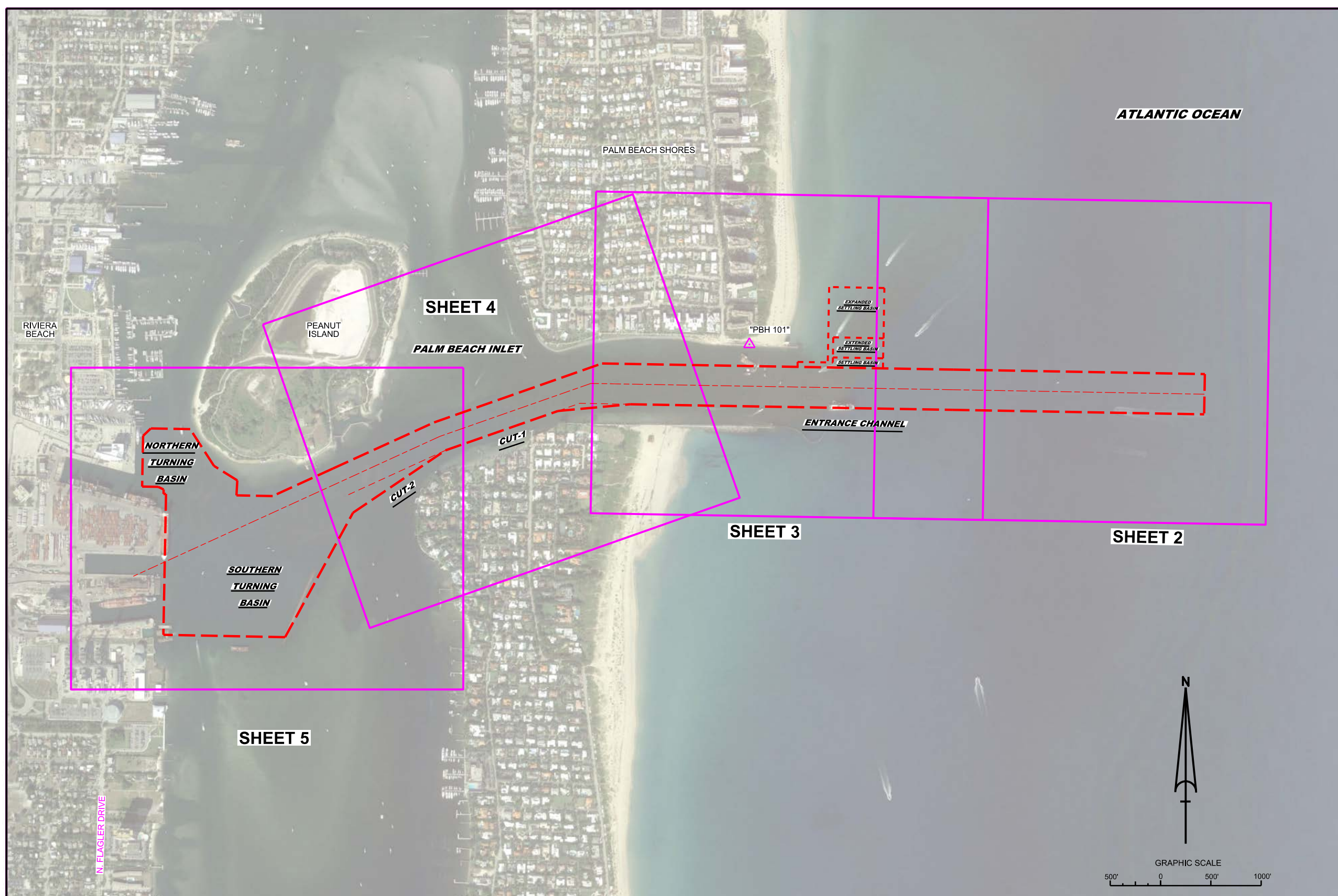


PALM BEACH HARBOR, FLORIDA NOVEMBER HYDROGRAPHIC EXAM SURVEY FY23 25, 33, 35, 37 & 39-FOOT PROJECT



SURVEY NOTES

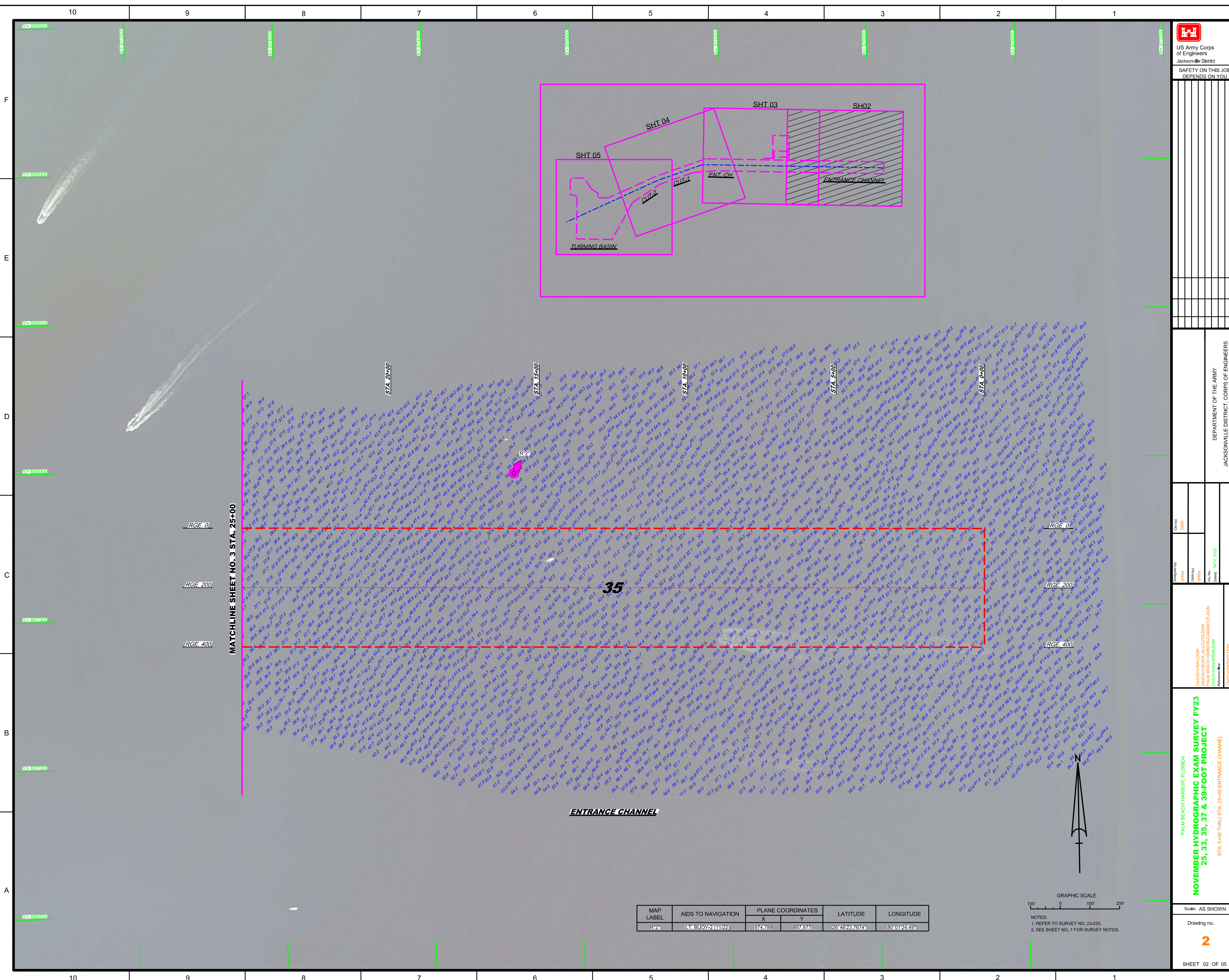
- REFER TO SURVEY NO. 23-033.
- SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) OF THE 1983-2001 TIDAL EPOCH.
- TIDAL REDUCTIONS WERE OBTAINED UTILIZING A REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING A HYPACK KINEMATIC TIDE DATUM (KTD) MODEL. KTD FILE NAME IS: "PALMBEACH_2018 05 03.KTD".
- ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
- PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF FLORIDA AND REFERENCED TO THE CURRENT REALIZATION OF THE NORTH AMERICAN DATUM OF 1983 (NAD83), BASED ON THE NOAA NATIONAL SPATIAL REFERENCE SYSTEM (NSRS).
- ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
- THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:
 REFERENCE BASE LOCATED AT "PBH 101" (OPUS PID: BBG27)
 TIDE STAFF LOCATED FROM "COE A 310 RESET" (PID: BBG25)
- DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MLLW, TIDAL EPOCH 1983-2001 AS REPORTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). A MODIFIED VERSION OF NOAA'S VDATUM MODEL WAS USED TO CALIBRATE TO THE PUBLISHED MLLW HEIGHT OF THE BENCHMARK ASSOCIATED BELOW:
 NOAA TIDAL STATION 872-2588, PORT OF W. PALM BEACH, LAKE WORTH (PID: BBG25)
 VERTICAL MEASUREMENTS WERE MADE USING AN ECHOTRAC E20 SINGLE-BEAM TRANSDUCER OPERATING AT 28 AND 200 KHZ AND AN EDGETECH 6205 MULTI-BEAM SYSTEM OPERATING AT 550 KHZ. ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.
- AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
- 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.
- 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
	PROJECT DEPTH

