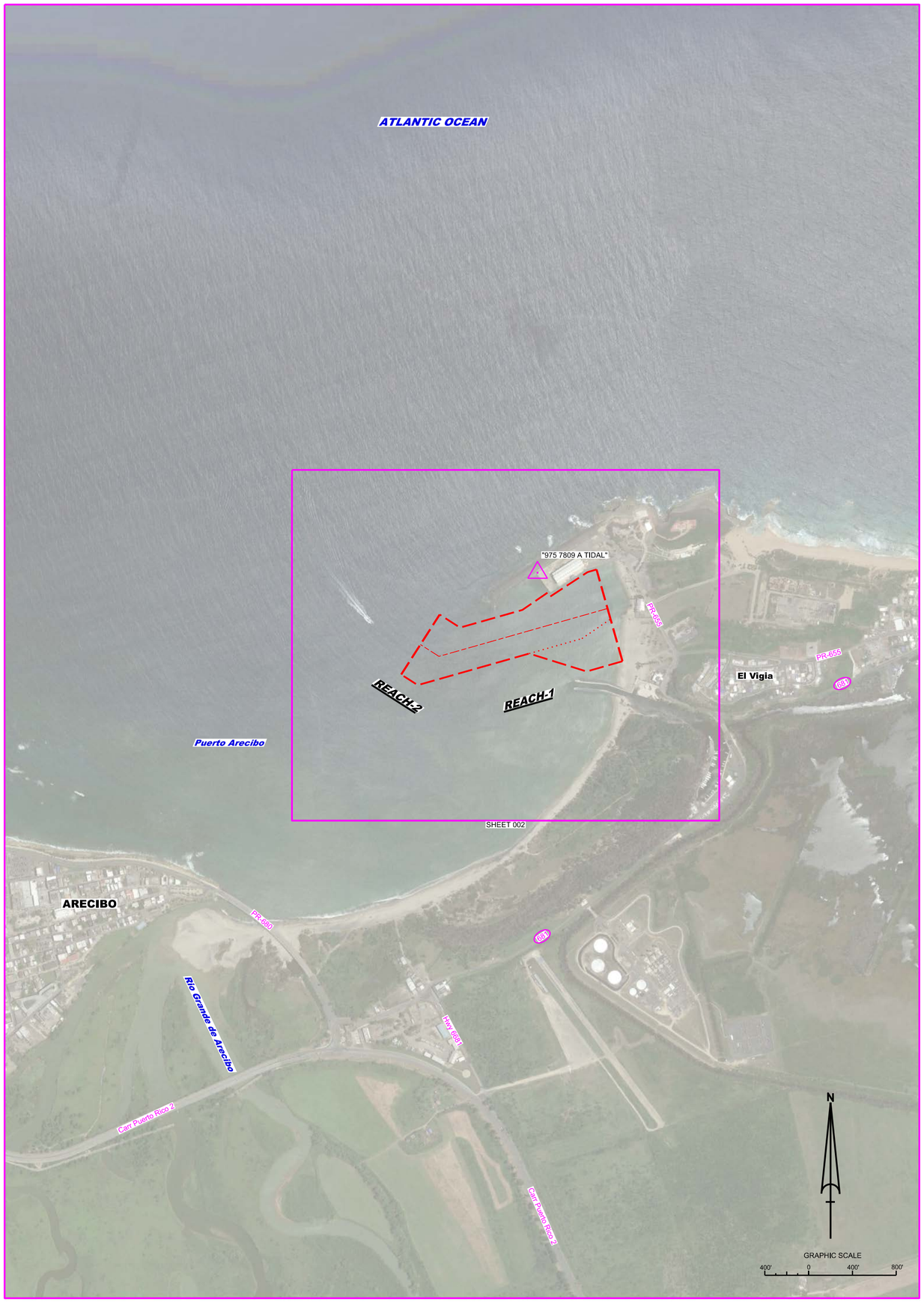
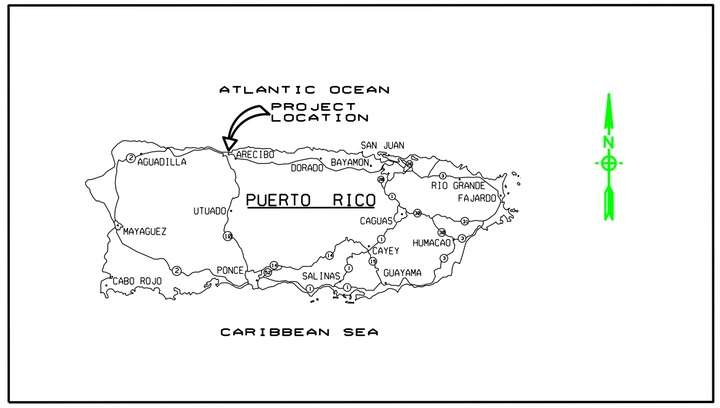




L O C A T I O N M A P

ARECIBO HARBOR
ARECIBO, PUERTO RICO
PROJECT CONDITION SURVEY FY24
25-FOOT PROJECT

SURVEY NOTES

1. REFER TO SURVEY NO. 24-049.
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 (PR-5200 PR &VI ZONE 1) AND REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83).
5. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
6. 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)
7. DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MLLW, TIDAL EPOCH 1983-2001, AS REPORTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMIONISTRATION (NOAA). NOAA'S VDATUM 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)
8. VERTICAL MEASUREMENTS WERE MADE USING A TELEDYNE ODOM ECHO-TRAC E20 SINGLE-BEAM TRANSDUCER. ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SB-34	06 DEC 2023	REACH 1 & 2

9. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
10. 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.
11. 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
C	CAN BUOY
N	NUN BUOY
	TIDE STAFF
8	PROJECT DEPTH

US Army Corps of Engineers
Jacksonville District

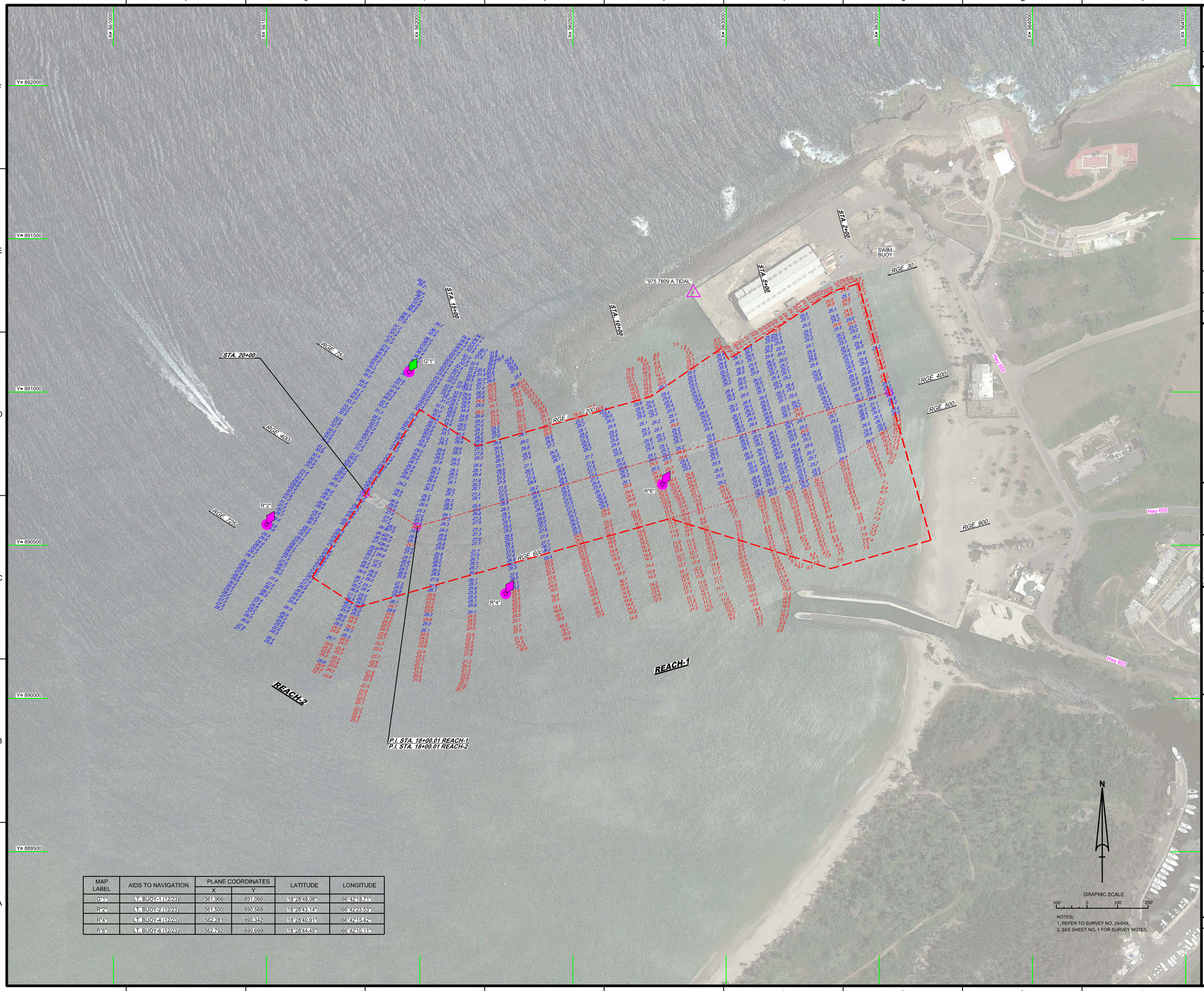
SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: VIRM
Drawn by: VIRM
Checked by: GMR
Inv. No.: W912EP-XX-X-XXXX
Date: DEC 2023

XXXX



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G"1"	LT. BUOY-1 (12/23)	561,966	891,066	18°28'48.08"	66°42'18.71"
R"2"	LT. BUOY-2 (12/23)	561,500	890,568	18°28'43.14"	66°42'23.53"
R"4"	LT. BUOY-4 (12/23)	562,281	890,342	18°28'40.91"	66°42'15.42"
R"6"	LT. BUOY-6 (12/23)	562,792	890,699	18°28'44.45"	66°42'10.11"

NOTES:
1. REFER TO SURVEY NO. 24-049,
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: VIRM
DWN by: VIRM
Chd by: CMR
Rev. No.: V0912EP-XX-X-XXXX
Date: DEC 2023

24-049-V-NAV.DGN
24-049-V-SOUN_ALCUTS.DGN
AREC0BO HARBOR-C-KIGMCCP.DGN
24-049-C-ESHBRDR.DGN
Reference files:
24-049-V-H202.DGN
File name:

AREC0BO HARBOR
AREC0BO, PUERTO RICO

PROJECT CONDITION SURVEY FY24
25-FOOT PROJECT

STA. 2+00 REACH-1 THRU STA. 20+00.01 REACH-2

PLAN

Scale: AS SHOWN

Drawing no.

2

SHEET 02 OF 02