MANATEE HARBOR
(TAMPA HARBOR ZONE 10)
MANATEE COUNTY, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY24
40-FOOT PROJECT

LOCATION MAP

SHEET INDEX

SURVEY NOTES

1. REFER TO SURVEY NO. 24-177.
2. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
3. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83).
4. DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MEAN LOWER LOW WATER MLLW, TIDAL EPOCH 1983-2001 AS REPORTED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). NOAA'S VDATUM MODEL WAS USED AND CALIBRATED TO THE PUBLISHED MLLW HEIGHTS OF THE BENCHMARKS ASSOCIATED WITH THE TIDE GAGE SITE PSECIFIED BELOW:

   NOAA TIDAL STATION 872-6384, PORT MANATEE, TAMPA BAY, FL
5. TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING THE KTD FILE "SPC-FL-WEST-2010-12-07.KTD".
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 "PT MNTE ARP" (OPUS PID: BBJM69)

   A MEASURE DOWN POINT WAS SET IN THE EASTERN BULKHEAD OF MANATEE HARBOR FROM NOS BM "872 6384 C" (PID: AG7340)
8. VERTICAL MEASUREMENTS WERE MADE USING A TELEDYNE RESON T20 MULTI-BEAM SYSTEM AND A ROSS MODEL 835C DUAL-FREQUENCY SMART SOUNDER SINGLE-BEAM SYSTEM FOR SINGLE-BEAM CHECK LINES. ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SV CORAL	19 JUL 2024	MANATEE HARBOR
SV CORAL	23 JUL 2024	MANATEE HARBOR
SV CORAL	30 JUL 2024	MANATEE HARBOR

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
	CAN BUOY
	NUN BUOY
	TIDE STAFF
8	PROJECT DEPTH

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description
		ABCD	
		A-N	

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

Checked by: GMR
Designed by: WRM
DWN by: WRM
Rev. No. - - -
Date: JUL 2024

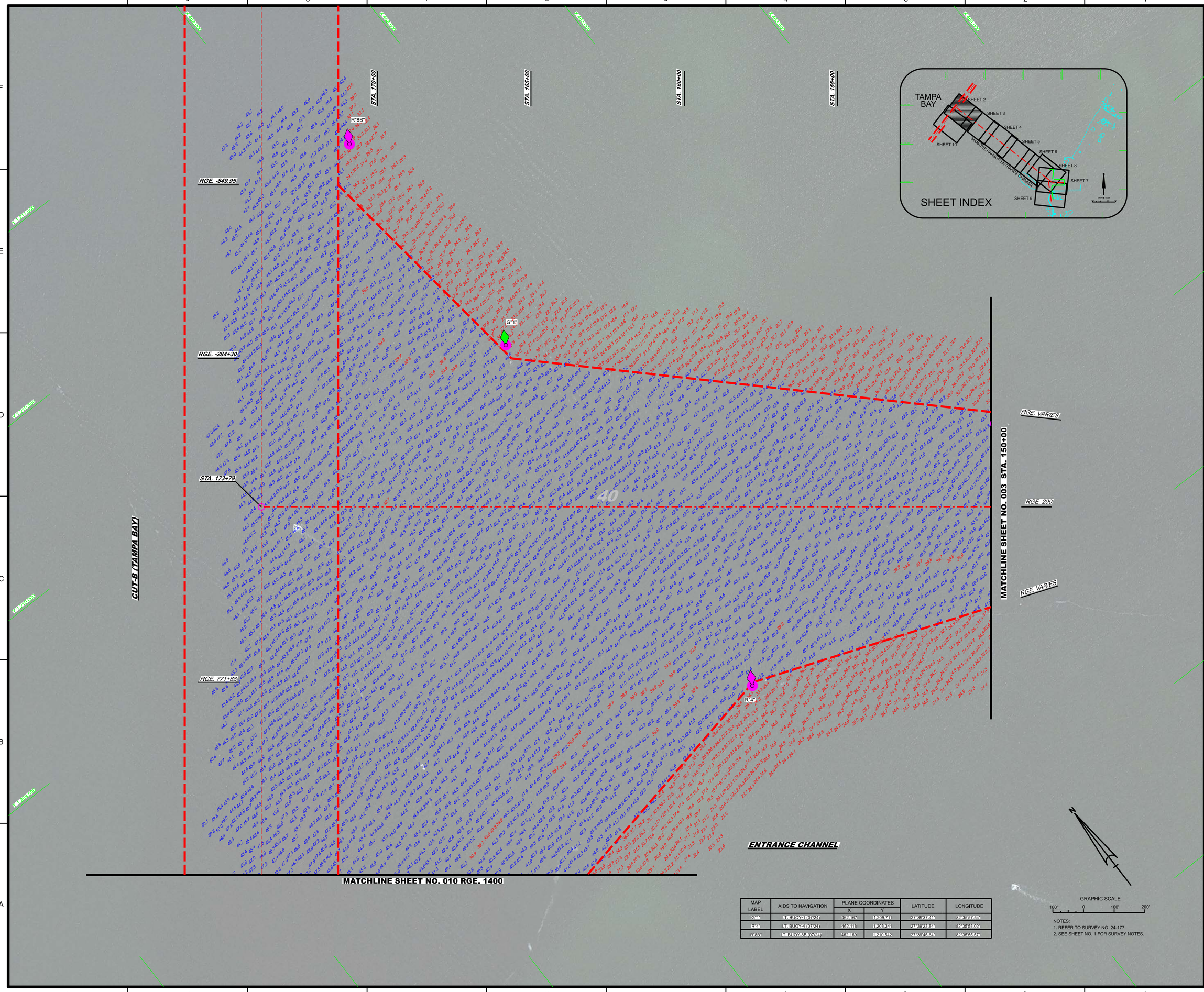
Reference files:
24-177-CS-HS-ROTS.DGN
24-177-CS-HARBOR-LOC19_MCCF_AEC_19174.DGN
TAMPA HARBOR-C-NGMCCF.DGN
24-177-VH-001.DGN
Ref: usamcc

