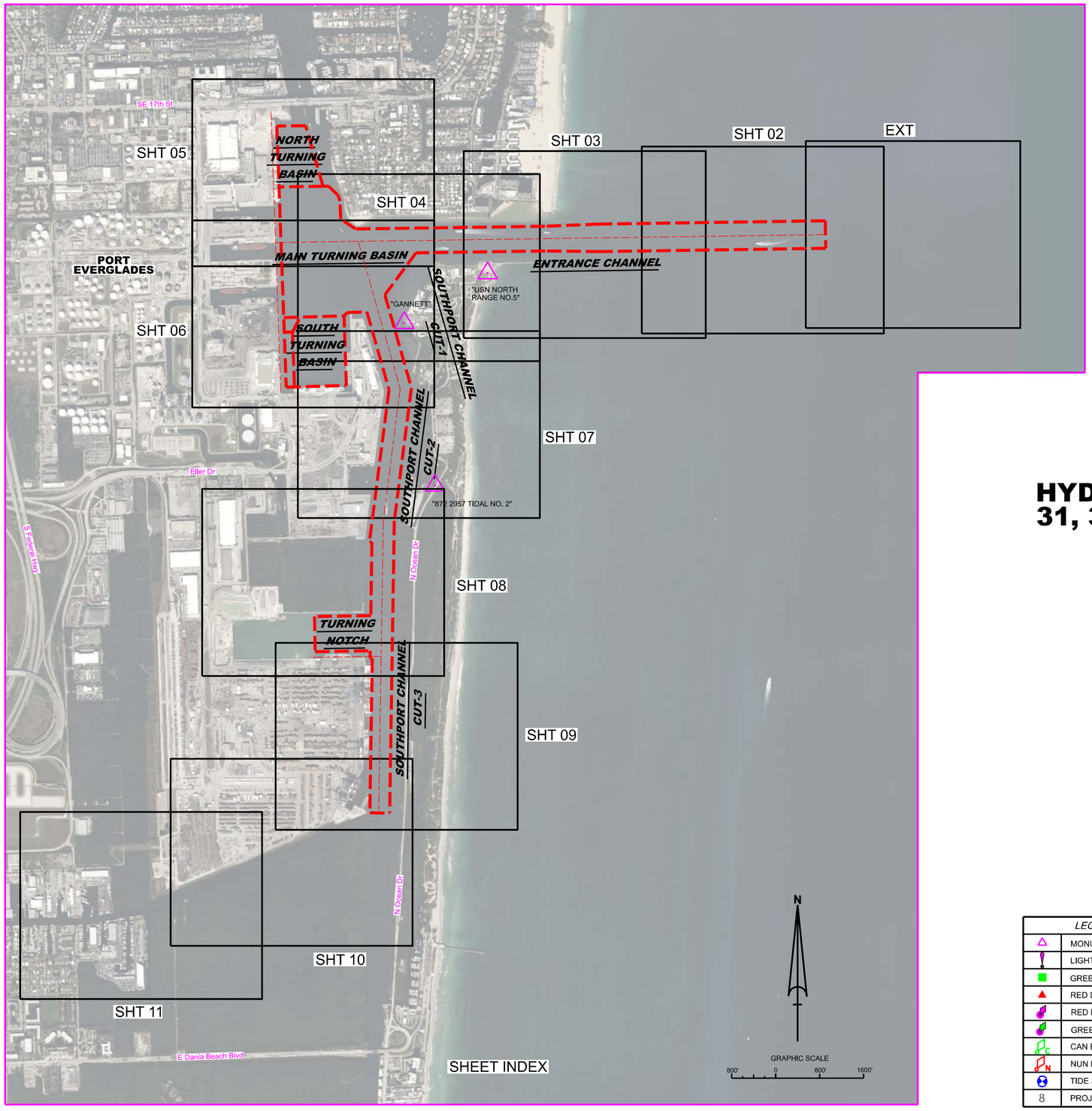
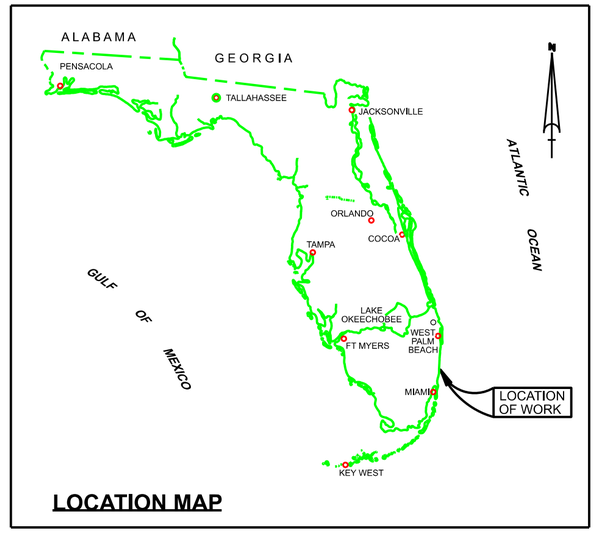




LOCATION MAP

PORT EVERGLADES HARBOR
BROWARD COUNTY, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY23
31, 36, 37, 42 AND 45-FOOT PROJECT

