

# INTRACOASTAL WATERWAY CUTS IR-1 THRU IR-7 INDIAN RIVER COUNTY, FL HYDROGRAPHIC EXAM SURVEY FY13 12-FOOT PROJECT

- SURVEY NOTES**
- REFER TO SURVEY NO. 13-027.
  - 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 NAMED "INDIANRIVER-STUDIE MARTIN 08JULY2010.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 NORTH AMERICAN DATUM OF 1983 (NAD83).
  - ALL AZIMUTHS ARE GRID; RECKONED CLOCKWISE FROM SOUTH.
  - ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.

REFERENCE BASE LOCATED AT "NO 1 1989" (OPUS PID#AF3487)  
TIDE STAFF LOCATED FROM "NO 1 1989" (OPUS PID#AF3487)

- DEPTH'S 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 BENCHMARKS ASSOCIATED WITH THE TIDE GAGE SITES SPECIFIED BELOW:  
NOAA TIDAL STATION 872-2028, SEB ASTIAN, INDIAN RIVER, FLORIDA  
VERTICAL MEASUREMENTS WERE MADE USING A ROSS 836 SMART-SOUNDER OPERATING AT A DUAL-FREQUENCY OF 28/200 KHZ. ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SB-32	08-10 JAN 2013	IR-1 THRU IR-7

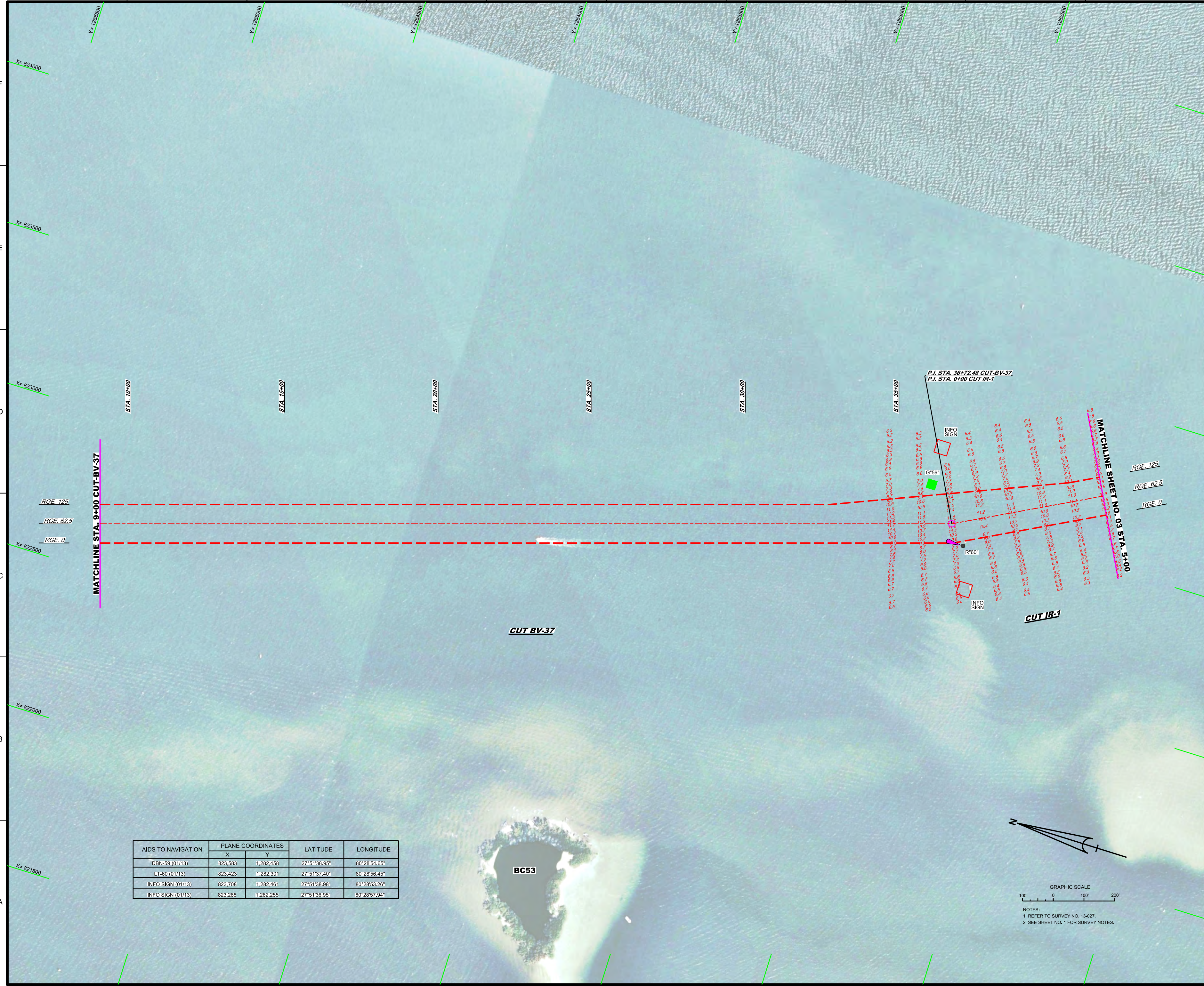
- AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED ABOVE AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME. THIS CHART IS SOLELY FOR THE DISTRIBUTION OF AVAILABLE DEPTHS AT THE TIME OF THE SURVEY AND IS NOT TO BE USED FOR NAVIGATION.
- 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, 1 JAN 02.

LEGEND	
	MONUMENT
	LIGHTED BEACON
	GREEN DAY BEACON
	RED DAY BEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	TIDE STAFF
	PROJECT DEPTH

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 GRL	CHECKED BY GRL	DESIGNED BY GRL	DATE 08/10/13	SCALE AS SHOWN
PROJECT TITLE INTRACOASTAL WATERWAY JACKSONVILLE TO MIAMI, FLORIDA INDIAN RIVER COUNTY EXAMINATION SURVEY FY12 12-FOOT PROJECT INDEX, LOCATION AND VICINITY MAP	DRAWING NO. <b>1/16</b>	SHEET 01 OF 40	DATE 08/10/13	SCALE AS SHOWN	DRAWING NO. <b>1/16</b>

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

X= 824000  
 Y= 1285000  
 X= 823500  
 Y= 1285000  
 X= 823000  
 Y= 1285000  
 X= 822500  
 Y= 1285000  
 X= 822000  
 Y= 1285000  
 X= 821500  
 Y= 1285000

STA. 10+00     STA. 15+00     STA. 20+00     STA. 25+00     STA. 30+00     STA. 35+00

P.I. STA. 36+72.48 CUT-BV-37  
 P.I. STA. 0+00 CUT-IR-1

G"59"

R"60"

INFO SIGN

INFO SIGN

MATCHLINE SHEET NO. 03 STA. 5+00

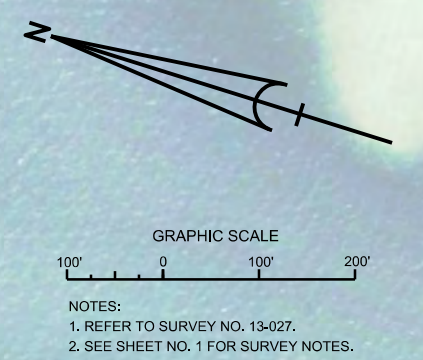
RGE. 125  
 RGE. 62.5  
 RGE. 0

CUT IR-1

CUT BV-37

BC53

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-59 (01/13)	823,583	1,282,458	27°51'38.95"	80°28'54.65"
LT-60 (01/13)	823,423	1,282,301	27°51'37.40"	80°28'56.45"
INFO SIGN (01/13)	823,708	1,282,461	27°51'38.98"	80°28'53.26"
INFO SIGN (01/13)	823,288	1,282,255	27°51'36.95"	80°28'57.94"



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

Designated by: WRM / WRM / WRM / WRM  
 Drawn by: WRM / WRM / WRM / WRM / WRM / WRM  
 File No.: WSP1255-03-000-000-000-000  
 Project: 13-027-0-00-000-000-000  
 Reference File: 13-027-0-00-000-000-000-000

INTRACOASTAL WATERWAY  
 JACKSONVILLE TO MIAMI, FLORIDA  
 INDIAN RIVER COUNTY  
**EXAMINATION SURVEY FY12**  
**12-FOOT PROJECT**  
 STA. 9+00 CUT BV-37 THRU STA. 5+00 CUT IR-1  
**PLAN**

