
- | VESSEL | DATE OF SURVEY | CUT |
|--------|----------------|-------------|
| SB-34 | 01 JUN 2022 | REACH 1 & 2 |
10. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
 11. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED ABOVE AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME. THIS CHART IS SOLELY FOR THE DISTRIBUTION OF AVAILABLE DEPTHS AT THE TIME OF THE SURVEY.
 12. SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL, AND QUALITY ASSURANCE REQUIREMENTS WERE FOLLOWED DURING THIS SURVEY IN ACCORDANCE WITH USACE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 30 NOV 2013.

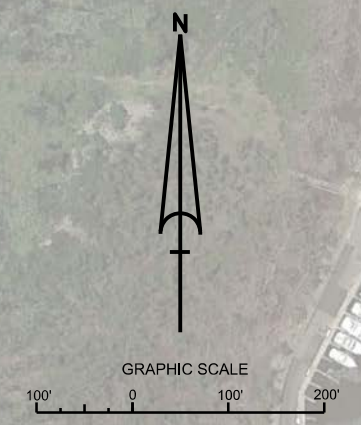
LEGEND	
▲	MONUMENT
⚓	LIGHTED BEACON
■	GREEN DAYBEACON
▲	RED DAYBEACON
⚓	RED LIGHTED BUOY
⚓	GREEN LIGHTED BUOY
⚓	CAN BUOY
⚓	NUN BUOY
⚓	TIDE STAFF
8	PROJECT DEPTH

US Army Corps of Engineers
Jacksonville District
SAFETY ON THIS JOB
DEPENDS ON YOU

<p>DEPARTMENT OF THE ARMY JACKSONVILLE DISTRICT, CORPS OF ENGINEERS JACKSONVILLE, FLORIDA</p>	<p>Check by: GMR Designed by: WRM Drawn by: WRM In Use: WRP/EP/AA/PA/DA Date: JUN 2022</p>
<p>XXXXXXXXXXXXXXXXXXXX.DGN XXXXXXXXXXXXXXXXXXXX.DGN XXXXXXXXXXXXXXXXXXXX.DGN XXXXXXXXXXXXXXXXXXXX.DGN XXXXXXXXXXXXXXXXXXXX.DGN ARECIBO HARBOR/ARCAGC/DGN 22-069-1/001.DGN</p>	
<p>ARECIBO HARBOR ARECIBO, PUERTO RICO PROJECT CONDITION SURVEY FY22 25-FOOT PROJECT INDEX, LOCATION AND VICINITY MAP</p>	
<p>Scale: AS SHOWN</p>	
<p>Drawing no. 1</p>	
<p>SHEET 01 OF 02</p>	



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G*1	CAN BUOY-1 (06/22)	562.025	890.992	18°28'47.35"	66°42'18.09"
R*2	NUN BUOY-2 (06/22)	561.489	890.508	18°28'42.55"	66°42'23.65"
R*4	NUN BUOY-4 (06/22)	562.234	890.314	18°28'40.65"	66°42'15.91"
R*6	NUN BUOY-6 (06/22)	562.791	890.688	18°28'44.35"	66°42'10.12"
SWIM BUOY	BUOY (06/22)	563.474	890.496	18°28'42.46"	66°42'03.06"
SWIM BUOY	BUOY (06/22)	563.508	890.675	18°28'44.7232"	66°42'02.68"
SWIM BUOY	BUOY (06/22)	563.535	890.774	18°28'45.19"	66°42'02.40"
SWIM BUOY	BUOY (06/22)	563.554	890.890	18°28'46.36"	66°42'02.20"



NOTES:
1. REFER TO SURVEY NO. 22-058.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.