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

SURVEY NOTES

1. REFER TO SURVEY NO. 23-159.
2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO THE NOAA REPORTED MEAN LOWER LOW WATER (MLLW) TIDAL DATUM, 1983-2001 EPOCH.
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEEDED BY A (+) SIGN.
4. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83), BASED ON THE NOAA NATIONAL SPATIAL REFERENCE SYSTEM (NSRS).
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 "USN NORTH RANGE 2 NO. 5" (PID: CS4034)

   TIDE STAFF SET FROM MONUMENT "872 2957 TIDAL 2" (PID: AD5884)
7. DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MEAN LOWER LOW WATER (MLLW). TIDAL EPOCH 1983-2001, AS PUBLISHED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA). NOAA'S VDATUM MODEL, AND PUBLISHED TIDE STATION DATA, WERE USED TO GENERATE A HYPACK KINEMATIC TIDE DATUM (KTD) MODEL. THIS KTD MODEL, BEING A COMBINATION OF THOSE TWO SOURCES, CANNOT BE CONSIDERED EQUIVALENT TO THE VDATUM MODEL BECAUSE OF POSSIBLE ADDITIONS OR EDITS THERETO. DO NOT USE VDATUM IN PLACE OF THE KTD FILE. THE KTD MODEL USED FOR THIS SURVEY IS:

   "BROWARD-MIAMIDADE-MONROE-COLLIER_2023 05 15.KTD"

   TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING THE KTD FILE REFERENCED ABOVE, AND CALIBRATED TO THE PUBLISHED MLLW HEIGHTS OF THE BENCHMARK ASSOCIATED WITH THE TIDE GAGE SITE SPECIFIED BELOW:

   NOAA TIDAL STATION 872-2957 FOR THE ENTIRE PROJECT (PID: AD5884)
8. VERTICAL MEASUREMENTS WERE MADE USING AN EDGETECH 6205 MULTI-PHASE ECHOSOUNDER AND AN ECHOTRAC E20 SINGLE-BEAM TRANSDUCER OPERATING AT 28 AND 200 KHZ. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SB-48	30 MAY 2023	TURNING BASIN, SP1, BERTHING AREAS
SB-48	13 JUN 2023	ENTRANCE CHANNEL
SB-48	14 JUN 2023	SP2, SP3, TURNING NOTCH

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.
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.

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

Dsn'd by: CMR
Dwn by: VRM
Chk'd by: VRM
Proj. No. MW23EFA-XXA-XXXX
Dated: JUN 2023

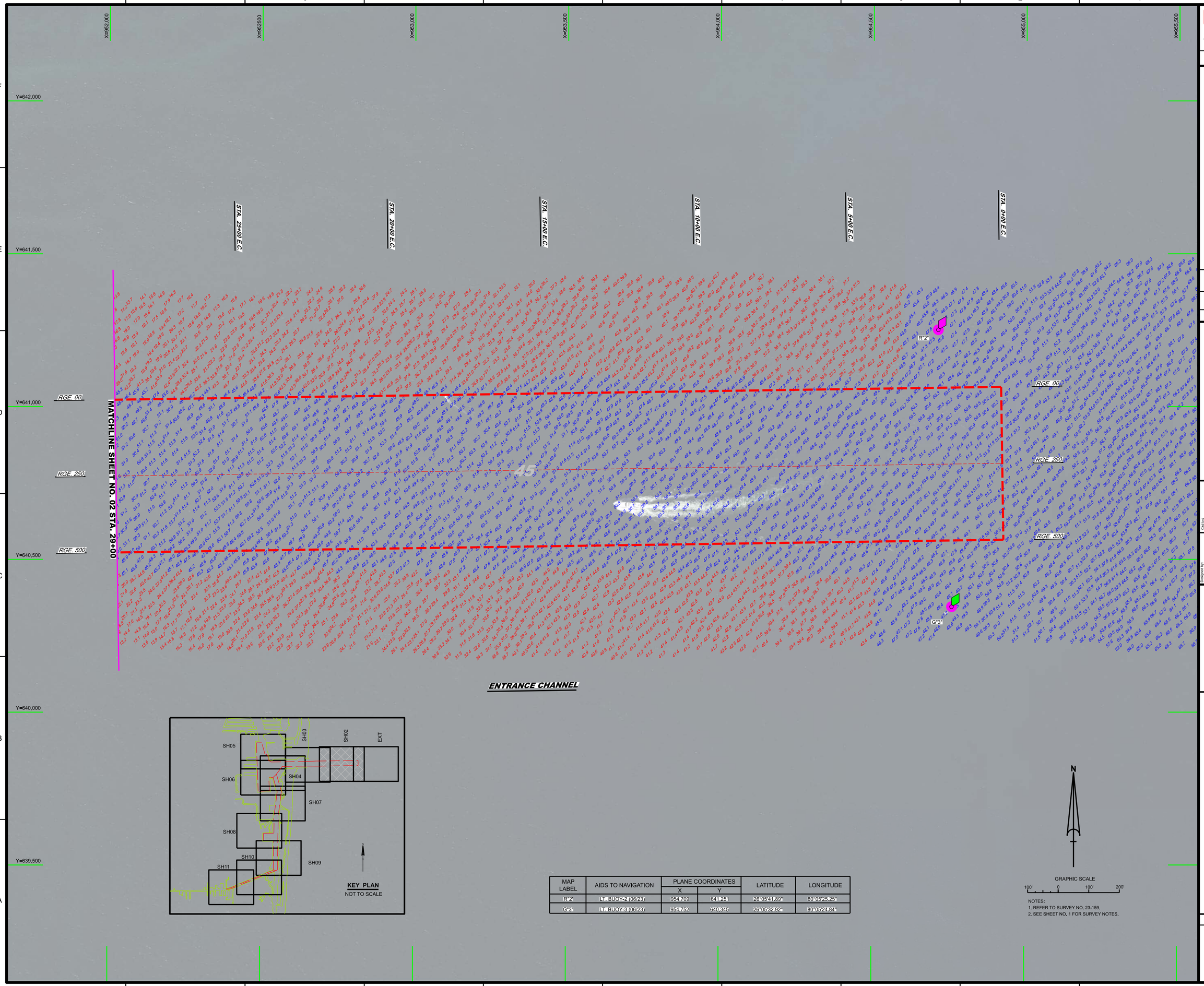
23-159-HNDX.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159C4BS-BRDR.DGN
Reference files
23-159-VH001.DGN
File name:

PORT EVERGLADES HARBOR, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT
INDEX, LOCATION AND VICINITY
MAP

Scale: AS SHOWN

Drawing no.
1 / 9

SHEET 01 OF 11



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R"2"	LT. BUOY-2 (06/23)	954,709	641,251	26°05'41.89"	80°05'25.25"
G"3"	LT. BUOY-3 (06/23)	954,752	640,345	26°05'32.92"	80°05'24.84"

GRAPHIC SCALE
100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 23-159.
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

Cad by: CMR
Cad Layout by: WRM
DWN by: WRM
Rev. No. W912EP-XX-X-XXXX
Dated: JUN 2023

PEH12-G-HDPKEYD.DGN
23-159-VAERIAL.DGN
23-159-VSURVEY_LAL.DGN
23-159-VSOUNDING_LALCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
Maintenance Files:
23-159-VH002.DGN
File name:

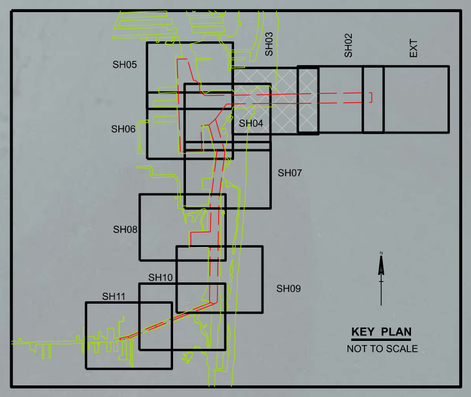
PORT EVERGLADES HARBOR, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT
STA. 0+00 THRU STA. 29+00 ENTRANCE CHANNEL
PLAN

Scale: AS SHOWN

Drawing no.
2 / 9

SHEET 02 OF 11

X=948,600
X=949,000
X=949,500
X=950,000
X=950,500
X=951,000
X=951,500
X=952,000
Y=642,000
Y=641,500
Y=641,000
Y=640,500
Y=640,000
Y=639,500
STA. 55+00 E.C.
STA. 51+00 E.C.
STA. 50+00 E.C.
STA. 45+00 E.C.
STA. 41+00 E.C.
STA. 40+00 E.C.
STA. 35+00 E.C.
STA. 30+00 E.C.
RGE. 25
RGE. 250
RGE. 475
RGE. VARIES
RGE. 00
RGE. 250
RGE. 500
R"4"
G"5"
MATCHLINE SHEET NO. 04 STA. 60+00
MATCHLINE SHEET NO. 02 STA. 29+00
ENTRANCE CHANNEL



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
R"4"	LT-4 (06/23)	950,858	641,092	26°05'40.58"	80°06'07.50"
G"5"	LT-5 (06/23)	950,739	640,364	26°05'33.38"	80°06'08.87"

N

GRAPHIC SCALE
100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 23-159.
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

Designed by: MRM
Drawn by: MRM
Checked by: GMR
Proj. No.: W912EP-XX-X-XXXX
Dated: JUN 2023

PEH12-G-KPKEYD.DGN
23-159-A-AERIAL.DGN
23-159-A-SOUNDING.DGN
23-159-A-SOUNDALLCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159-C-BR-BRDR.DGN
Reference files:

23-159-V-VH003.DGN
File name:

PORT EVERGLADES HARBOR, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT

STA. 29+00 THRU STA. 60+00 ENTRANCE CHANNEL

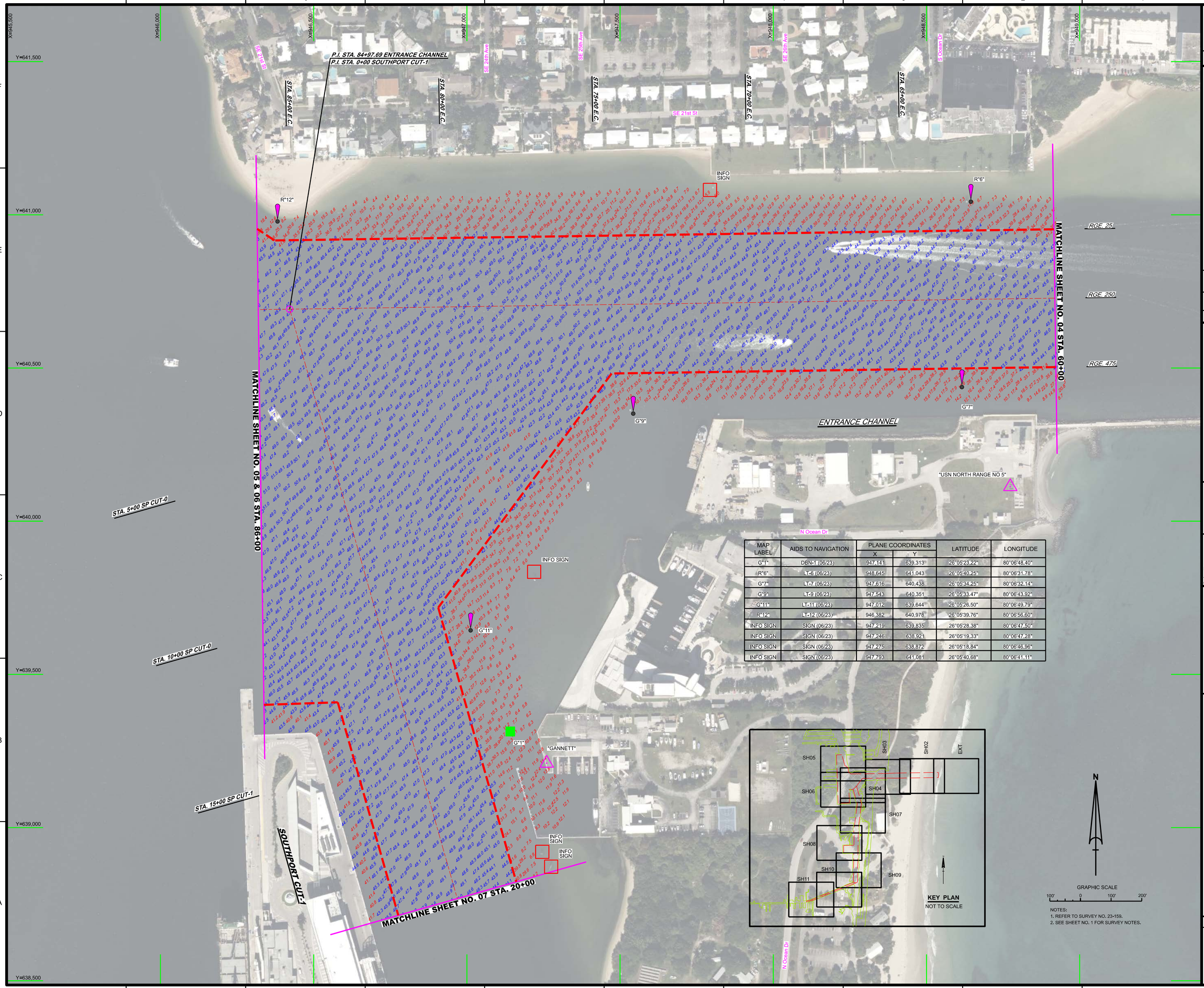
PLAN

Scale: AS SHOWN

Drawing no.

3 / 9

SHEET 03 OF 11



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
G"1"	DBN-1 (06/23)	947,141	639,313'	26°05'23.22"	80°06'48.40"
R"6"	LT-6 (06/23)	948,645	641,043	26°05'40.25"	80°06'31.78"
G"7"	LT-7 (06/23)	947,616	640,438	26°05'34.25"	80°06'32.14"
G"9"	LT-9 (06/23)	947,543	640,351	26°05'33.47"	80°06'43.92"
G"11"	LT-11 (06/23)	947,012	639,644	26°05'26.50"	80°06'49.79"
R"12"	LT-12 (06/23)	946,382	640,978	26°05'39.76"	80°06'56.60"
INFO SIGN	SIGN (06/23)	947,219	639,835	26°05'28.38"	80°06'47.50"
INFO SIGN	SIGN (06/23)	947,246	638,921	26°05'19.33"	80°06'47.28"
INFO SIGN	SIGN (06/23)	947,275	638,872	26°05'18.84"	80°06'46.96"
INFO SIGN	SIGN (06/23)	947,793	641,081	26°05'40.68"	80°06'41.11"

GRAPHIC SCALE
100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 23-159.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

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

PORT EVERGLADES HARBOR, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT
STA. 0+00 THRU STA. 84+97.69 ENTRANCE CHANNEL &
STA. 0+00 THRU STA. 86+00 SOUTHPORT CUT-1
PLAN

Scale: AS SHOWN

Drawing no.
4 / 9

SHEET 04 OF 11

Drawn by: GMR
Designed by: WRM
DWN by: WRM
Rev. No.: W912ER-XX-XX-XXXX
Dates: JUN 2023

PE#12-G-4PKEYD.DGN
23-159-XAERIAL.DGN
23-159-XBOA_ALL.DGN
23-159-XSOU_ALLCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCF.DGN
25-159-DAR-BRKR.DGN
Reference files:
25-159-VH004.DGN
File name:

MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
G"29"	LT-29 (06/23)	945,910	641,773	26°05'47.66"	80°07'01.72"
R"30"	LT. BUOY-30 (06/23)	945,746	641,704	26°05'46.99"	80°07'03.53"
INFO SIGN	SIGN (06/23)	945,867	642,347	26°05'53.35"	80°07'02.14"

NOTES:
1. REFER TO SURVEY NO. 23-159.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

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

Designed by: WRM
Ckd by: GMR
DWN by: WRM
Inv. No. W912EP-XX-X-XXXX
Dated: JUN 2023

Reference files:
PEH12-G-KPKEYD.DGN
23-159-V-NAV.DGN
23-159-V-SOUN_ALLCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159-G-BS-BRDR.DGN

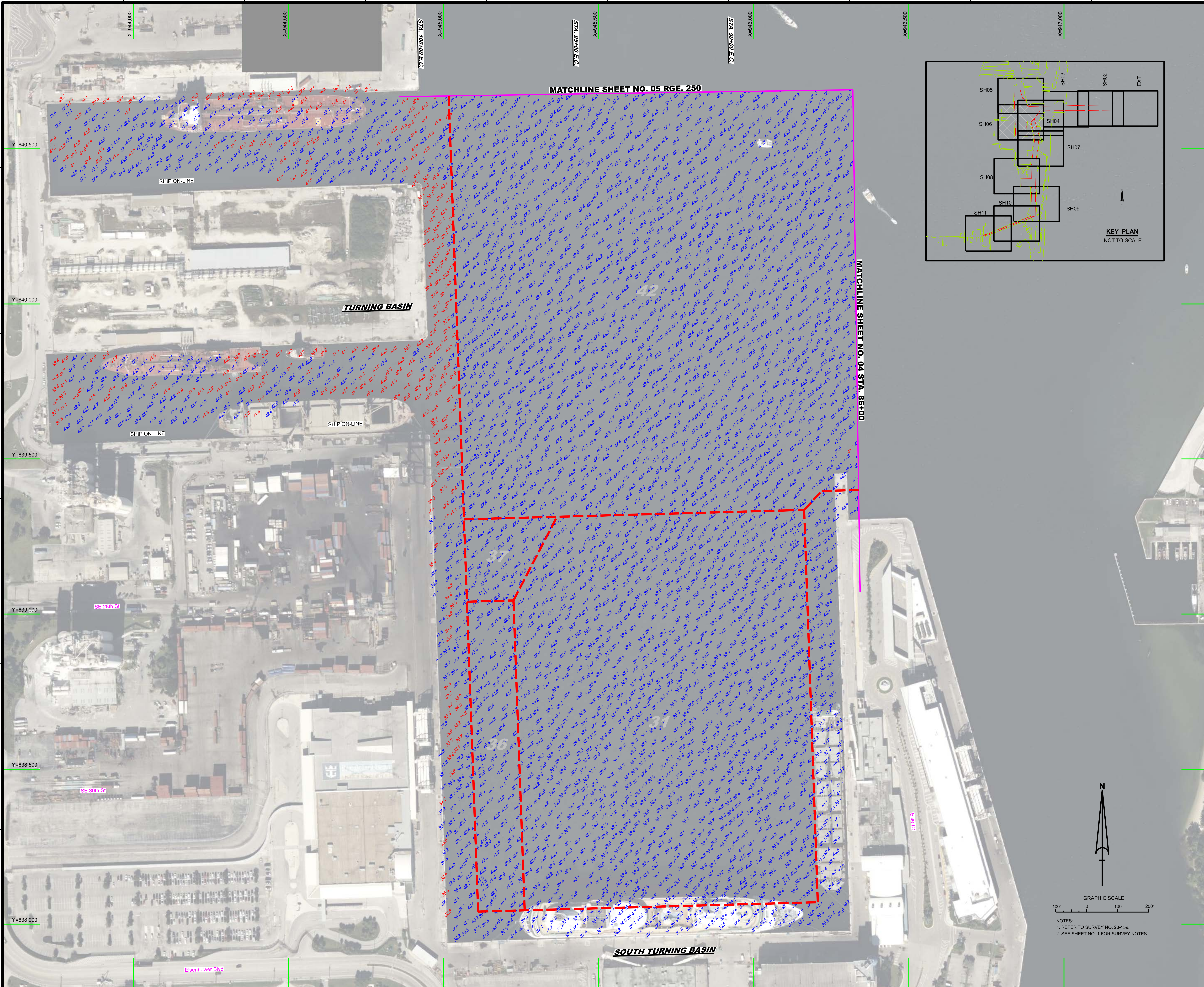
File name: 23-159-VH-005.DGN

PORT EVERGLADES HARBOR, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT
STA. 86+00 THRU STA. 100+00 ENTRANCE CHANNEL/TURNING BASIN
PLAN

Scale: AS SHOWN

Drawing no.
5 / 9

SHEET 05 OF 11



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

Designed by: WRM
DWN by: WRM
Ckd by: GMR
Inv. No. W912EP-XX-X-XXXX
Dated: JUN 2023

Reference files:
PEH12-G-KPKEYD.DGN
23-159-V-AERIAL.DGN
23-159-V-SOUN_ALLCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159-G-BS-BRDR.DGN