Scale: AS SHOWN  
 Drawing no.  
**2/16**  
 SHEET 02 OF 40



No.	Symbol	Zone	Description

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

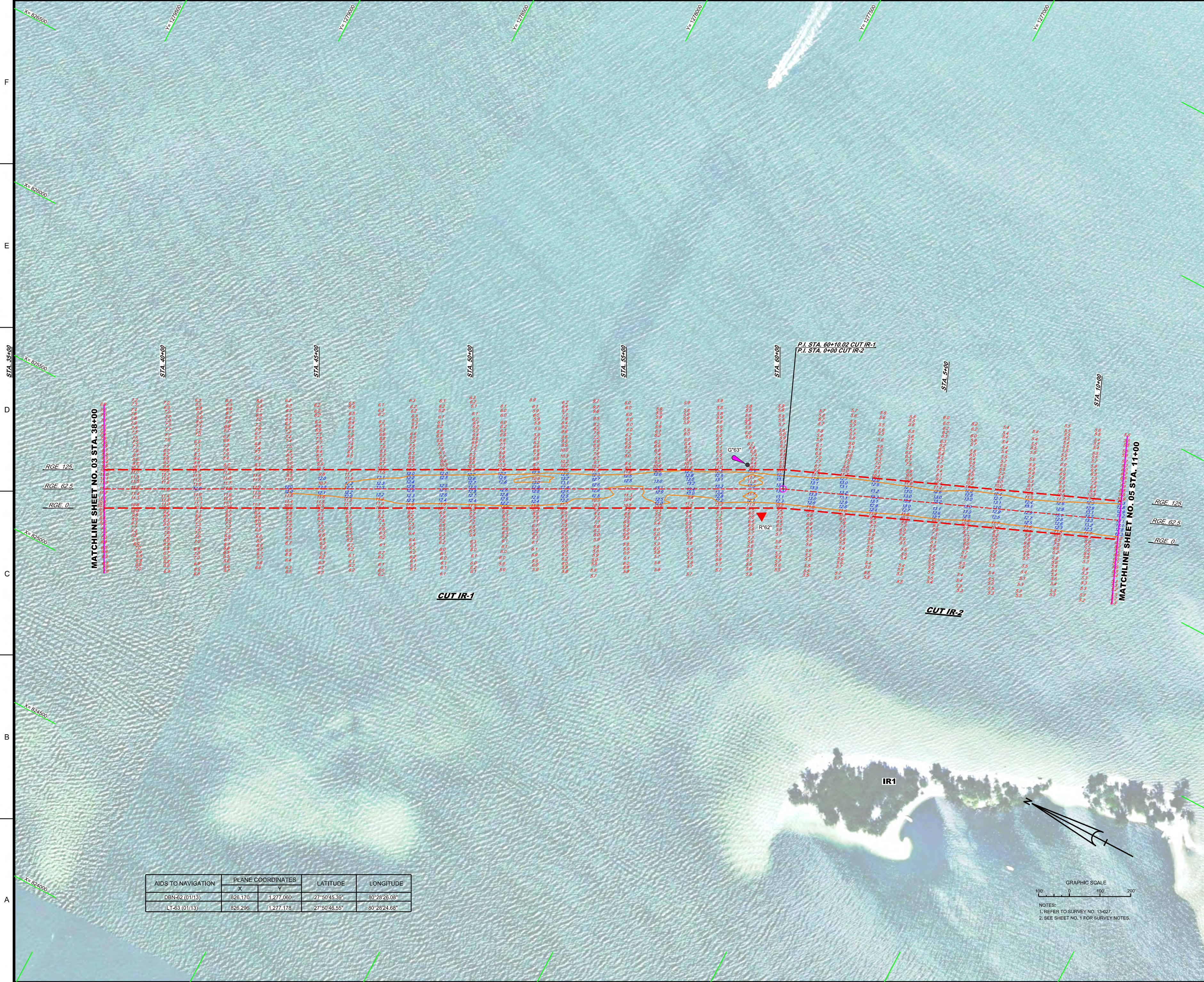
Designed by <b>WRM</b>	Checked by <b>GRL</b>
Drawn by <b>WRM</b>	Reviewed by <b>WRM</b>
File No. <b>13-0274-HSHALDGN</b>	Director <b>DD/MM/YYYY</b>
Reference File <b>13-0274-HSHALDGN</b>	File Name <b> </b>

INTRACOASTAL WATERWAY  
JACKSONVILLE TO MIAMI, FLORIDA  
INDIAN RIVER COUNTY  
**EXAMINATION SURVEY FY12**  
**12-FOOT PROJECT**  
STA. 38+00 CUT IR-1 THRU STA. 11+00 CUT IR-2  
**PLAN**

Scale: AS SHOWN

Drawing no.  
**4/16**

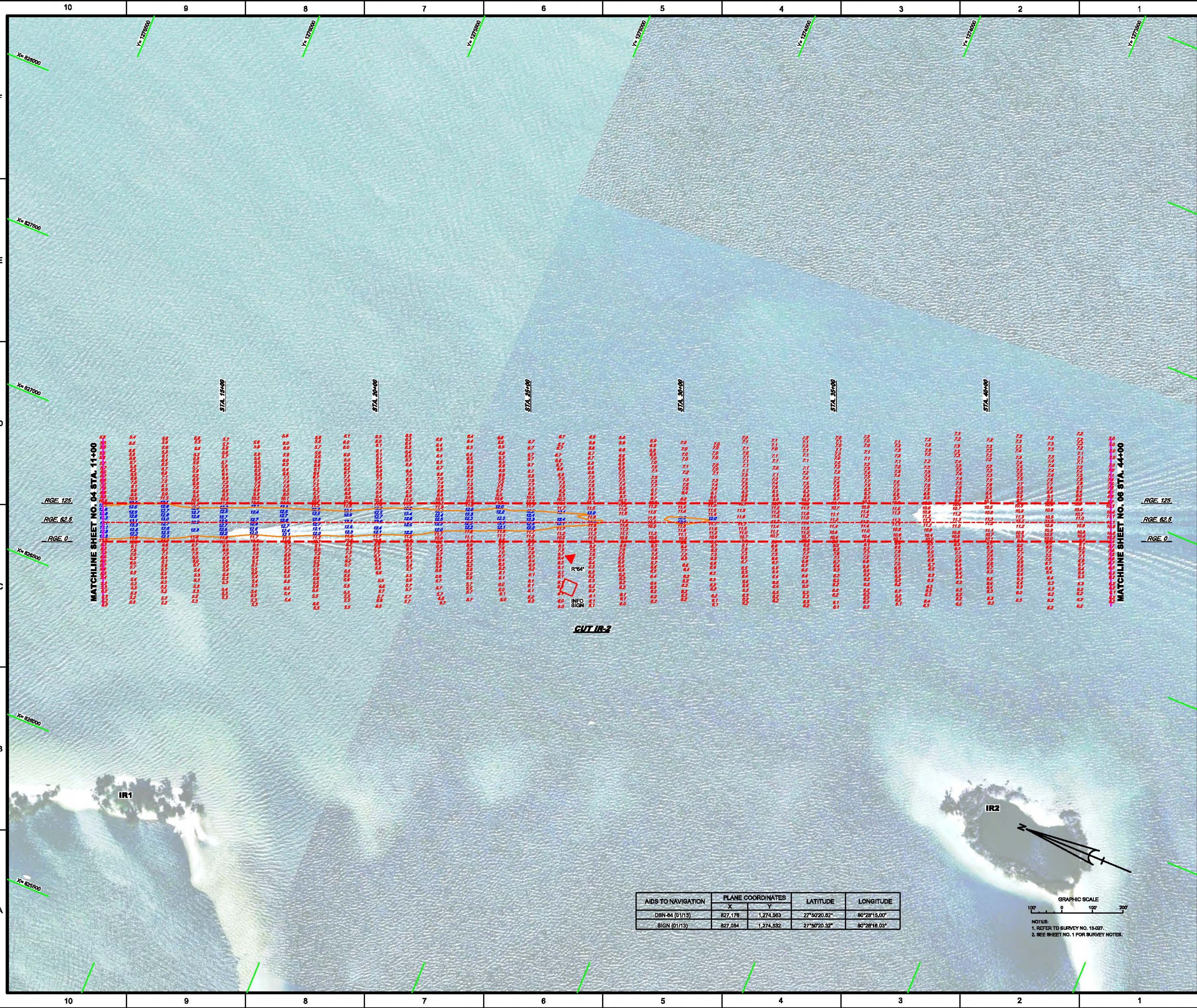
SHEET 04 OF 40



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-52 (01/13)	826.170	1,277.080	27°50'45.39"	80°28'26.08"
LT-63 (01/13)	826.296	1,277.178	27°50'46.55"	80°28'24.68"

GRAPHIC SCALE  
100' 0' 100' 200'

NOTES:  
1. REFER TO SURVEY NO. 13-027.  
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