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

Check by: GHR
 Designed by: WRM
 Drawn by: WRM
 File No.: 23-033-BS-BRDLDN
 Date: NOV 2022
 File name: 23-033-BS-SD1.DGN

PALM BEACH HARBOR, FLORIDA
 NOVEMBER HYDROGRAPHIC EXAM SURVEY FY23
 25, 33, 35, 37 & 39-FOOT PROJECT
 INDEX, LOCATION AND VICINITY
 MAP



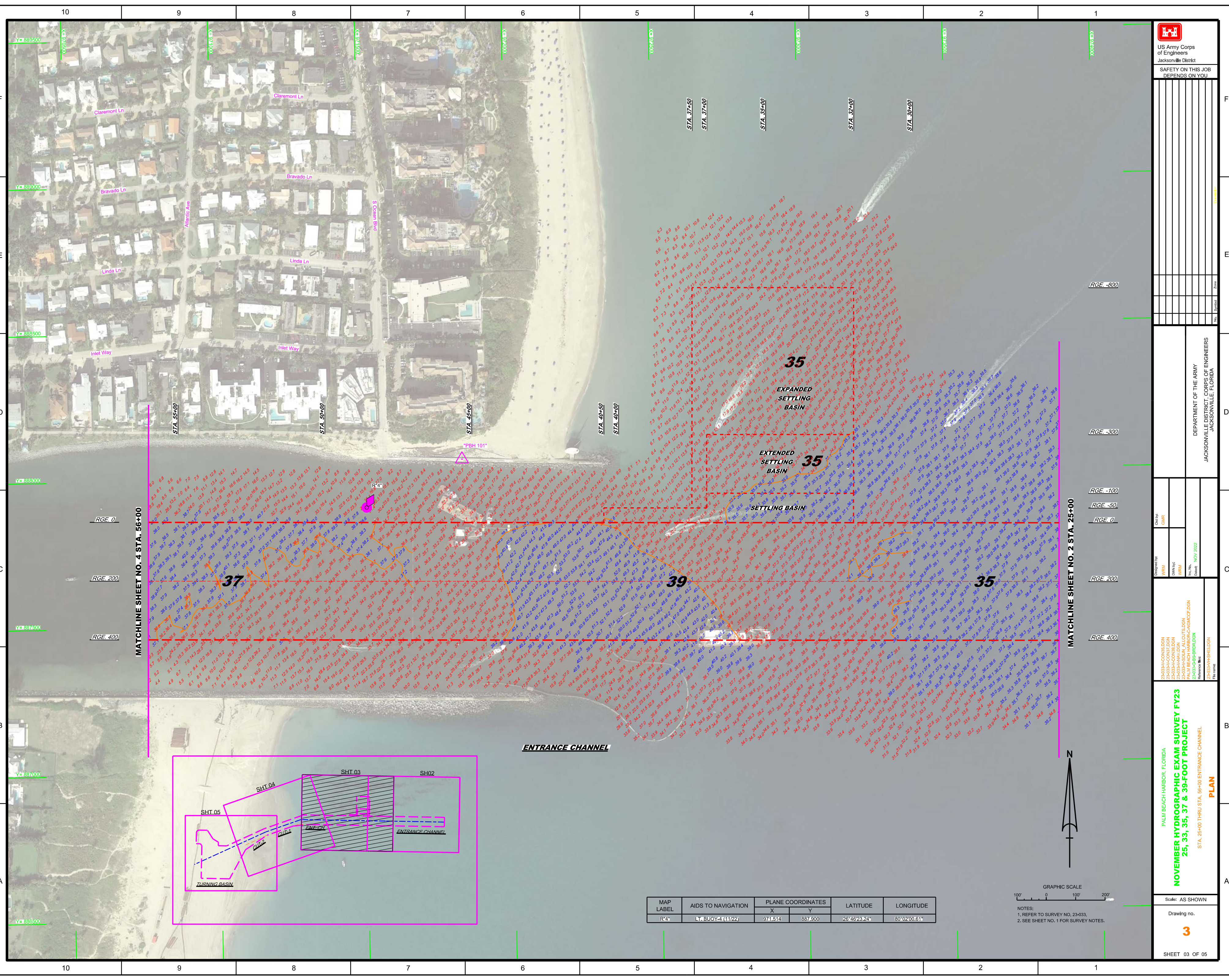
MATCHLINE SHEET NO. 3 STA. 25+00

ENTRANCE CHANNEL

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R*2	LT. BUOY-2 (11/22)	974.788	887.977	26 46'23.7674"	80 01'24.49"

GRAPHIC SCALE