MANATEE HARBOR
MANATEE COUNTY, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY24
40-FOOT PROJECT
INDEX, LOCATION AND VICINITY MAP

Scale: AS SHOWN

Drawing no.
1

SHEET 01 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G"1"	LT. BUOY-1 (07/24)	462,167	1,209,711	27°39'37.41"	82°35'57.54"
R"4"	LT. BUOY-4 (07/24)	462,118	1,208,334	27°39'23.84"	82°35'58.02"
R"8B"	LT. BUOY-8B (07/24)	462,169	1,210,542	27°39'45.64"	82°35'55.57"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
N		A-N	ABCD

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

Designed by: WRM
Cad by: GMR
DWN by: WRM
Rev. No.: - - -
Dates: JUL 2024

24-177-C-BS-BRGR.DGN
MANATEE HARBOR-CONTROL19_MCCF_AEC_19174.DGN
TAMPA HARBOR-C-NCMCCF.DGN
24-177-V-SOUN.DGN
24-177-V-HA002.DGN
24-177-V-INDEX.DGN

Reference files:
24-177-V-HA002.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

HYDROGRAPHIC EXAM EXAM SURVEY FY24
40-FOOT PROJECT

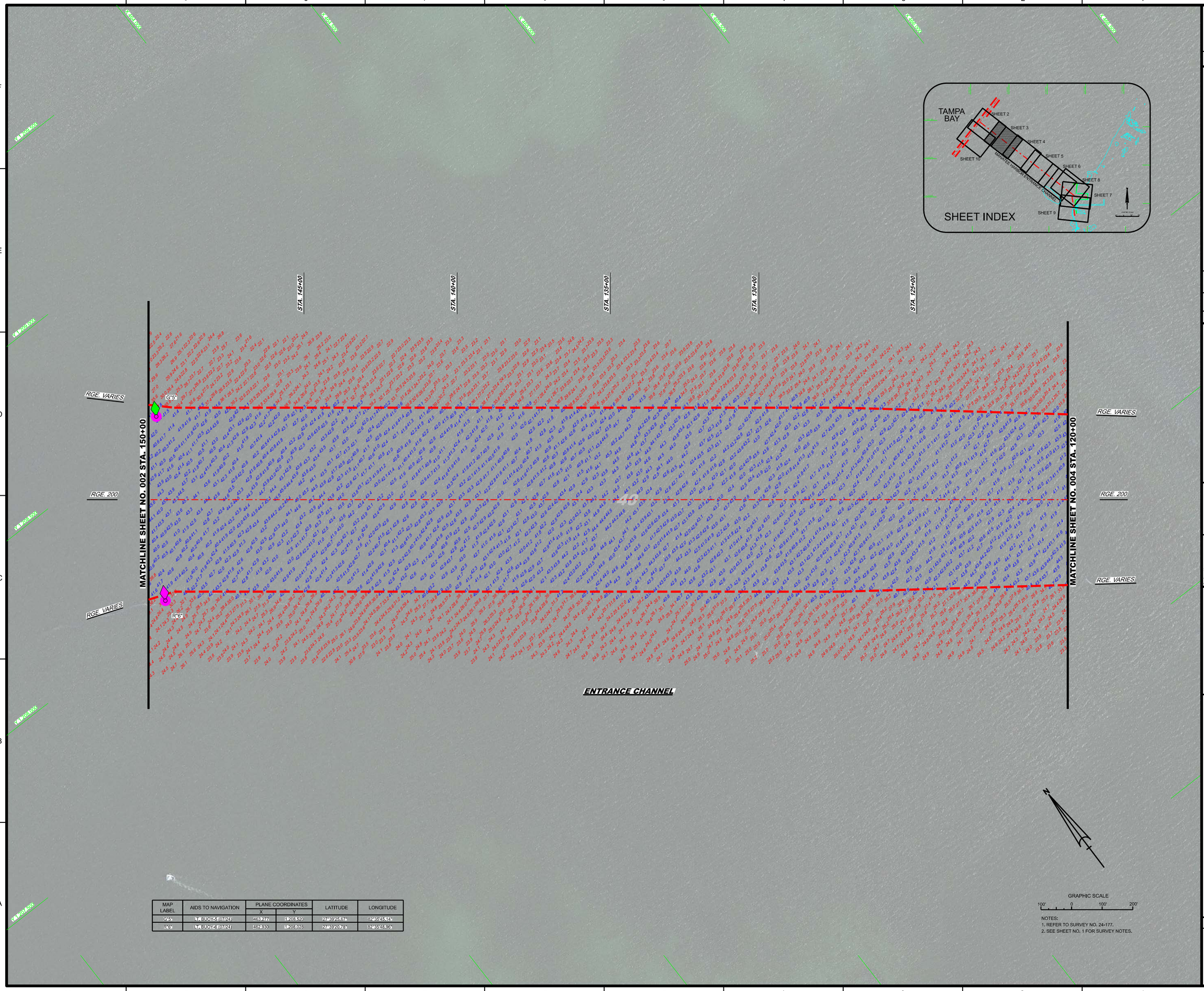
STA. 150+00 THRU STA. 173+79 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