MATCHLINE SHEET NO. 04 STA. 11+00

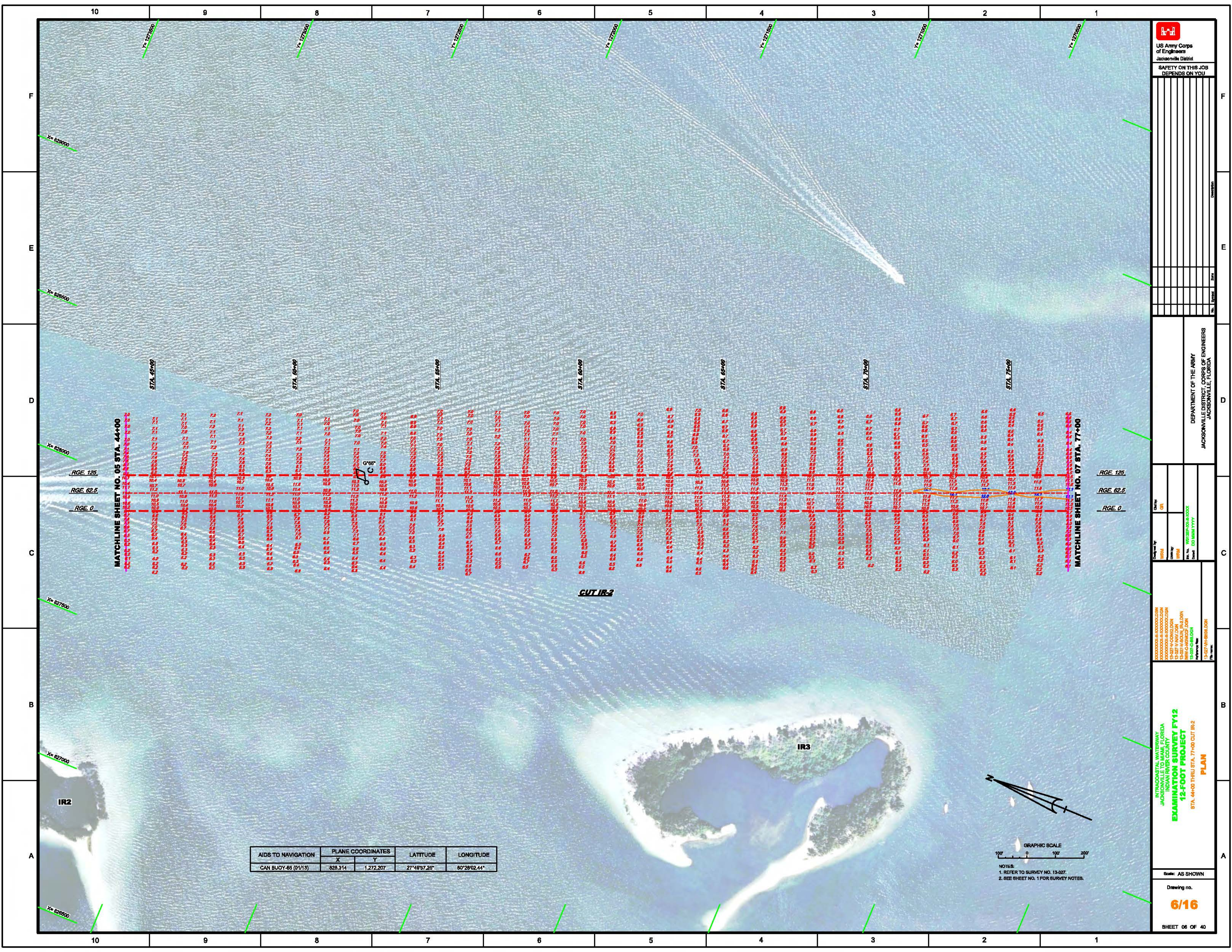
MATCHLINE SHEET NO. 06 STA. 44+00

CUT IR-2

R64  
 INFO SIGN

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-84 (01/13)	827,178	1,274,563	27°50'20.82"	80°28'15.00"
SIGN (01/13)	827,084	1,274,532	27°50'20.32"	80°28'18.03"

GRAPHIC SCALE  
 100' 0 100' 200'  
 NOTES:  
 1. REFER TO SURVEY NO. 13-027.  
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

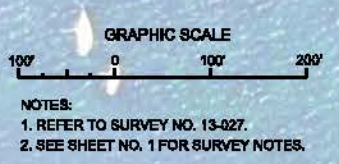


MATCHLINE SHEET NO. 05 STA. 44+00

MATCHLINE SHEET NO. 07 STA. 77+00

STA.	44+00	45+00	46+00	47+00	48+00	49+00	50+00	51+00	52+00	53+00	54+00	55+00	56+00	57+00	58+00	59+00	60+00	61+00	62+00	63+00	64+00	65+00	66+00	67+00	68+00	69+00	70+00	71+00	72+00	73+00	74+00	75+00	76+00	77+00			
RGE 125	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
RGE 62.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
RGE 0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
CAN BUOY-65 (01/13)	828,314	1,272,207	27°49'57.25"	80°29'02.44"



US Army Corps of Engineers  
Jacksonville District

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

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Checked by: **WMM**  
Drawn by: **WMM**  
Scale: **AS SHOWN**

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PROJECT NO. **13-027-HR-8108.DGN**  
JOB NO. **13-027-HR-8108.DGN**  
JOB TITLE: **13-027-HR-8108.DGN**  
JOB DESCRIPTION: **13-027-HR-8108.DGN**

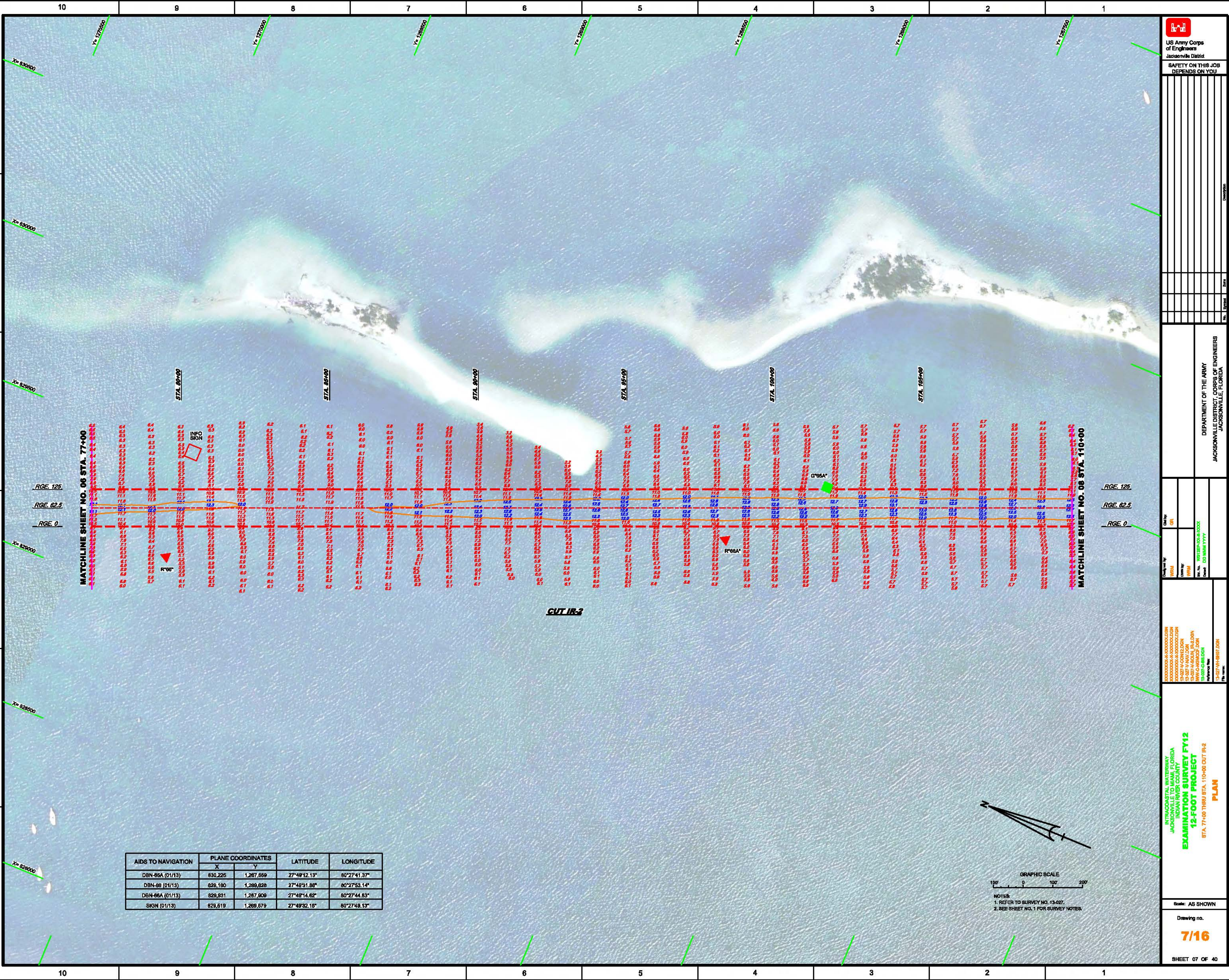
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**INTRACOASTAL WATERWAY  
JACKSONVILLE TO MIAMI, FLORIDA  
INDIAN RIVER COUNTY  
12-FOOT PROJECT  
STA. 44+00 THRU STA. 77+00 CUT IR-2  
PLAN**