100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 23-033.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



Created By	GHR
Designed By	WRM
Drawn By	WRM
File Name	240333-BS-BRD/SDN
Issue	NOV 2022
Reference File	240333-BS-BRD/SDN

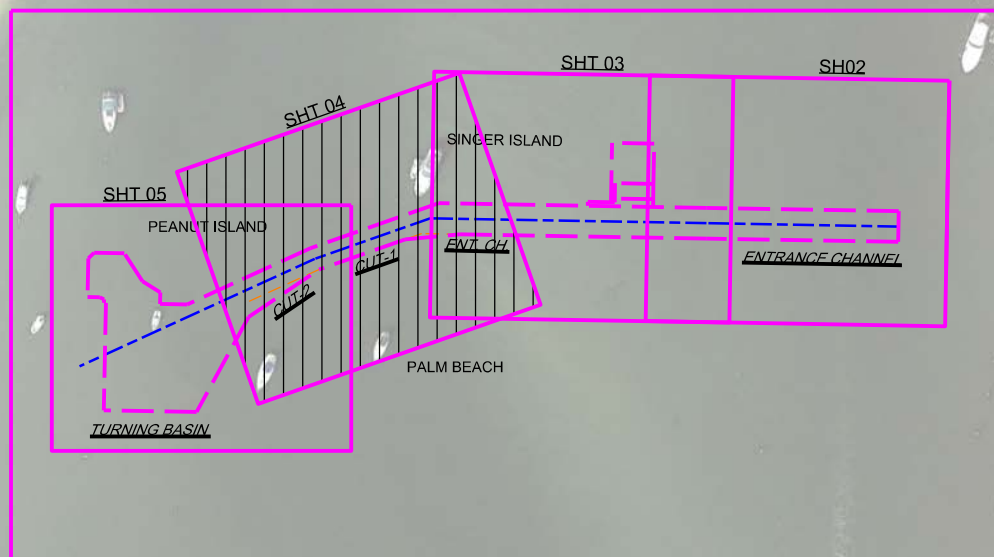
PALM BEACH HARBOR, FLORIDA
 NOVEMBER HYDROGRAPHIC EXAM SURVEY FY23
 25, 33, 35, 37 & 39-FOOT PROJECT
 STA. 25+00 THRU STA. 36+00 ENTRANCE CHANNEL
PLAN

Scale: AS SHOWN
 Drawing No.
3
 SHEET 03 OF 05

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R-4	LT BUOY-4 (11/22)	974,514	887,900	26°46'23.24"	80°02'00.61"

