

FERNANDINA HARBOR NASSAU COUNTY, FLORIDA EXAMINATION SURVEY FY13 35 & 36-FOOT PROJECT

SURVEY NOTES

- REFER TO SURVEY NO. 13-101.
 - DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO 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 GAUGE SITES SPECIFIED BELOW:

NOAA TIDAL STATION 872-0030, FERNANDINA BEACH, AMELIA ISL, FL
 - 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: "CAMDENGA-NASSAU-DUVAL-STJOHNS-FLAGLER-01FEB2011.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.
 - THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:

REFERENCE BASE LOCATED AT "BATH HOUSE ARP (OPUS PID: BBCB08)


TIDE STAFF WAS SET NEAR FERNANDINA MUNICIPAL MARINA FROM "RICHARD E. BONNER", OPUS PID: BBCK39.
 - VERTICAL MEASUREMENTS WERE MADE USING A R2SONIC 2021 MULTI-BEAM SYSTEM OPERATING AT 240 KHZ (HIGH FREQUENCY). ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.
- | VESSEL | DATE OF SURVEY | AREA |
|--------|----------------|----------------------|
| S/B-46 | 16 AUG 2013 | CUT-1 THRU CUT-5 |
| S/B-46 | 17 AUG 2013 | CUT-5, 6, 6A & 7 |
| S/B-46 | 20 AUG 2013 | CUT-6A, 7, 8, 9 & 10 |
| S/B-46 | 21 AUG 2013 | CUT-1 THRU 10 |
- AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
 - THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF 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	
	GPS 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	AUG 2013 13-101-HAR01.DGN 13-101-HAR01.DGN
EXAMINATION SURVEY FY13 35 AND 36-FOOT PROJECT INDEX, LOCATION AND VICINITY MAP	Scale: AS SHOWN Drawing no. 1
SHEET 01 OF 09	

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
Lt. BUOY-6 (0813)	511397	2310664	30°41'19.00"	81°27'38.03"
Lt. BUOY-7 (0813)	511397	2310641	30°41'18.79"	81°27'31.50"



US Army Corps of Engineers
Jacksonville District

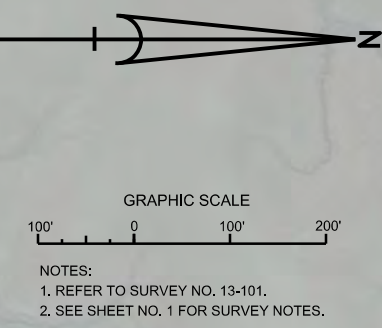
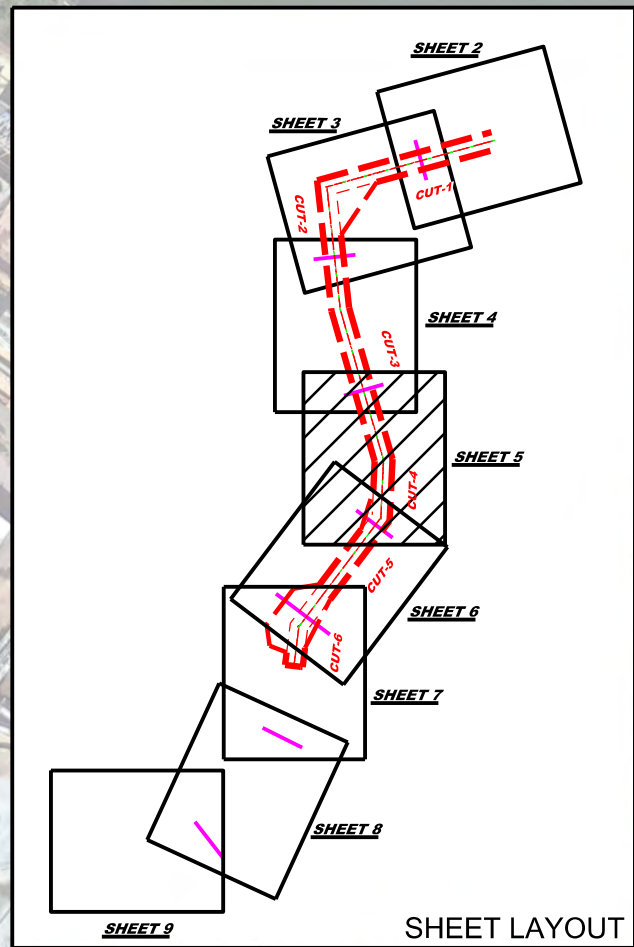
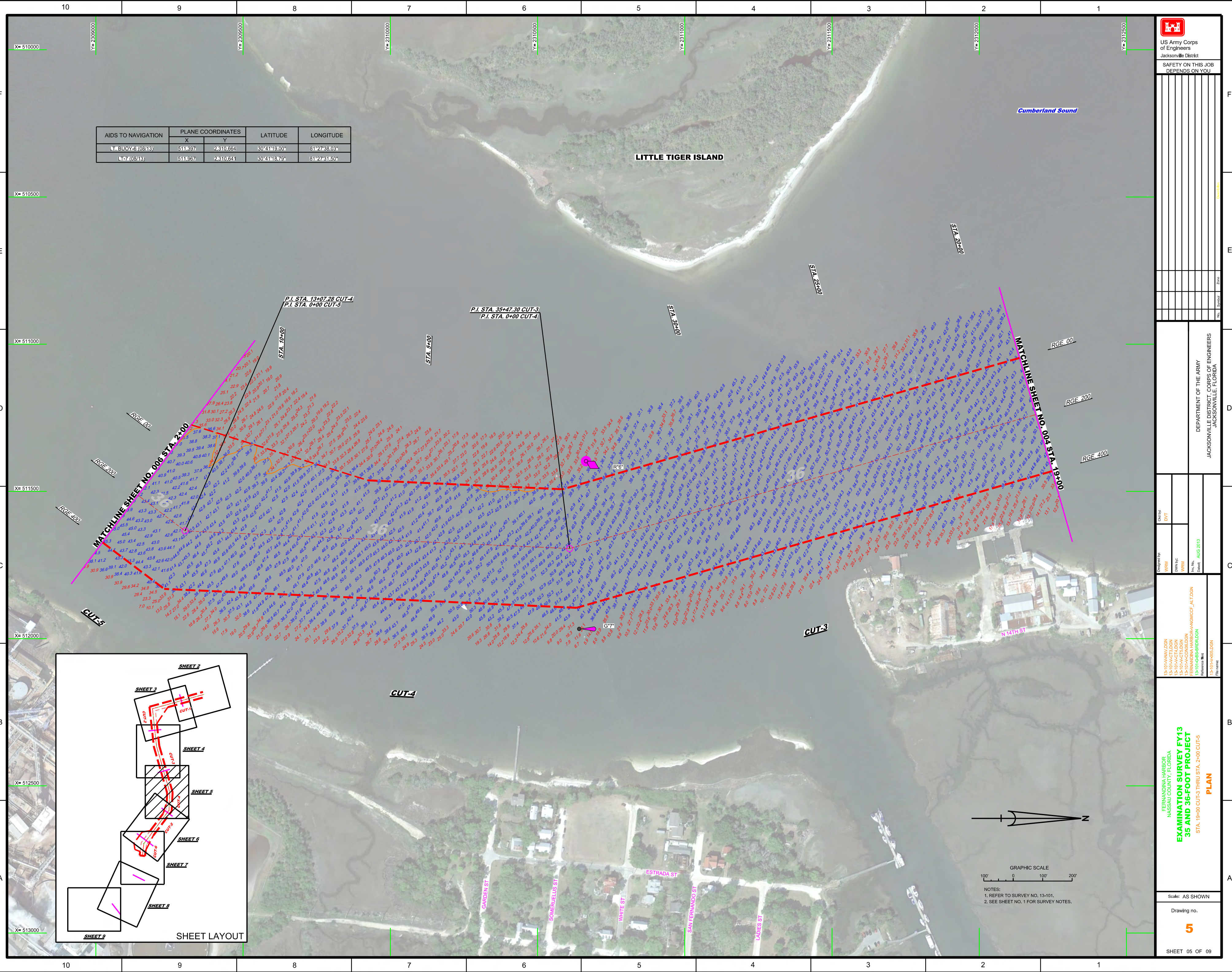
SAFETY ON THIS JOB
DEPENDS ON YOU