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Drawing no. **6/16**

SHEET 06 OF 40




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

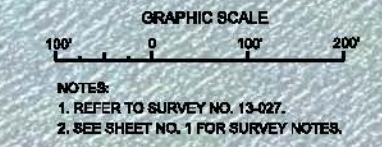
Drawing no. **7/16**  
 SHEET 07 OF 40

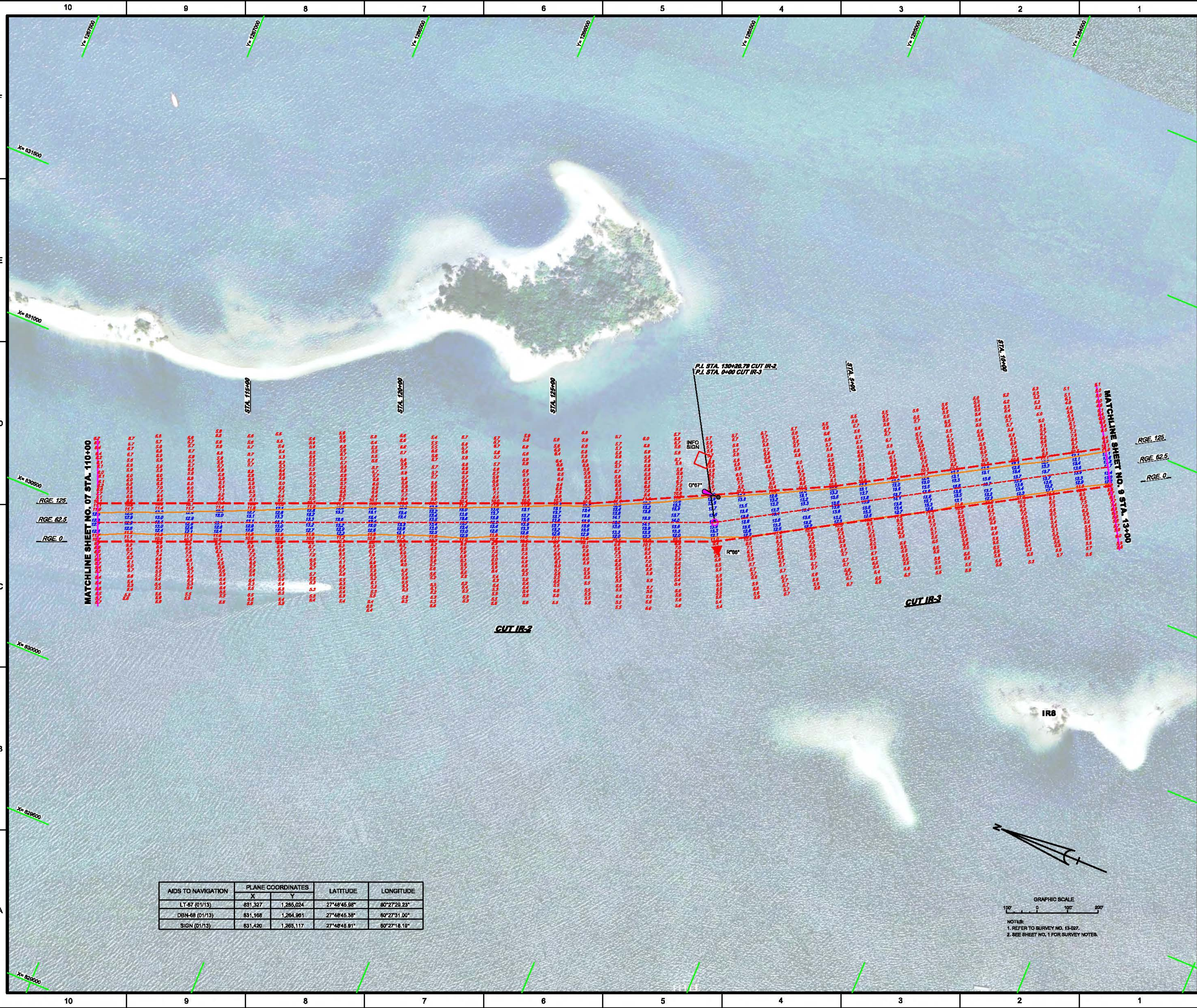
INTRACOASTAL WATERWAY  
 JACKSONVILLE TO MIAMI, FLORIDA  
 INDIAN RIVER COUNTY  
 EXAMINATION SURVEY FY12  
 12-FOOT PROJECT  
 STA. 77+00 THRU STA. 110+00 CUT IR-2  
**PLAN**

1. REFER TO SURVEY NO. 13-027.  
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

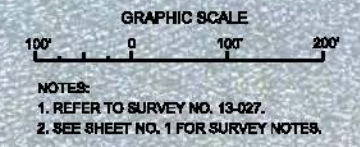
Scale: AS SHOWN

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-85A (01/13)	830,225	1,287,859	27°49'12.13"	80°27'41.37"
DBN-88 (01/13)	828,180	1,289,628	27°48'31.88"	80°27'53.14"
DBN-86A (01/13)	829,831	1,287,908	27°49'14.62"	80°27'44.83"
SIGN (01/13)	829,519	1,288,579	27°49'32.16"	80°27'49.13"





AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-67 (01/13)	831,327	1,265,024	27°48'45.98"	80°27'28.23"
DBN-68 (01/13)	831,168	1,264,961	27°48'46.38"	80°27'31.00"
SIGN (01/13)	831,420	1,265,117	27°48'48.91"	80°27'18.18"





US Army Corps of Engineers  
Jacksonville District

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DEPENDS ON YOU

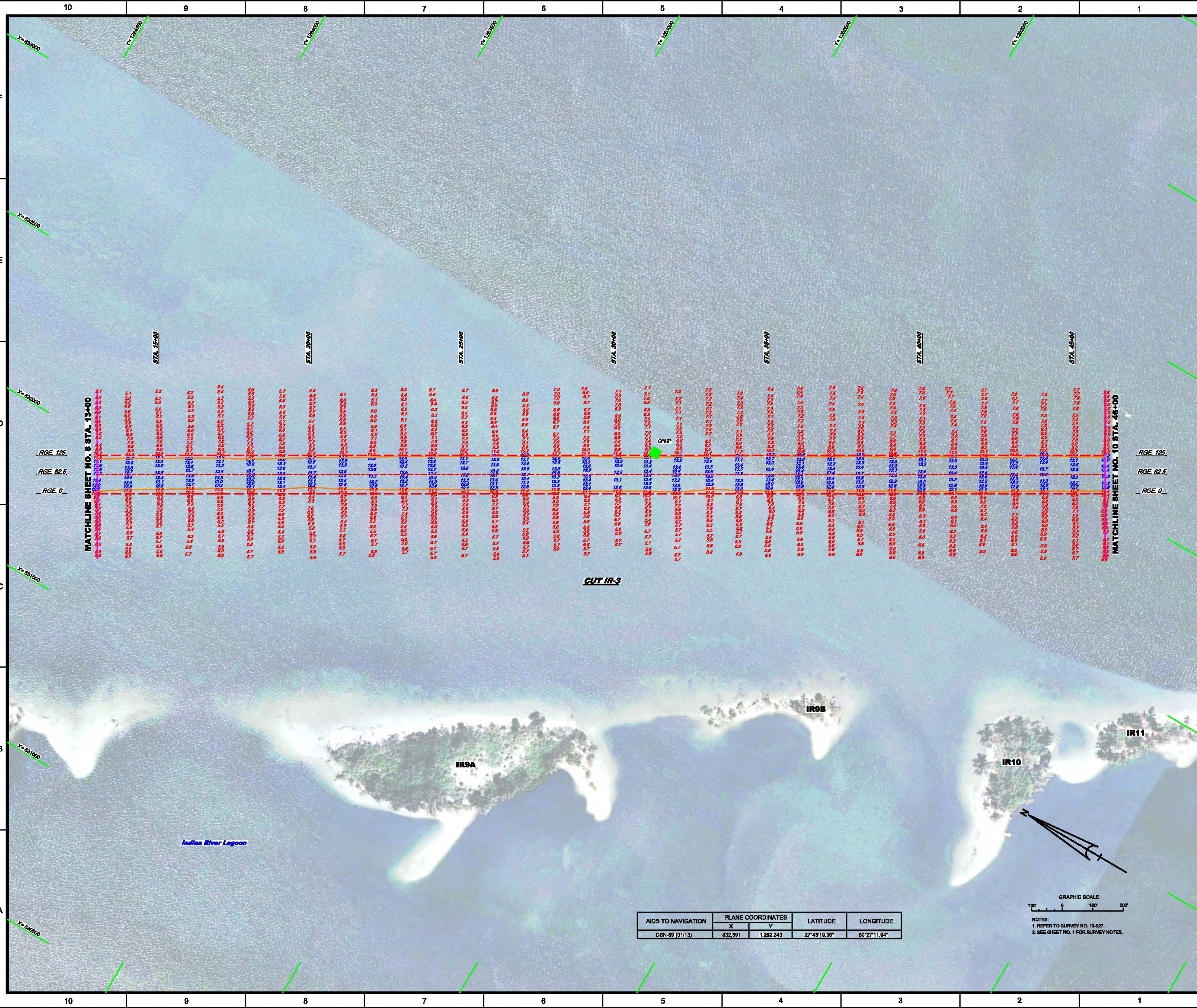
DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
JACKSONVILLE, FLORIDA