File name: 23-159-VH-006.DGN

PORT EVERGLADES HARBOR, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT

STA. 86+00 THRU STA. 100+00 ENTRANCE CHANNEL / TURNING BASIN AND SOUTHERN TURNING BASIN

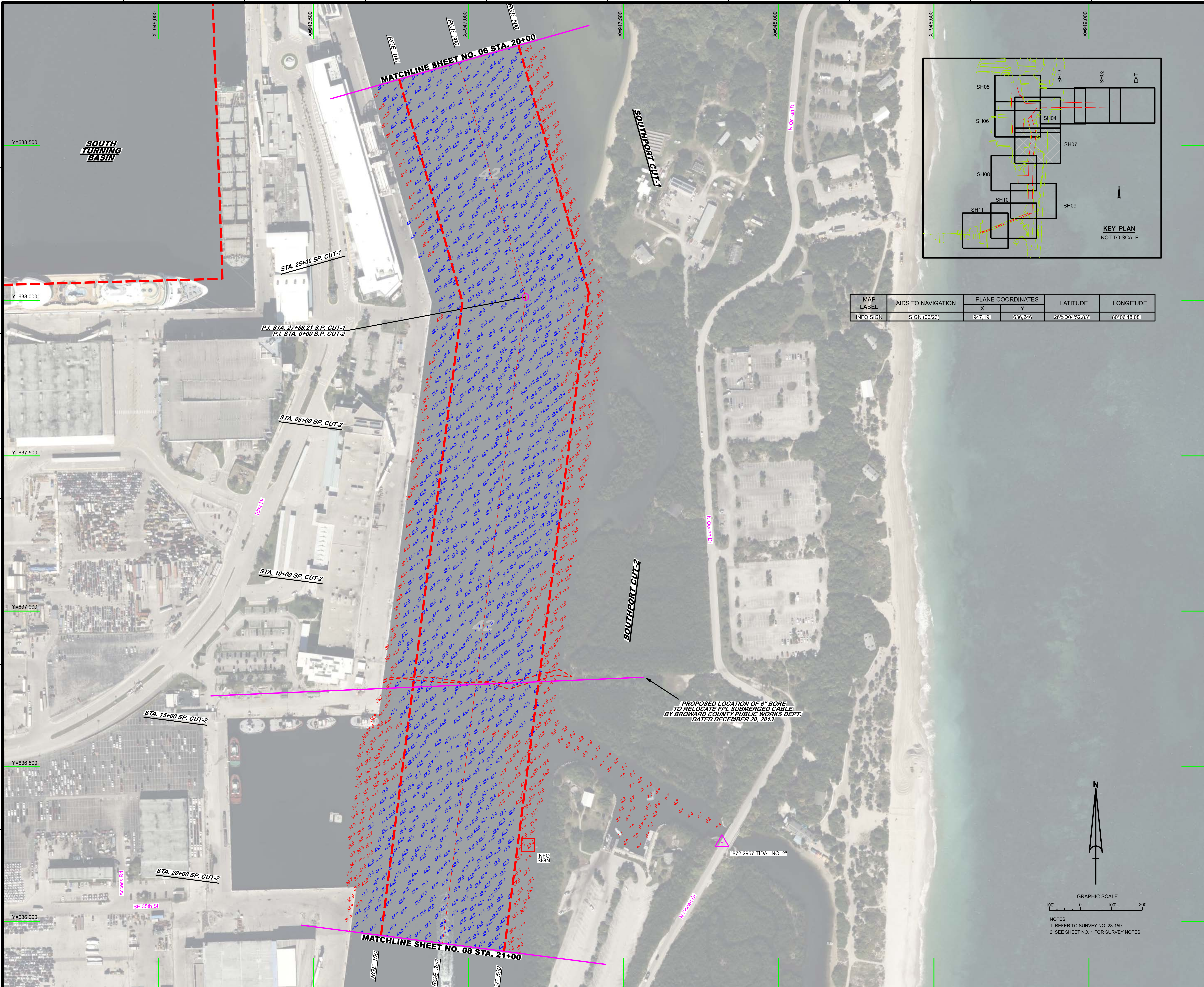
PLAN

Scale: AS SHOWN

Drawing no.

6 / 9

SHEET 06 OF 11



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
INFO SIGN	SIGN (06/23)	947,191	636,246	26%D04'52.83"	80°06'48.08"

NOTES:
1. REFER TO SURVEY NO. 23-159.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

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

Designed by: WRM
Ckd by: GMR
DWN by: WRM
Inv. No. W912EP-XX-X-XXXX
Dated: JUN 2023

Reference files:
PEH12-G-KPKEYD.DGN
23-159-V-AERIAL.DGN
23-159-V-NAV.DGN
23-159-V-UTIL.DGN
23-159-V-SOUN_ALLCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159-G-BS-BRDR.DGN