2

SHEET 2 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G"5"	LT. BUOY-5 (07/24)	463.277	1,208.520	27°38'25.67"	82°34'45.14"
R"6"	LT. BUOY-4 (07/24)	462.930	1,208.078	27°38'26.78"	82°34'48.96"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
N		A-N	ABCD

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

Drafted by: GMR
Designed by: WRM
Drawn by: WRM
Rev. No. - - -
Date: JUL 2024

Reference files:
24-177-C-G-E-RPCS.DGN
MANATEE HARBOR_CC2019_MCCF_AEC_19174.DGN
24-177-VA-SOUN.DGN
24-177-VAINDEX.DGN
24-177-VAAN1.DGN

Filename: 24-177-VH-003.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY24
40-FOOT PROJECT

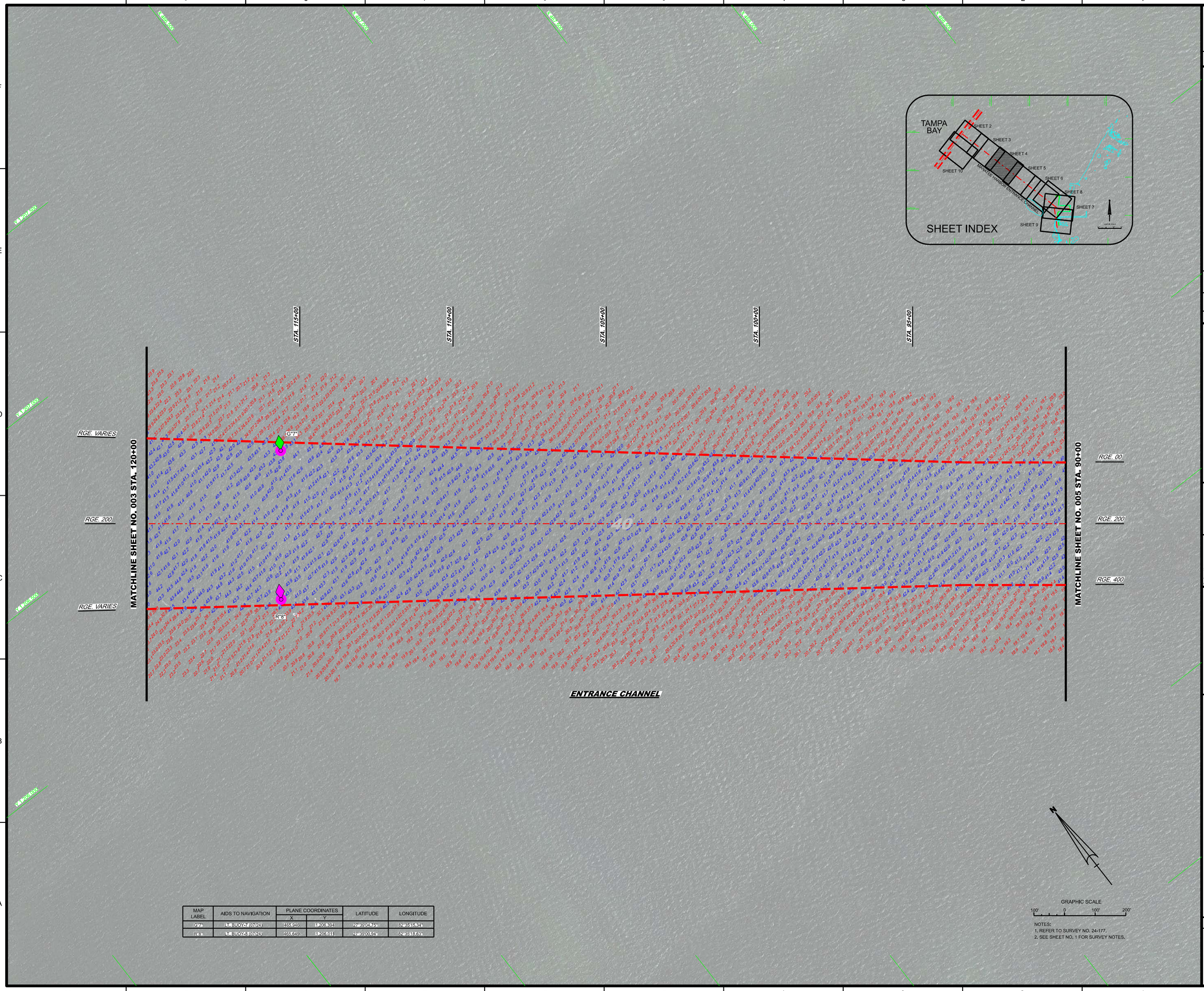
STA. 120+00 THRU STA. 150+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