Checked by: GFL  
Designed by: WPM  
Drawn by: WPM  
Plot by: WPM  
Job No.: 13-027-1-001-001  
Contract: DD MMN YYY  
Reference No.: 13-027-1-001-001  
File Name:

INTRACOASTAL WATERWAY  
JACKSONVILLE TO MIAMI, FLORIDA  
INDIAN RIVER COUNTY  
13-027-1-001-001  
WPM-CAMARDES FORN  
13-027-C-001-001  
13-027-1-001-001

EXAMINATION SURVEY FY12  
12-FOOT PROJECT  
STA. 13+00 THRU STA. 48+00 CUT IR-3  
PLAN

Scale: AS SHOWN  
Drawing no.  
**9/16**  
SHEET 08 OF 40



MATCHLINE SHEET NO. 8 STA. 13+00

MATCHLINE SHEET NO. 10 STA. 48+00

STA. 15+00

STA. 20+00

STA. 25+00

STA. 30+00

STA. 35+00

STA. 40+00

STA. 45+00

RGE 125  
RGE 02.5  
RGE 0

RGE 125  
RGE 02.5  
RGE 0

Indian River Lagoon

IR9A

IR9B

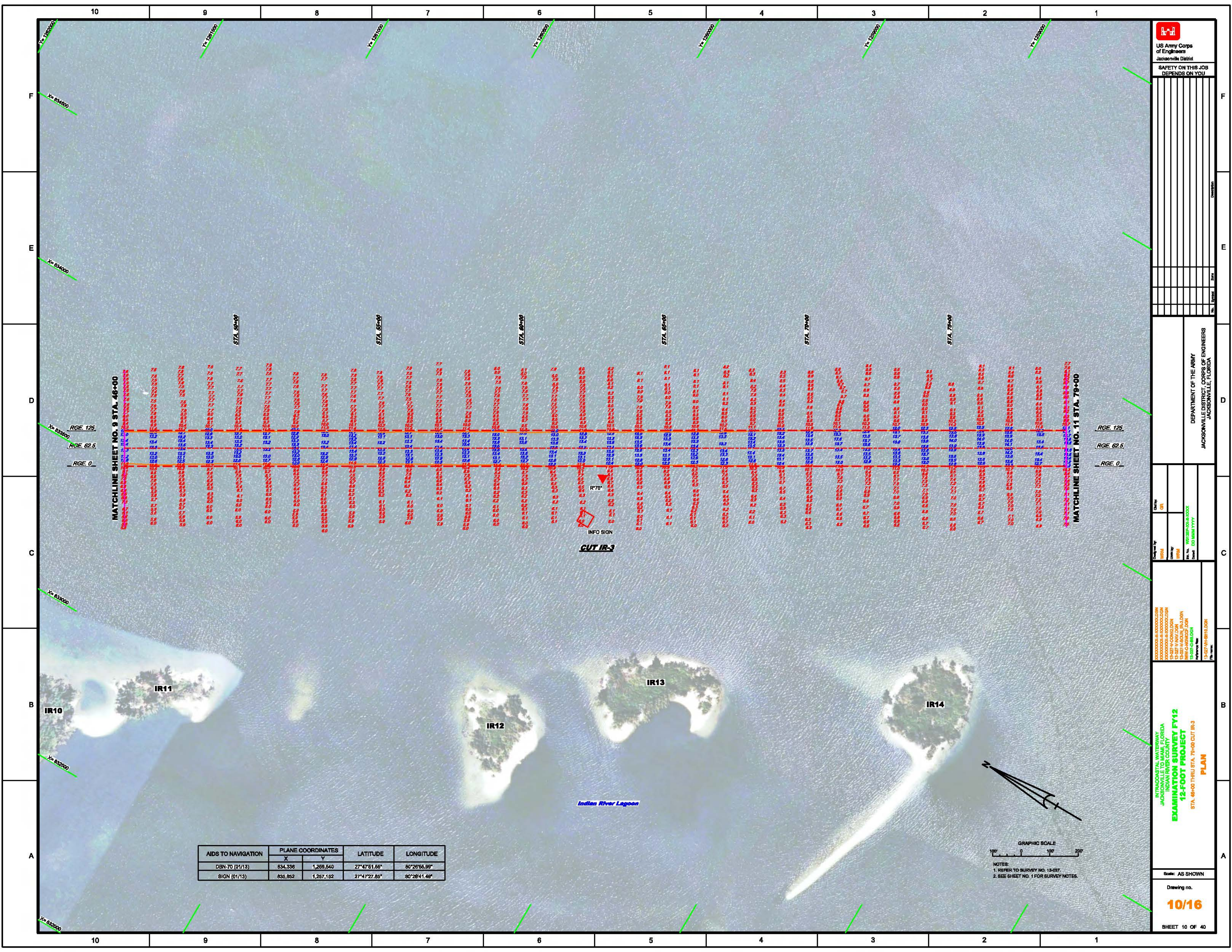
IR10

IR11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-69 (01/13)	832,891	1,262,343	27°48'19.38"	80°27'11.94"

NOTES:  
1. REFER TO SURVEY NO. 13-027.  
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