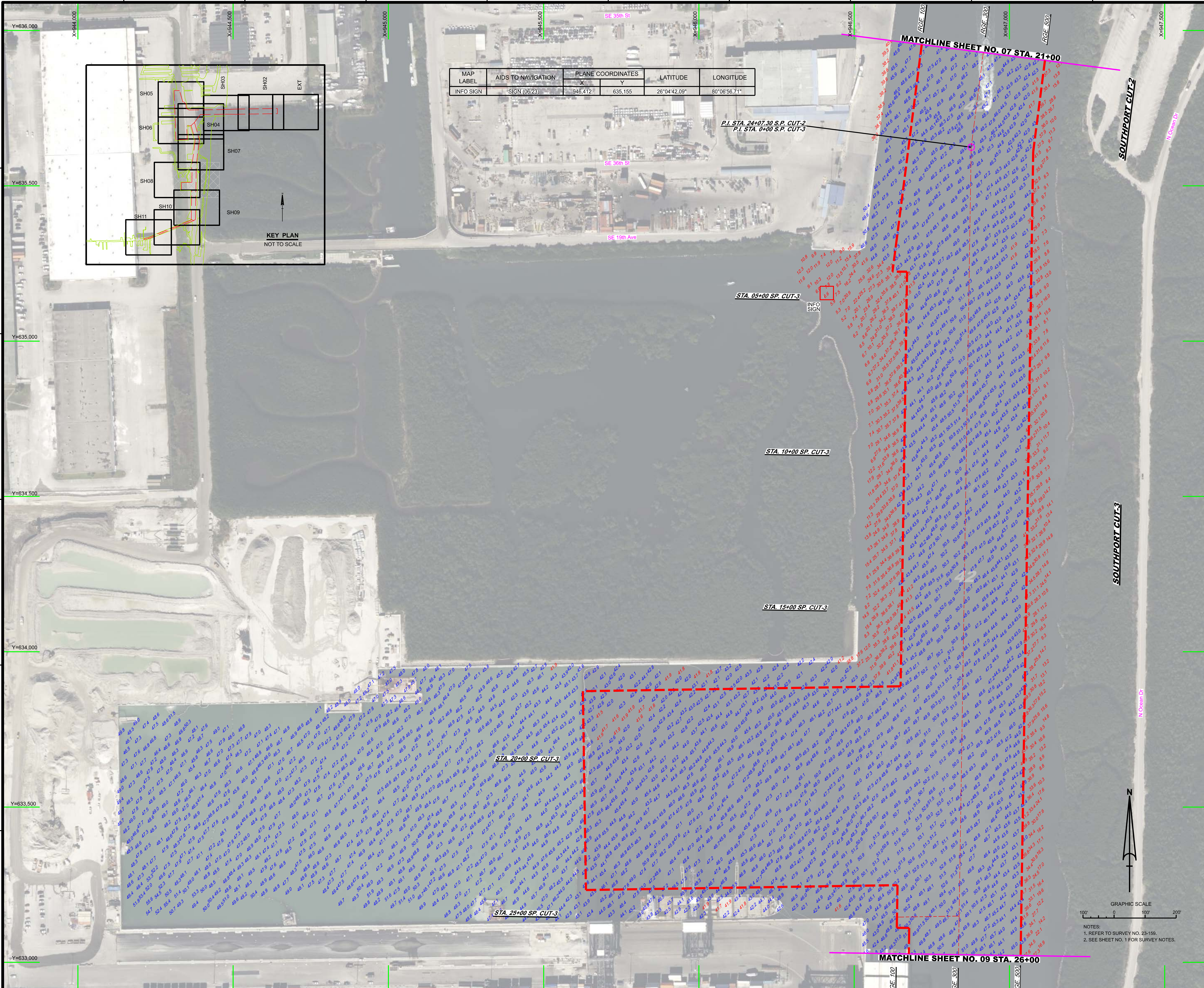
File name: 23-159-VH-007.DGN

PORT EVERGLADES HARBOR, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT
STA. 20+00 SOUTHPORT CUT-1 THRU STA. 21+00 SOUTHPORT CUT-2
PLAN

Scale: AS SHOWN

Drawing no.
7 / 9

SHEET 07 OF 11



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
		X	Y		
INFO SIGN	SIGN (06/23)	946,412	635,155	26°04'42.09"	80°06'56.71"

NOTES:
1. REFER TO SURVEY NO. 23-159.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

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

Designed by: WRM
Ckd by: GMR
DWN by: WRM
Inv. No. W912EP-XX-X-XXXX
Dated: JUN 2023

Reference files:
PEH12-G-KPKEYD.DGN
23-159-V-AERIAL.DGN
23-159-V-NAV.DGN
23-159-V-SOUN_ALLCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159-G-BS-BRDR.DGN