3

SHEET 3 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G"7"	Lt. BUOY-7 (07/24)	465,946	1,206,394	27°39'04.75"	82°35'15.34"
R"8"	Lt. BUOY-8 (07/24)	465,649	1,206,011	27°39'00.94"	82°35'18.63"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
		A-N	ABCD

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

Checked by: GMR
Drawing by: WRM
Designed by: WRM
Rev. No.: - - -
Dates: JUL 2024

24-177-A-B-SHEET.DGN
MANATEE-HARBOR-CH2019_MCCF_AEC_19174.DGN
24-177-A-SOUN.DGN
24-177-A-INDEX.DGN
24-177-A-NAV.DGN
Reference files:
24-177-VHA004.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

HYDROGRAPHIC EXAM EXAM SURVEY FY24
40-FOOT PROJECT

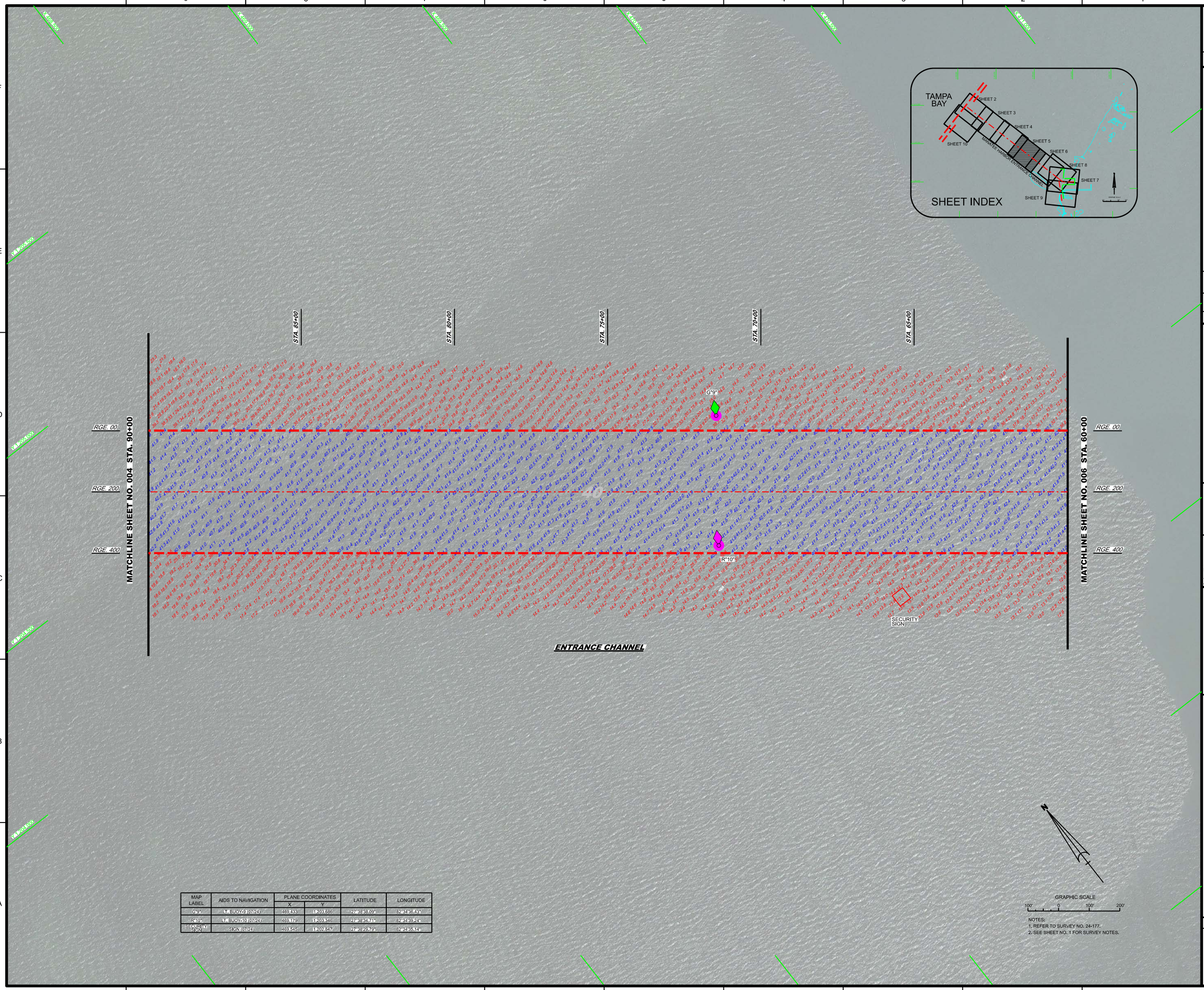
STA. 90+00 THRU STA. 120+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