MATCHLINE SHEET NO. 9 STA. 46+00

MATCHLINE SHEET NO. 11 STA. 79+00

STA. 50+00

STA. 55+00

STA. 60+00

STA. 65+00

STA. 70+00

STA. 75+00

RGE. 125  
RGE. 62.5  
RGE. 0

RGE. 125  
RGE. 62.5  
RGE. 0

CUT IR-3

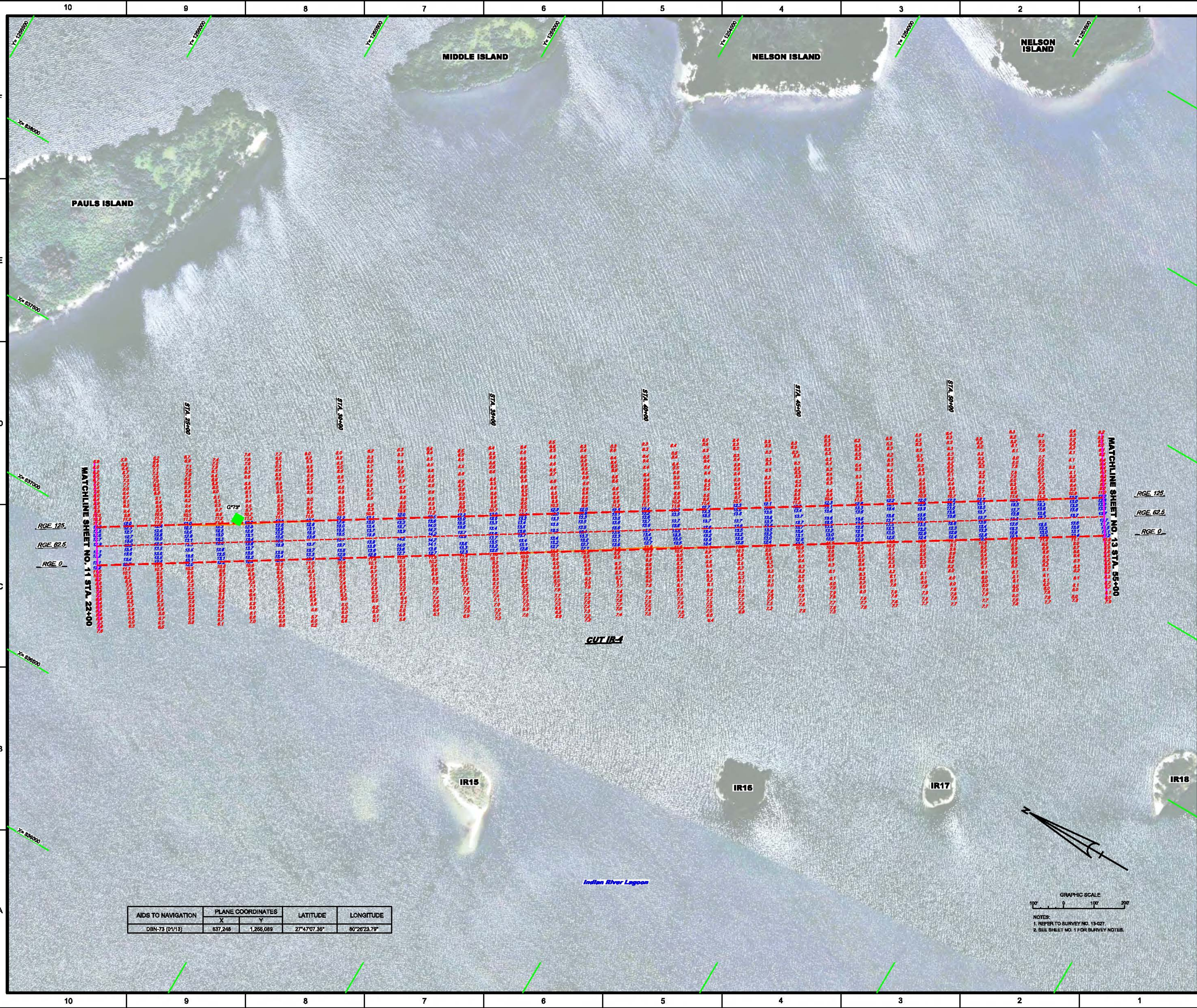
INFO SIGN

R70

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-70 (01/13)	834,336	1,269,640	27°47'51.66"	80°26'55.99"
SIGN (01/13)	838,852	1,257,152	27°47'27.85"	80°26'41.46"

GRAPHIC SCALE  
100' 0 100' 200'  
NOTES:  
1. REFER TO SURVEY NO. 18-027.  
2. SEE SHEET NO. 1 FOR SURVEY NOTES.





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

DATE	BY	DESCRIPTION

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

Checked by: GFL  
 Drawn by: WFM  
 Date: 03/11/11  
 Project: 13-027-H-R12

INTRACOASTAL WATERWAY  
 JACKSONVILLE TO MIAMI, FLORIDA  
 INDIAN RIVER COUNTY  
 EXAMINATION SURVEY FY12  
 12-FOOT PROJECT  
 STA. 22+00 CUT THRU STA. 55+00 CUT IR-4  
**PLAN**

Scale: AS SHOWN  
 Drawing no.  
**12/16**  
 SHEET 12 OF 40

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-73 (01/13)	837,248	1,266,089	27°47'07.36"	80°26'23.79"

GRAPHIC SCALE  
 0 100 200  
 NOTES:  
 1. REFER TO SURVEY NO. 13-027.  
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

MATCHLINE SHEET NO. 11 STA. 22+00

MATCHLINE SHEET NO. 13 STA. 55+00

CUT IR-4

Indian River Lagoon

PAULS ISLAND

MIDDLE ISLAND

NELSON ISLAND

NELSON ISLAND

IR15

IR16

IR17

IR18

STA. 25+00

STA. 26+00

STA. 27+00

STA. 28+00

STA. 29+00

STA. 30+00

RGE 125

RGE 62.5

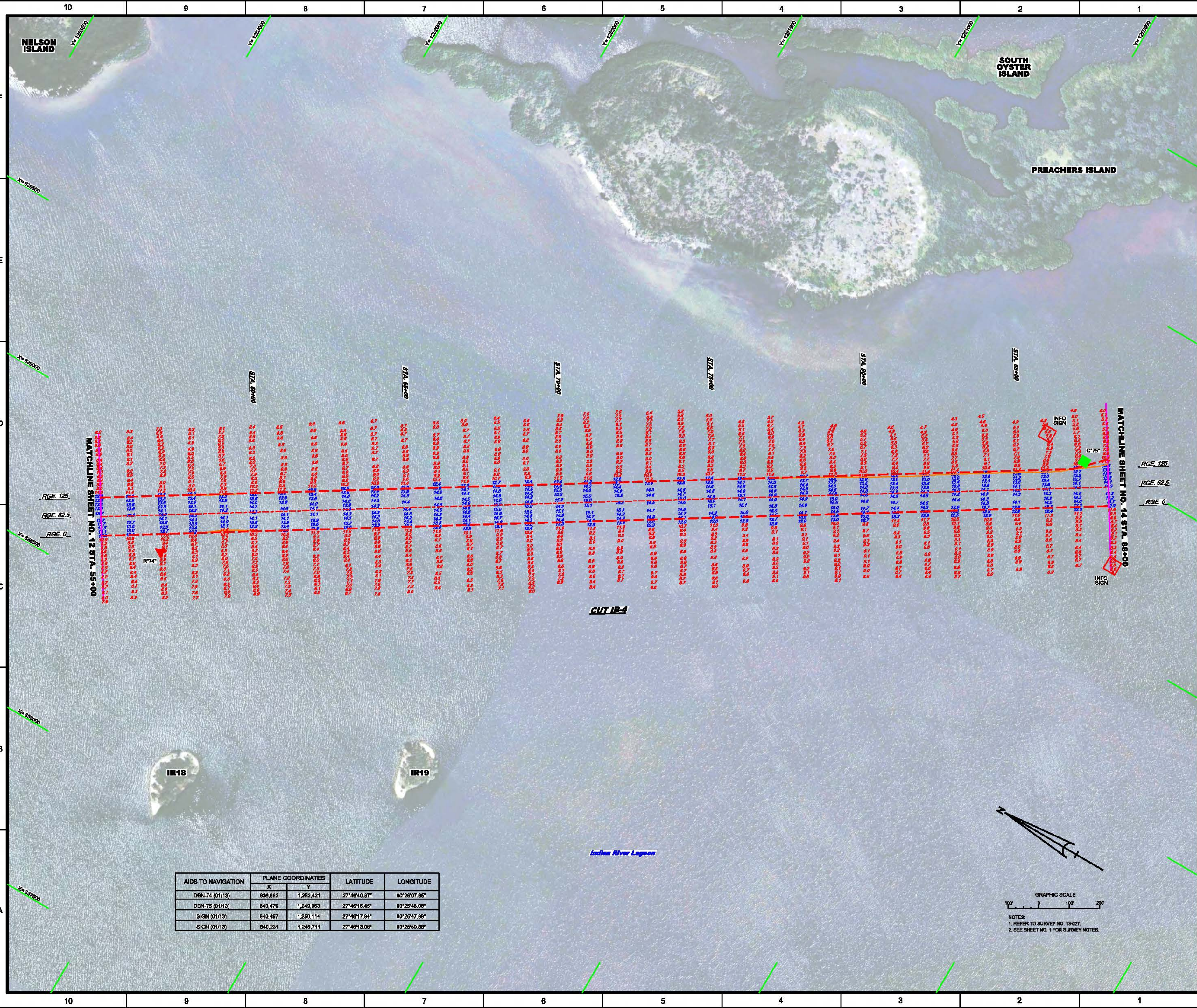
RGE 0

RGE 125

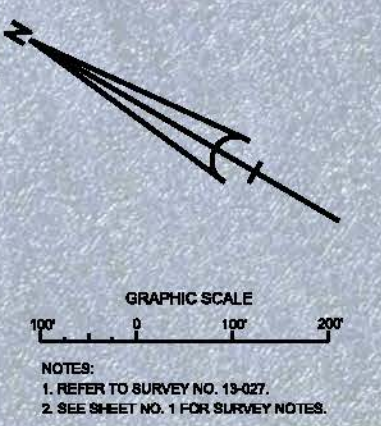
RGE 62.5

RGE 0

G179'



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-74 (01/13)	836,892	1,252,421	27°46'40.87"	80°26'07.85"
DBN-75 (01/13)	840,479	1,249,963	27°46'16.45"	80°25'48.08"
SIGN (01/13)	840,487	1,250,114	27°46'17.94"	80°25'47.88"
SIGN (01/13)	840,231	1,249,711	27°46'13.96"	80°25'50.86"