GRAPHIC SCALE
 0 100 200
 NOTES:
 1. REFER TO SURVEY NO. 23-033.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G*5	LT-5 (11/22)	970,672	887,410	26°46'18.45"	80°02'09.9508"
R*6	LT. BUOY-6 (11/22)	970,551	887,929	26°46'23.60"	80°02'11.24"
G*7	LT. BUOY-7 (11/22)	969,978	887,365	26°46'18.06"	80°02'17.60"
R*8	LT-8 (11/22)	969,301	887,590	26°46'20.34"	80°02'25.05"
G*9	LT-9 (11/22)	968,790	886,913	26°46'13.67"	80°02'30.75"
R*10	LT-10 (11/22)	968,200	887,149	26°46'16.06"	80°02'37.24"
INFO SIGN	SIGN (11/22)	970,058	887,345	26°46'17.85"	80°02'16.73"



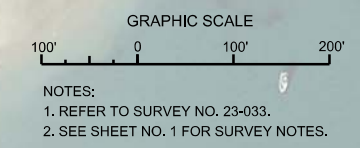
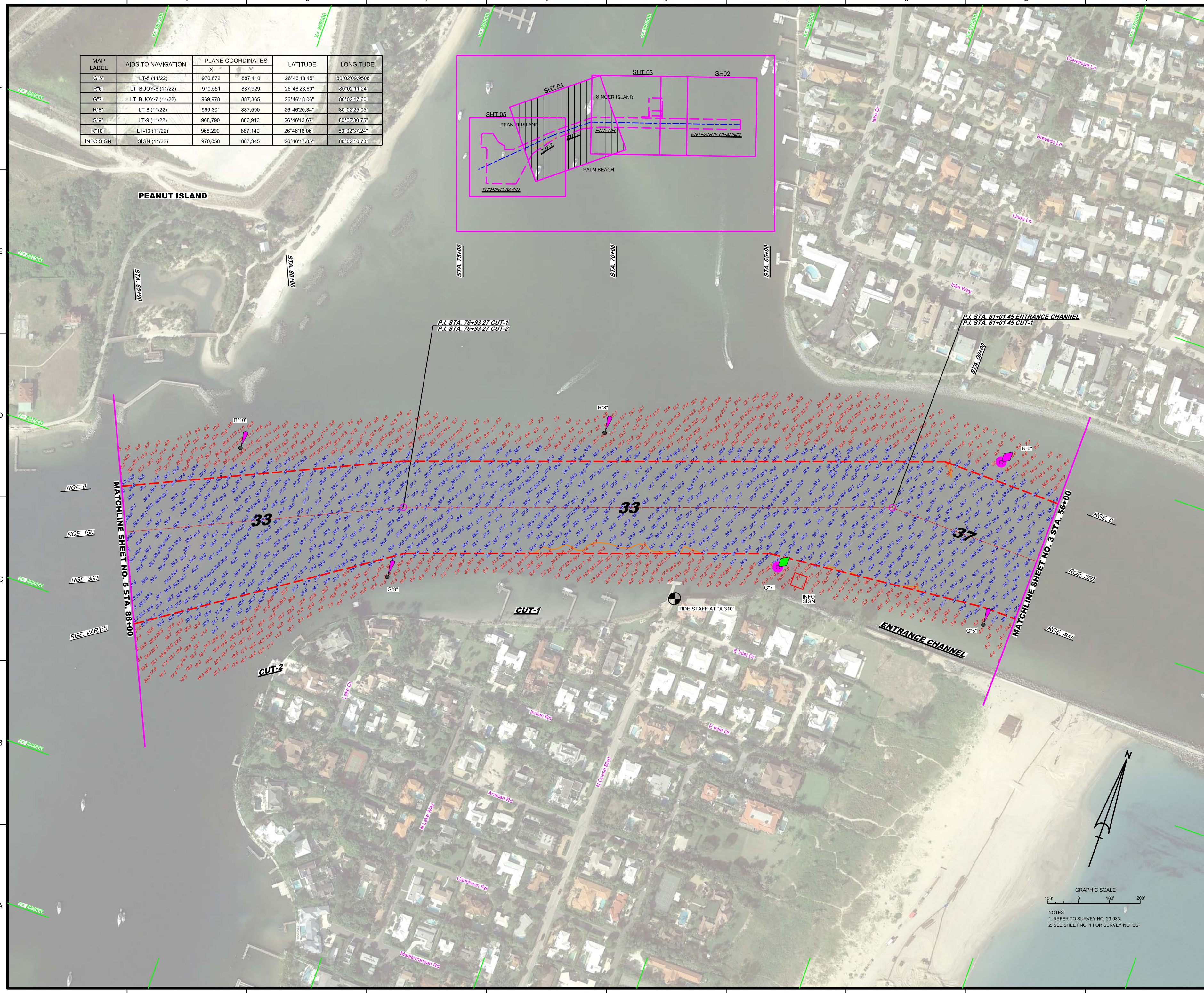
US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