4

SHEET 4 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
G"9"	LT. BUOY-9 (07/24)	469,433	1,203,686	27°38'38.09"	82°34'36.43"
R"10"	LT. BUOY-10 (07/24)	469,179	1,203,346	27°38'34.71"	82°34'39.24"
SECURITY SIGN	SIGN (07/24)	469,545	1,202,847	27°38'29.79"	82°34'35.14"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
		A-N	ABCD

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

Checked by: GMR
Designed by: WRM
DWN by: WRM
Rev. No. - -
Guest: JUL 2024

Reference files:
24-177-S-HS-PROF.DGN
MANATEE-HARBOR-2019_MCOF_AEC_19174.DGN
24-177-V-SOUN.DGN
24-177-V-INDEX.DGN
24-177-V-NAV.DGN

24-177-V-H-005.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY24
40-FOOT PROJECT

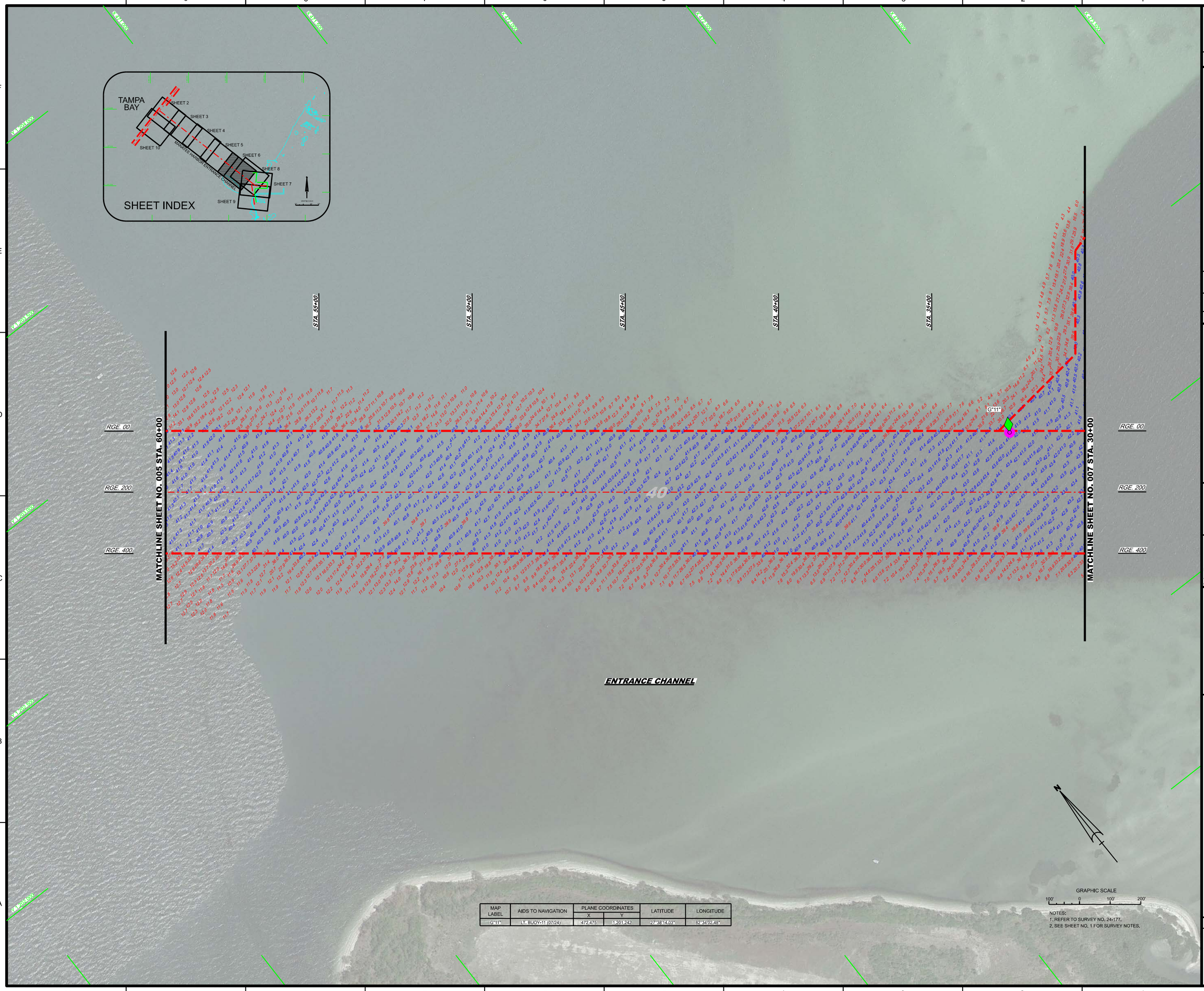
STA. 60+00 THRU STA. 90+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

5

SHEET 5 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G"11"	LT. BUOY-11 (07/24)	472,475	1,201,242	27°38'14.03"	82°34'02.48"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
		A-N	ABCD