CUT IR-4

Indian River Lagoon

MATCHLINE SHEET NO. 12 STA. 65+00

MATCHLINE SHEET NO. 14 STA. 85+00

RGE. 125  
 RGE. 62.5  
 RGE. 0

RGE. 125

RGE. 62.5

RGE. 0

INFO SIGN

INFO SIGN

R74

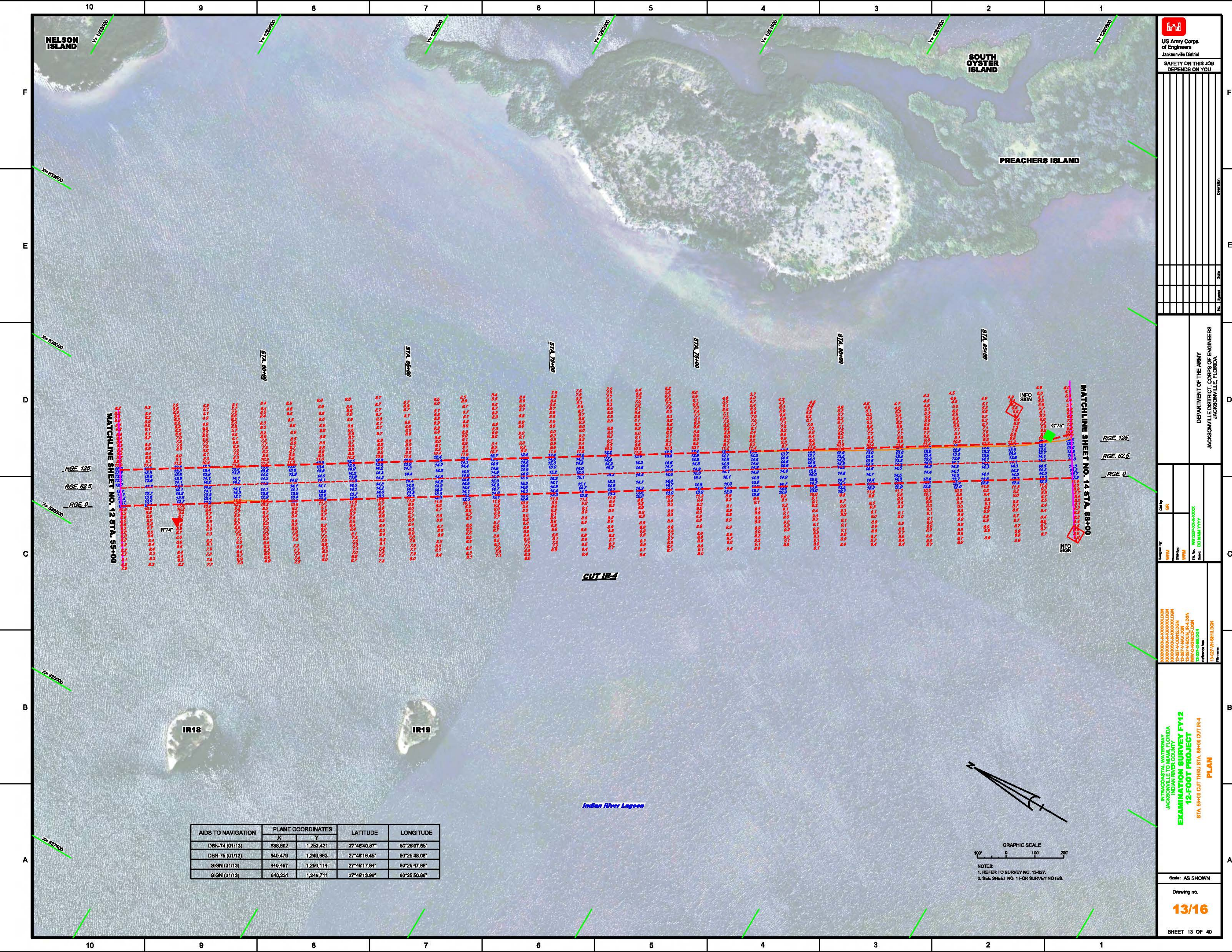
IR18

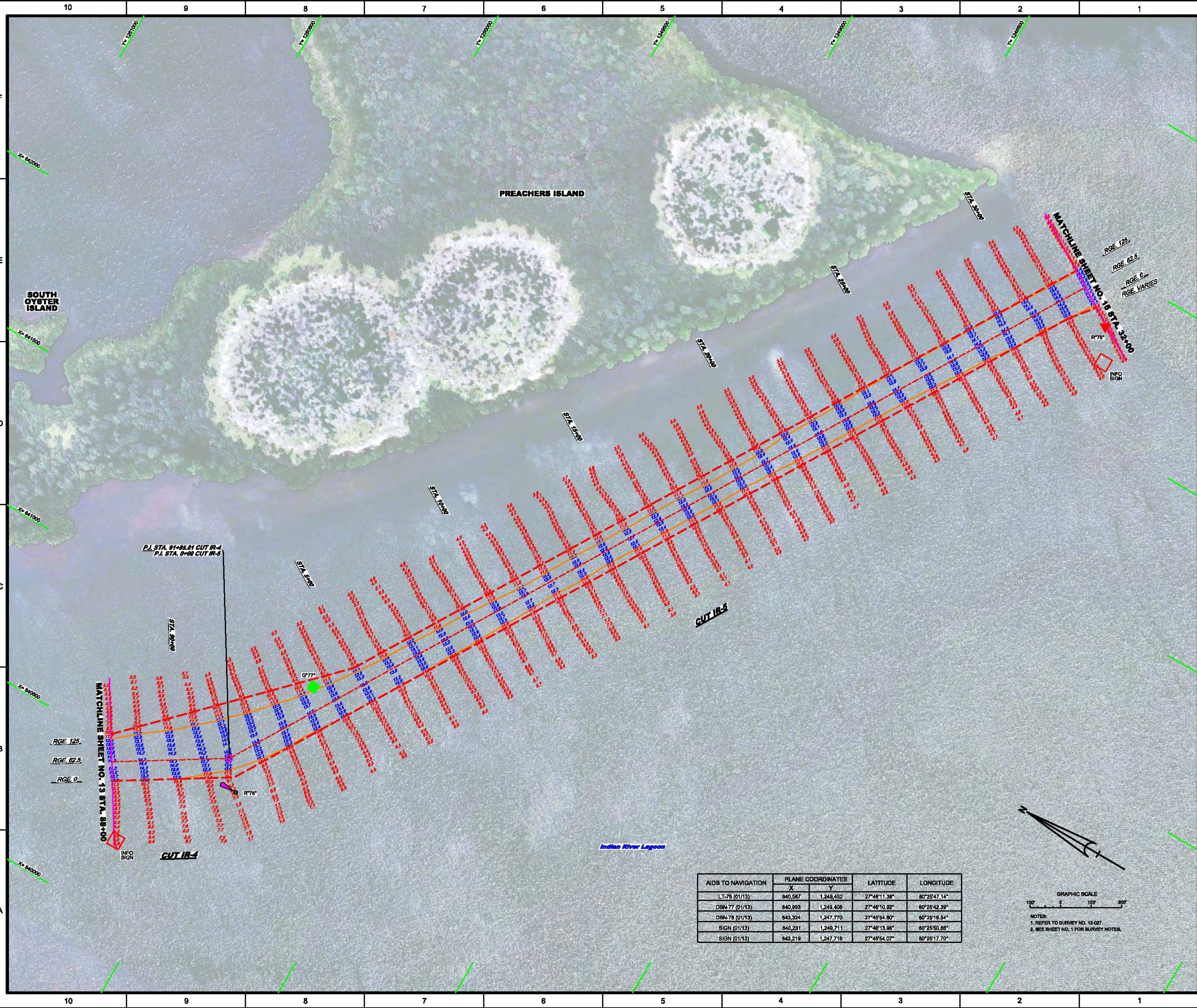
IR19

NELSON ISLAND

SOUTH OYSTER ISLAND

PREACHERS ISLAND

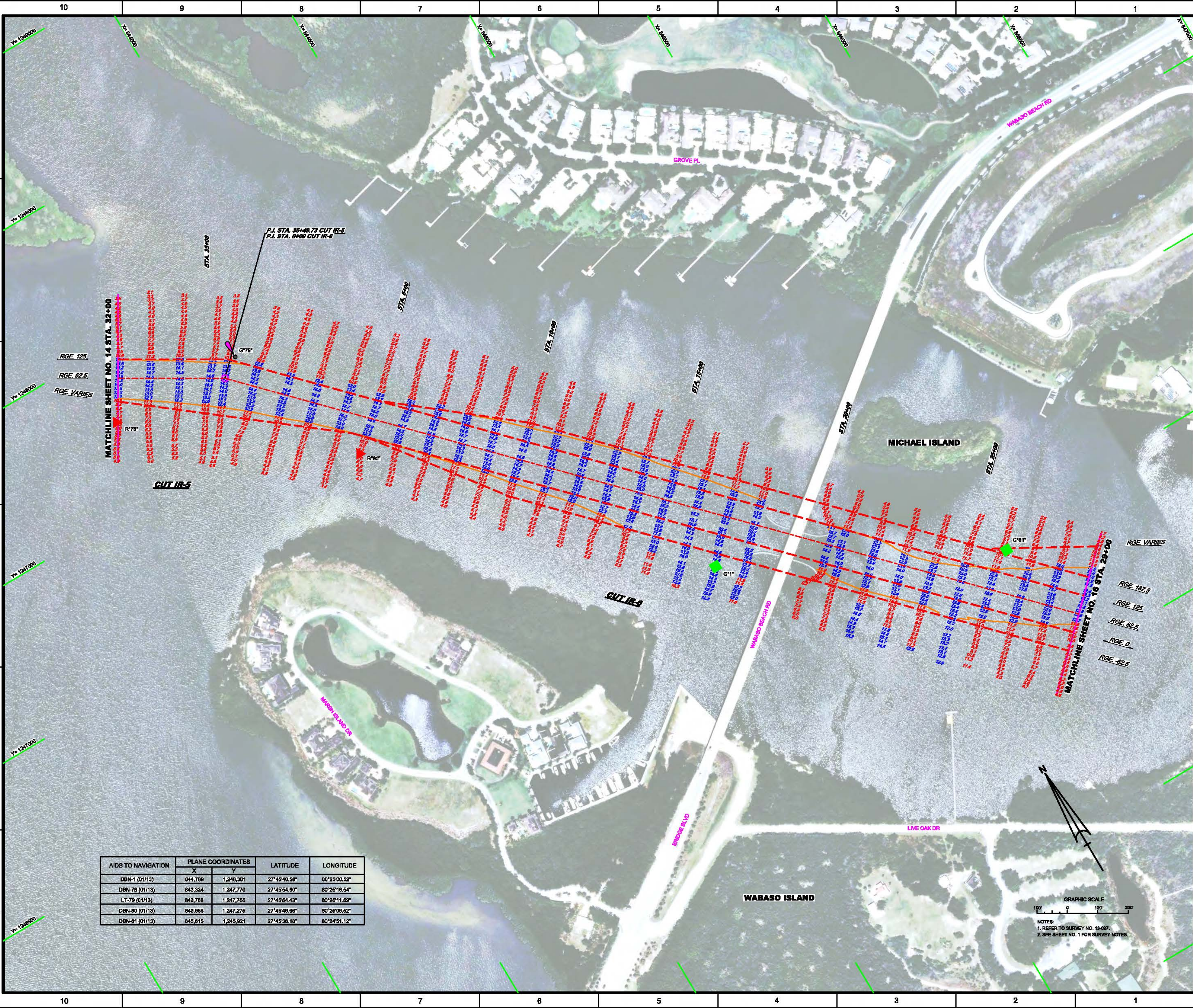




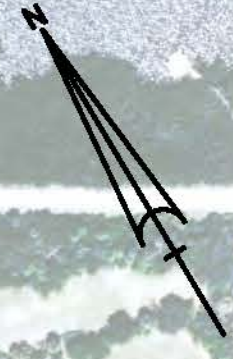
AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-78 (01/13)	840,587	1,249,452	27°48'11.38"	80°25'47.14"
DBN-77 (01/13)	840,993	1,249,406	27°46'10.52"	80°25'42.39"
DBN-78 (01/13)	843,324	1,247,770	27°45'54.60"	80°25'16.54"
SIGN (01/13)	840,231	1,249,711	27°48'13.86"	80°25'50.88"
SIGN (01/13)	843,219	1,247,716	27°45'54.07"	80°25'17.70"

GRAPHIC SCALE  
 100' 0' 100' 200'

NOTES:  
 1. REFER TO SURVEY NO. 13-027.  
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-1 (01/13)	844,789	1,248,361	27°45'40.56"	80°23'00.52"
DBN-78 (01/13)	843,324	1,247,770	27°45'54.60"	80°25'16.54"
LT-79 (01/13)	843,788	1,247,765	27°45'54.43"	80°25'11.69"
DBN-80 (01/13)	843,956	1,247,275	27°45'48.86"	80°25'09.52"