File name: 23-159-VH-008.DGN

PORT EVERGLADES HARBOR, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT

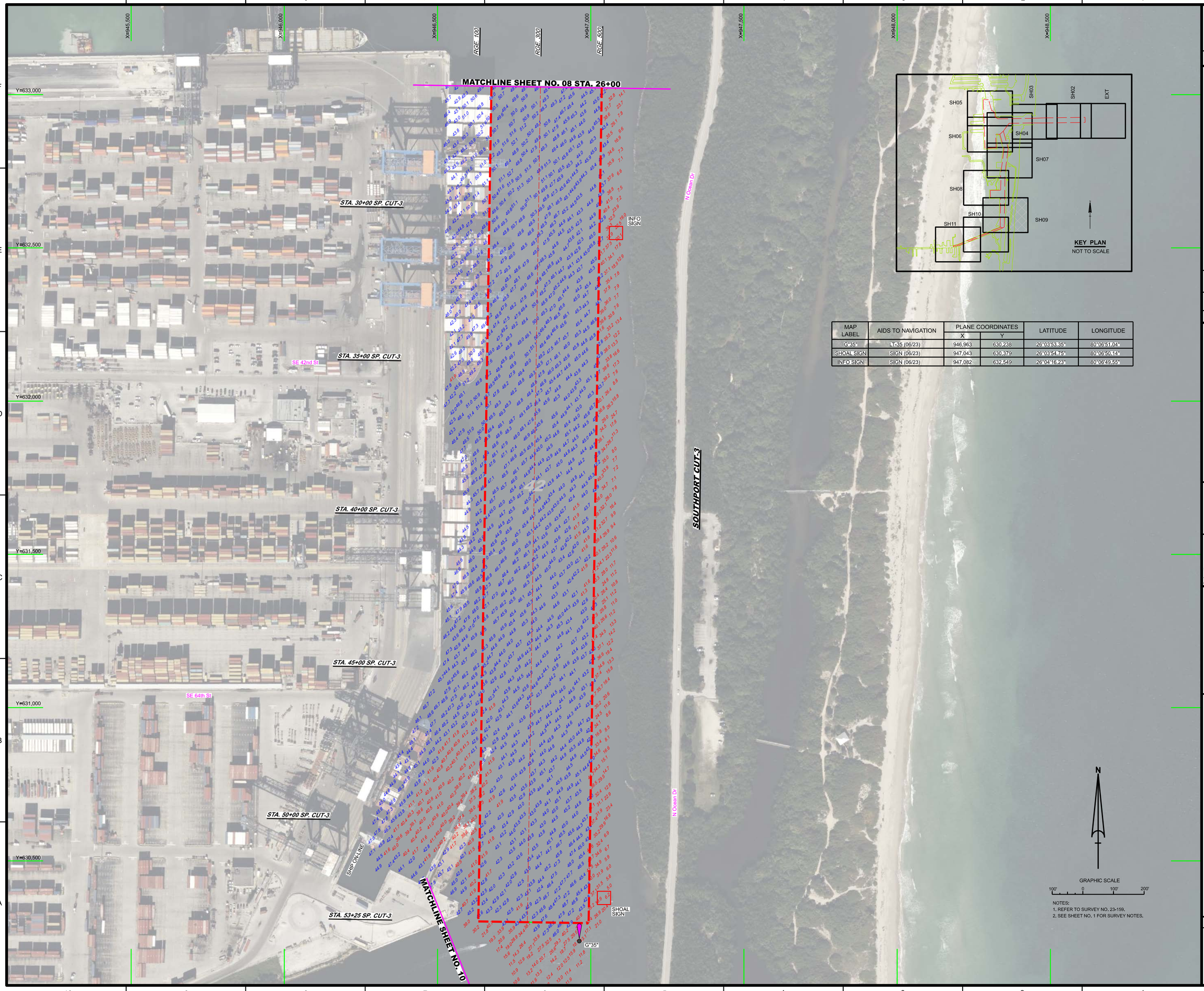
STA. 21+00 SOUTHPORT CUT-2 THRU STA. 26+00 COUTHPORT CUT-3

PLAN

Scale: AS SHOWN

Drawing no. 8 / 9

SHEET 08 OF 11



MAP LABEL	AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
G"35"	LT-35 (06/23)	946,963	630,238	26°03'53.35"	80°06'51.04"
SHOAL SIGN	SIGN (06/23)	947,043	630,379	26°03'54.75"	80°06'50.14"
INFO SIGN	SIGN (06/23)	947,082	632,549	26°04'16.23"	80°06'49.55"

NOTES:
1. REFER TO SURVEY NO. 23-159.
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

Dwn by: CMR
Chkd by: VRM
DWN by: VRM
Proj. No.: V912EP-XXX-XXXX
Dated: JUN 2023

XXXXXXXXXXXXXXXXXX.DGN
FEH12-02-KPKEYD.DGN
23-159-V-AERIAL.DGN
23-159-V-SOUNDING.DGN
23-159-V-SOUNDING_ALL_CUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159-V-SHEETS-BRDR.DGN
Maintenance Dredging
23-159-VH-009.DGN
Tide Control

PORT EVERGLADES HARBOR, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT

STA. 26+00 THRU STA. 53+65 SOUTHPORT CUT-3

PLAN

Scale: AS SHOWN

Drawing no.

9 / 9

SHEET 09 OF 11

NOTES:
1. REFER TO SURVEY NO. 23-159.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Description	Zone

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

Designed by: WRM
Ckd by: GMR
DWN by: WRM
Inv. No. W912EP-XX-X-XXXX
Dated: JUN 2023

Reference files:
PEH12-G-KPKEYD.DGN
23-159-V-AERIAL.DGN
23-159-V-SOUN_ALLCUTS.DGN
PORT EVERGLADES HARBOR-C-NGMCCF.DGN
23-159-G-BS-BRDR.DGN

File name: 23-159-VH-EC-EXT.DGN

PORT EVERGLADES HARBOR, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY23
31-FOOT THRU 45-FOOT PROJECT

STA. 0+00 THRU STA. -25+00 ENTRANCE CHANNEL

PLAN

Scale: AS SHOWN

Drawing no.
1

SHEET 01 OF 01