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

Graphic: GMR
Checked by: WRM
Drawn by: WRM
Rev. No. - - -
Dates: JUL 2024

24-177-S-HYDRO.DGN
MANATEE-HARBOR-2019_MCOF_AEC_19174.DGN
24-177-VASDUN.DGN
24-177-VINDEX.DGN
24-177-VNAV.DGN
Reference files:

24-177-VH006.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

HYDROGRAPHIC EXAM EXAM SURVEY FY24
40-FOOT PROJECT

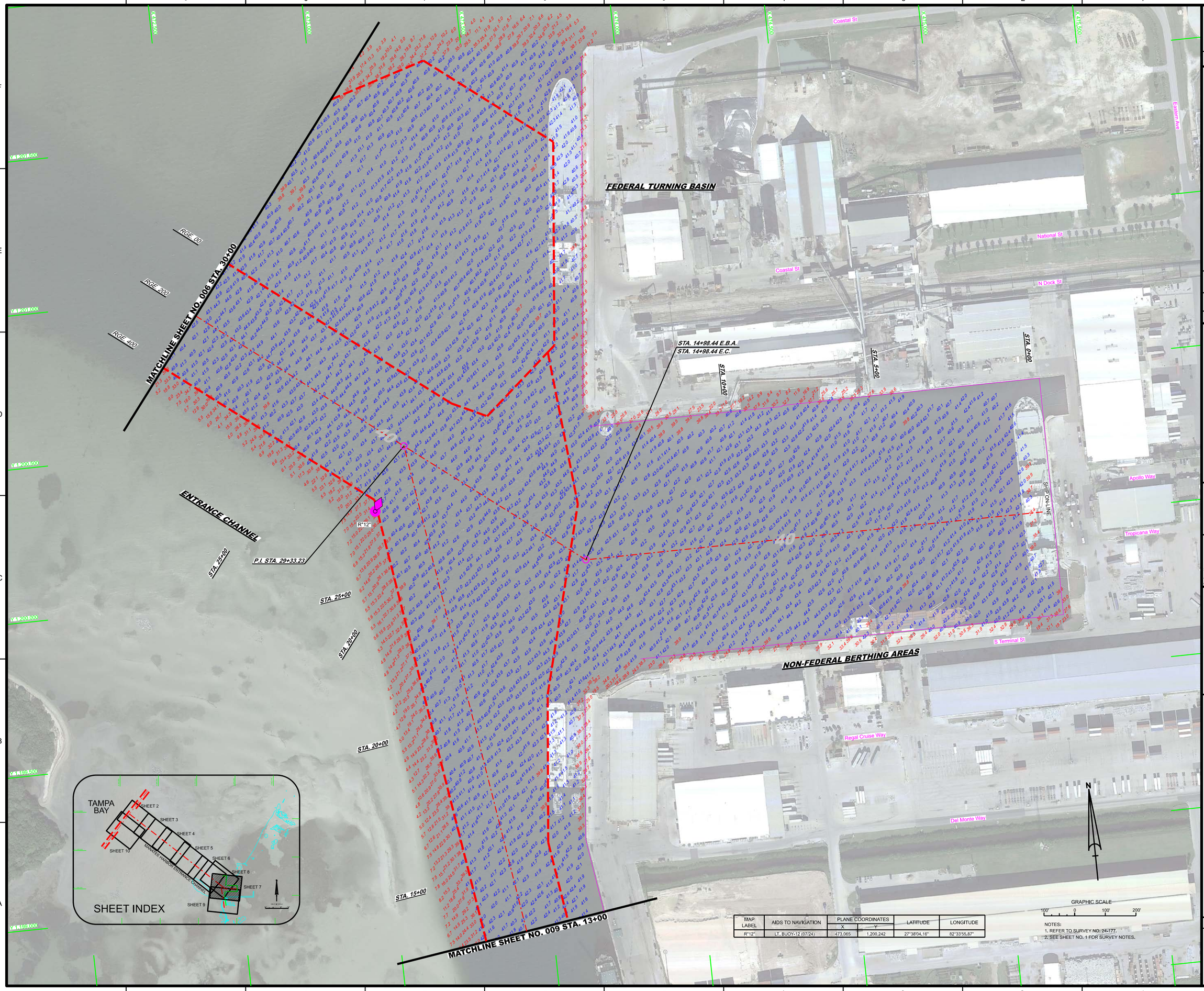
STA. 30+00 THRU STA. 60+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

6

SHEET 6 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
R"12"	LT. BUOY-12 (07/24)	473,065	1,200,242	27°38'04.16"	82°33'55.87"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
		A-N	ABCD

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

Cad by: GMR
Designed by: WRM
Drwn by: WRM
Rev. No. - -
Date: JUL 2024

Reference files:
24-177-G-AB-RPCD.DGN
MANATEE-HARBOR-20119_MCOF_AEC_19174.DGN
MANATEE_FENDER LINES.DGN
24-177-V-SOUN.DGN
24-177-V-MOD.DGN
24-177-V-ANNO.DGN