DBN-81 (01/13)	845,815	1,245,921	27°45'36.16"	80°24'51.12"



GRAPHIC SCALE  
 100' 0 100' 200'  
 NOTES:  
 1. REFER TO SURVEY NO. 13-027.  
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

**US Army Corps of Engineers**  
 Jacksonville District

**SAFETY ON THIS JOB DEPENDS ON YOU**

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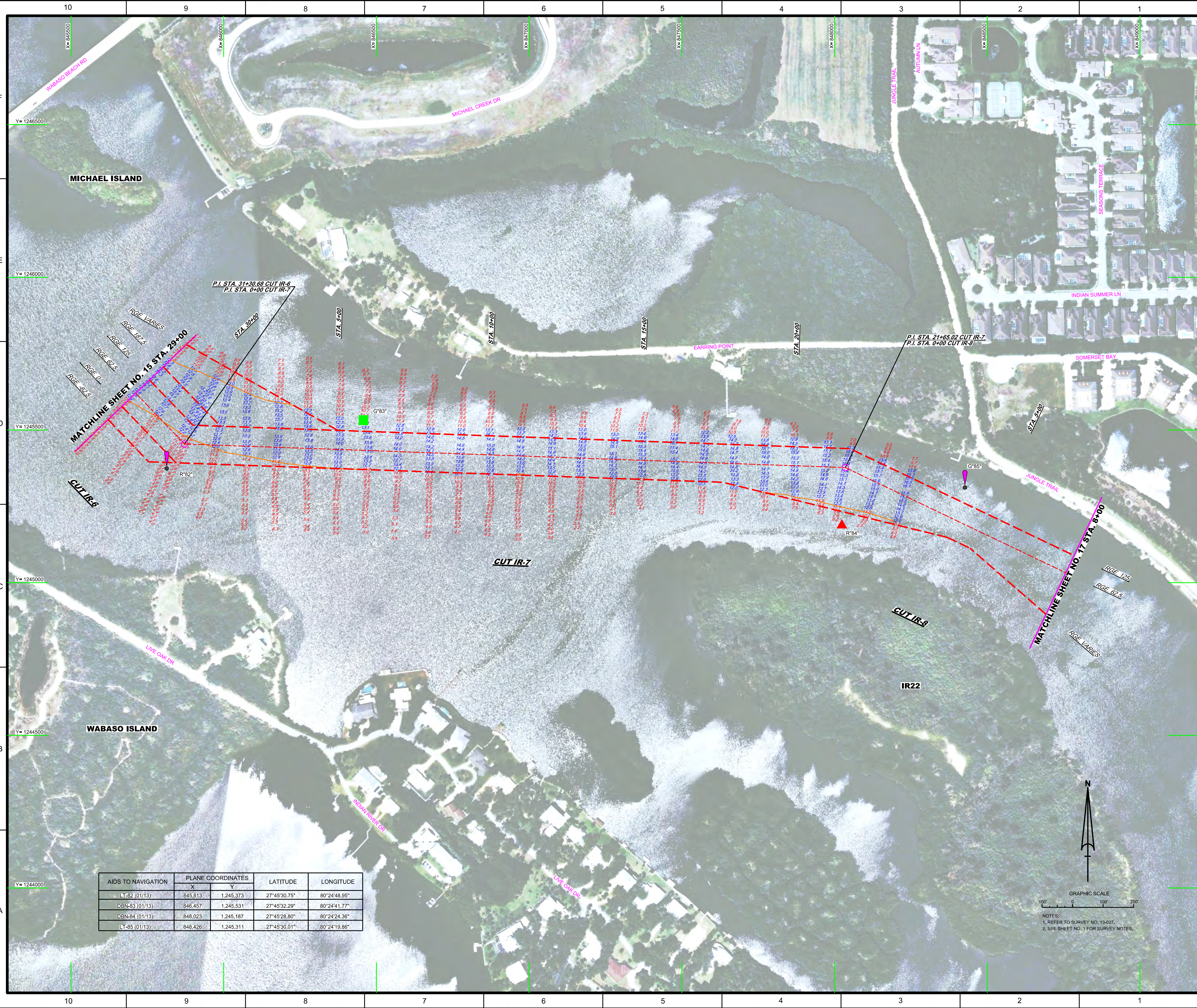
**DEPARTMENT OF THE ARMY**  
 JACKSONVILLE DISTRICT, CORPS OF ENGINEERS  
 JACKSONVILLE, FLORIDA

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**INTRA-COASTAL WATERWAY**  
 JACKSONVILLE TO MIAMI, FLORIDA  
 INDIAN RIVER COUNTY  
**EXAMINATION SURVEY FY12**  
**12-FOOT PROJECT**  
 STA. 32+00 CUT IR-5 THRU STA. 29+00 CUT IR-4  
**PLAN**

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Scale: AS SHOWN  
 Drawing no.  
**15/16**  
 SHEET 15 OF 16



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-82 (01/13)	845,813	1,245,373	27°45'30.75"	80°24'48.95"
DBN-83 (01/13)	846,457	1,245,531	27°45'32.29"	80°24'41.77"
DBN-84 (01/13)	848,023	1,245,187	27°45'28.80"	80°24'24.36"
LT-85 (01/13)	848,426	1,245,311	27°45'30.01"	80°24'19.86"