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

Drawn by: GHR
Checked by: GHR
Date: NOV 2022

2-0333-ACON33.DGN
2-0333-ACON37.DGN
2-0333-HAV.DGN
2-0333-BS-BR10.DGN
2-0333-BS-BR10.DGN
2-0333-BS-BR10.DGN



NOTES:
1. REFER TO SURVEY NO. 23-033.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

PALM BEACH HARBOR, FLORIDA

NOVEMBER HYDROGRAPHIC EXAM SURVEY FY23
25, 33, 35, 37 & 39-FOOT PROJECT

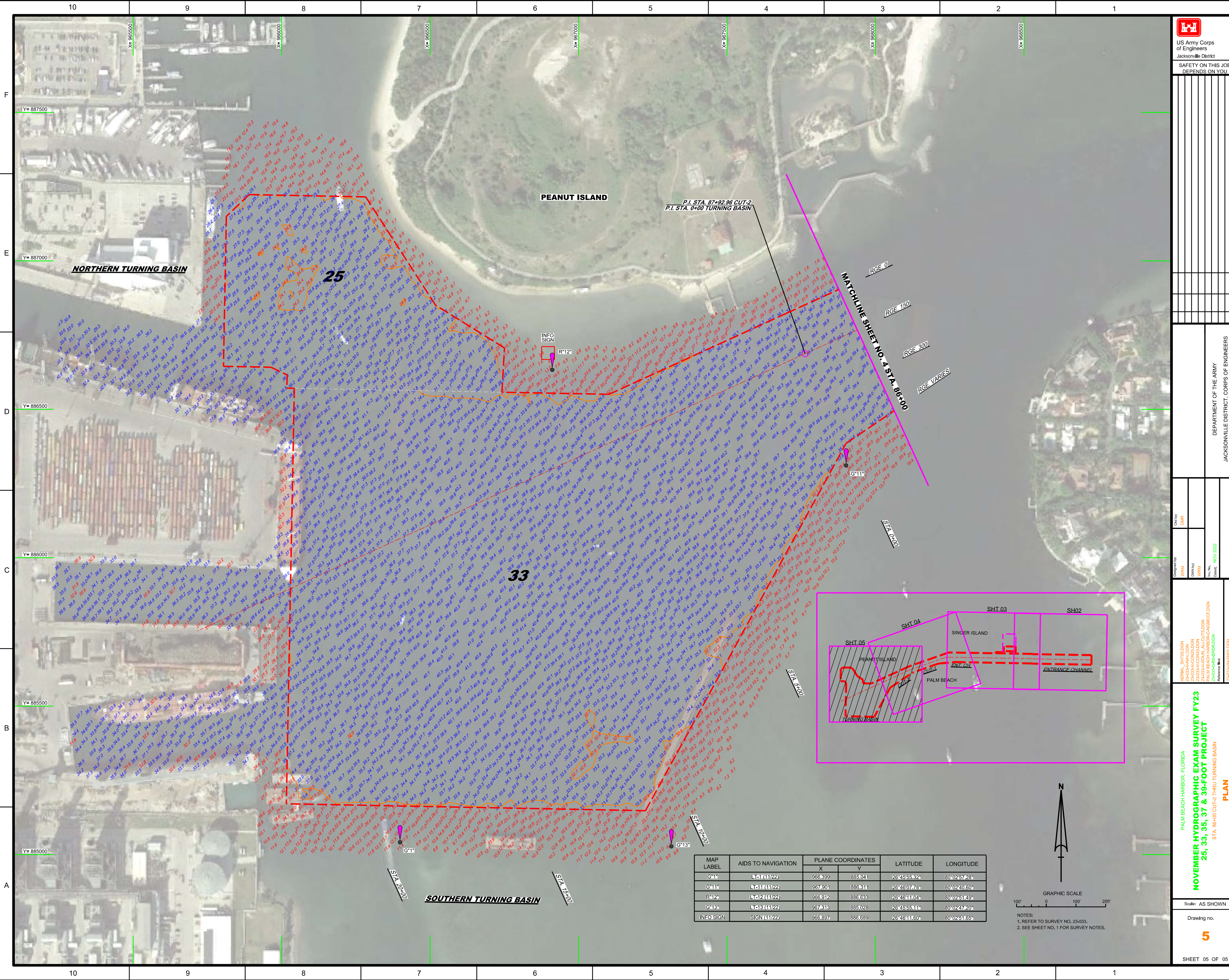
STA. 56+00 ENTRANCE CHANNEL THRU STA. 86+00 CUT-2