24-177-VH-007.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

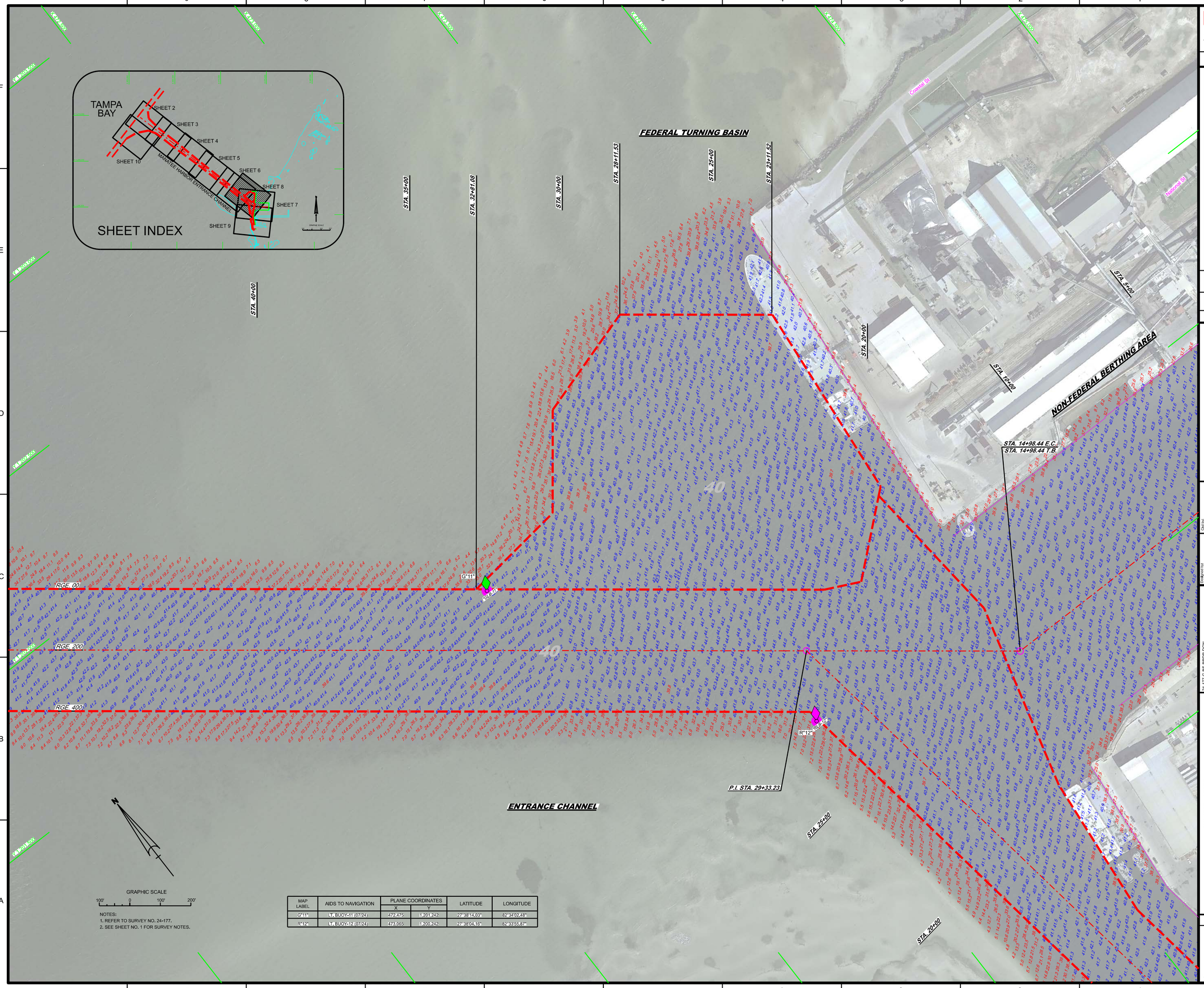
HYDROGRAPHIC EXAM SURVEY FY24
40-FOOT PROJECT
STA. 0+00 TURNING BASIN THRU STA. 30+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

7

SHEET 7 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G"11"	LT. BUOY-11 (07/24)	472,475	1,201,242	27°38'14.03"	82°34'02.48"
R"12"	LT. BUOY-12 (07/24)	473,065	1,200,242	27°38'04.16"	82°33'55.87"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
N		A-N	ABCD

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

Designed by: WRM
Drawn by: WRM
Checked by: GMR
Rev. No. ---
Dates: JUL 2024

24-177-C-B5-B6-D-DGN
PR_24-177-C-B5-B6-D_20241019_MCCF_AEC_19174.DGN
MANTEE_FENDER LINES.DGN
24-177-A-SOUN.DGN
24-177-A-NAVIGATION
24-177-A-NAV-OGR.DGN

Reference files:
24-177-VHa008.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

HYDROGRAPHIC EXAM EXAM SURVEY FY24
40-FOOT PROJECT
FEDERAL TURNING BASIN
PLAN

Scale: AS SHOWN

Drawing no.