PLAN

Scale: AS SHOWN

Drawing no. **4**

SHEET 04 OF 05



P.I. STA. 87+92.96 CUT-2
P.I. STA. 0+00 TURNING BASIN

PEANUT ISLAND

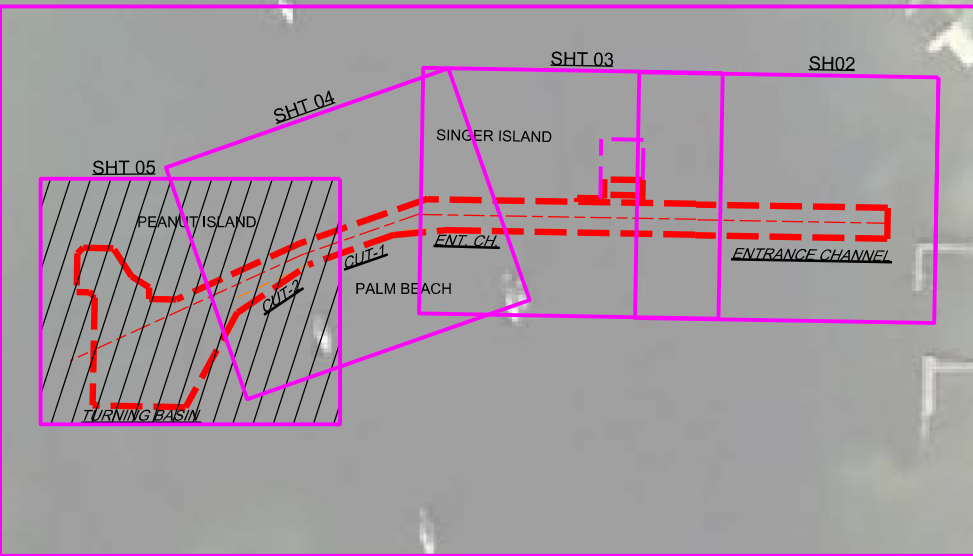
NORTHERN TURNING BASIN

25

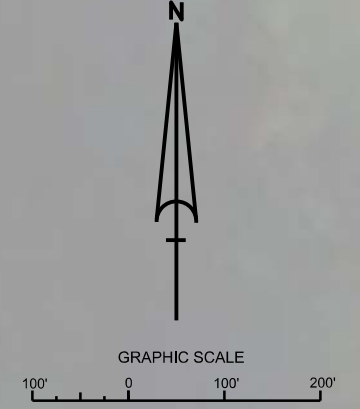
33

SOUTHERN TURNING BASIN

RGE 0
RGE 150
RGE 300
RGE VARIES



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G*11	L11(11/22)	966.399	885.041	26°45'55.32"	80°02'57.28"
G*11	L11(11/22)	967.901	886.311	26°46'07.78"	80°02'40.60"
R*12	L12(11/22)	966.912	886.633	26°46'11.04"	80°02'41.49"
G*13	L13(11/22)	967.313	885.028	26°45'55.11"	80°02'47.20"
INFO SIGN	SIGN(11/22)	966.897	886.689	26°46'11.60"	80°02'41.65"



NOTES:
1. REFER TO SURVEY NO. 23-033.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.