8

SHEET 8 OF 10

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description
N		A-N	ABCD

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

Checked by: GMR
Drafted by: WRM
DWN by: WRM
Rev. No.
Dates: JUL 2024

24-177-C-B-SHOR.DGN
MANATEE_HARBOR_20231019_MCCF_AEC_19174.DGN
MANATEE_FENDER LINES.DGN
24-177-V-SOUN.DGN
24-177-V-MAP.DGN
24-177-V-ANN-V.DGN

Reference files:
24-177-V-H-009.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

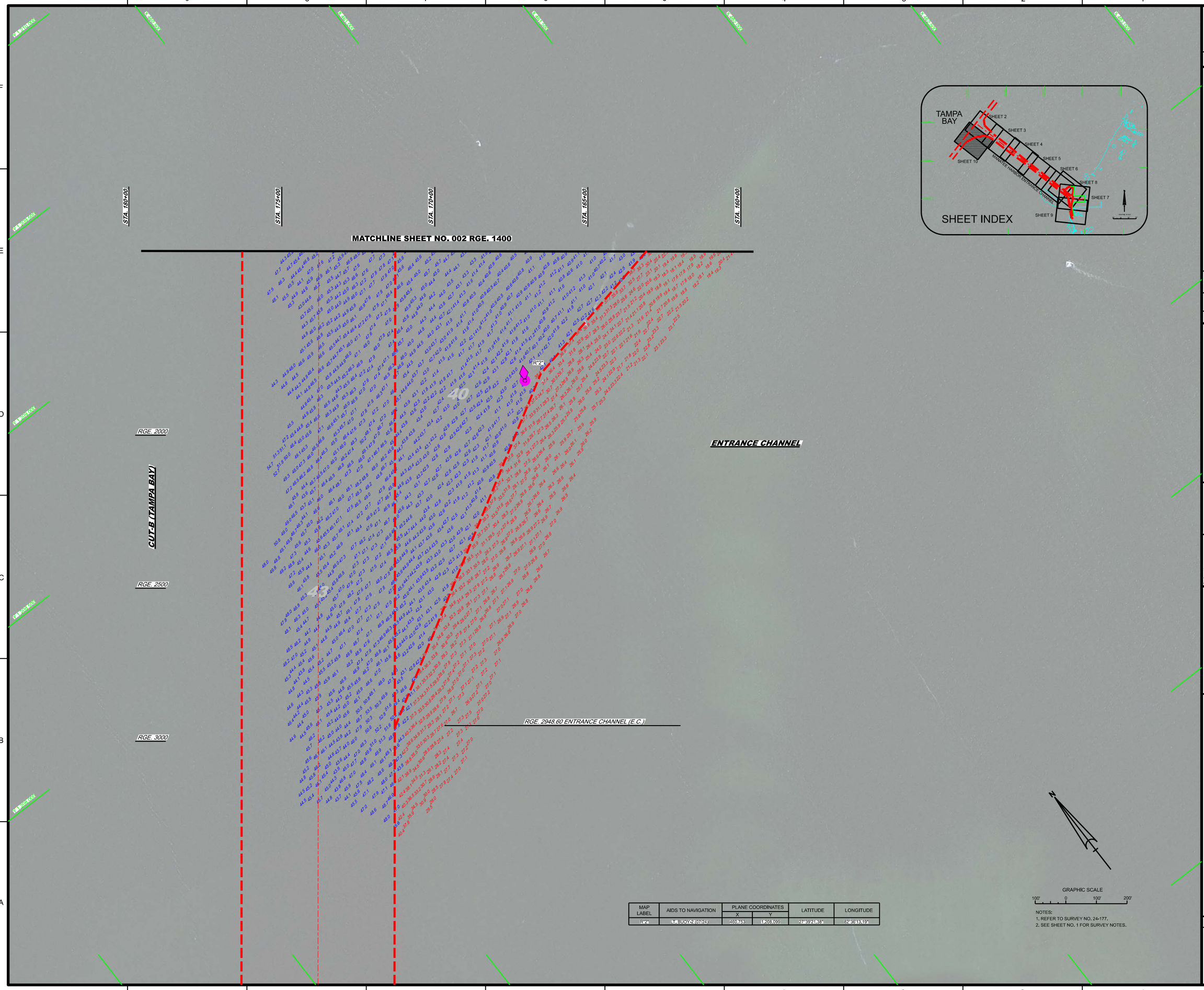
HYDROGRAPHIC EXAM EXAM SURVEY FY24
40-FOOT PROJECT
SOUTH BERTHING AREA
PLAN

Scale: AS SHOWN

Drawing no.

9

SHEET 9 OF 10



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R"2"	LT. BUOY-2 (07/24)	460,753	1,208,099	27°39'21.38"	82°36'13.19"

NOTES:
1. REFER TO SURVEY NO. 24-177.
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	Description

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

Drawn by: GMR
Designed by: WRM
DWN by: WRM
Rev. No. : - -
Date: JUL 2024

24-177-S-4-BRDR.DGN
MANATEE HARBOR-OC2019_MCCF_AEC_19174.DGN
TAMPA HARBOR-CNGMCF.DGN
24-177-VSOUN.DGN
24-177-VANG.DGN
24-177-VANU.DGN

Reference files:
24-177-VH010.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY24
40-FOOT PROJECT

ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

10

SHEET 10 OF 10