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

Designed by: WRM
Checked by: DVT
Drawn by: WRM
Reviewed by: WRM
Date: AUG 2013

FERDINANDA HARBOR, FLORIDA
NASSAU COUNTY, FLORIDA
**EXAMINATION SURVEY FY13
35 AND 36-FOOT PROJECT**
STA. 19+00 CUT-3 THRU STA. 2+00 CUT-5
PLAN

Scale: AS SHOWN
Drawing no. **5**
SHEET 05 OF 09



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-8 (08/13)	511,233	2,309,091	30°41'03.42"	81°27'39.62"

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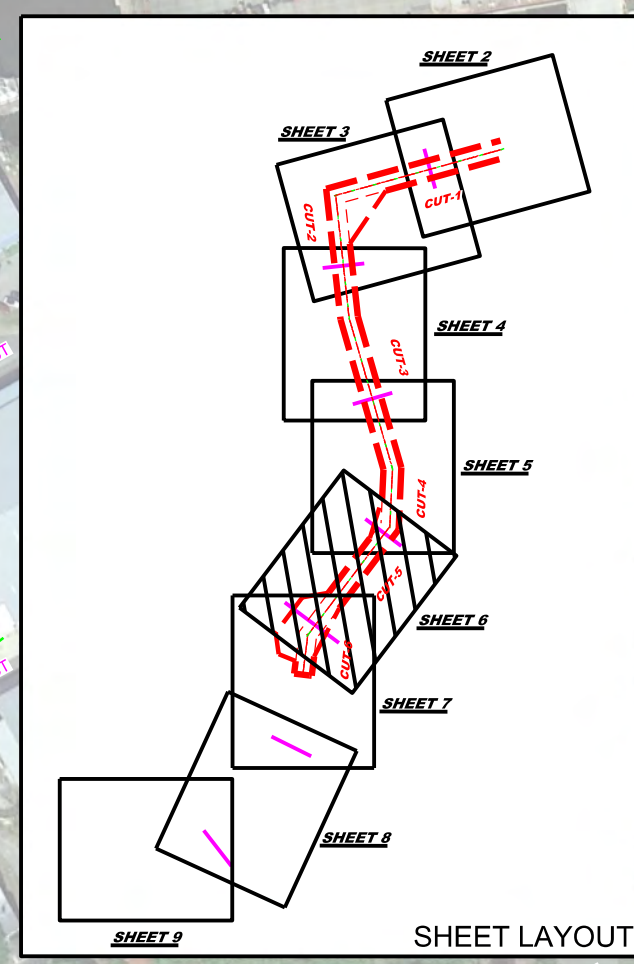
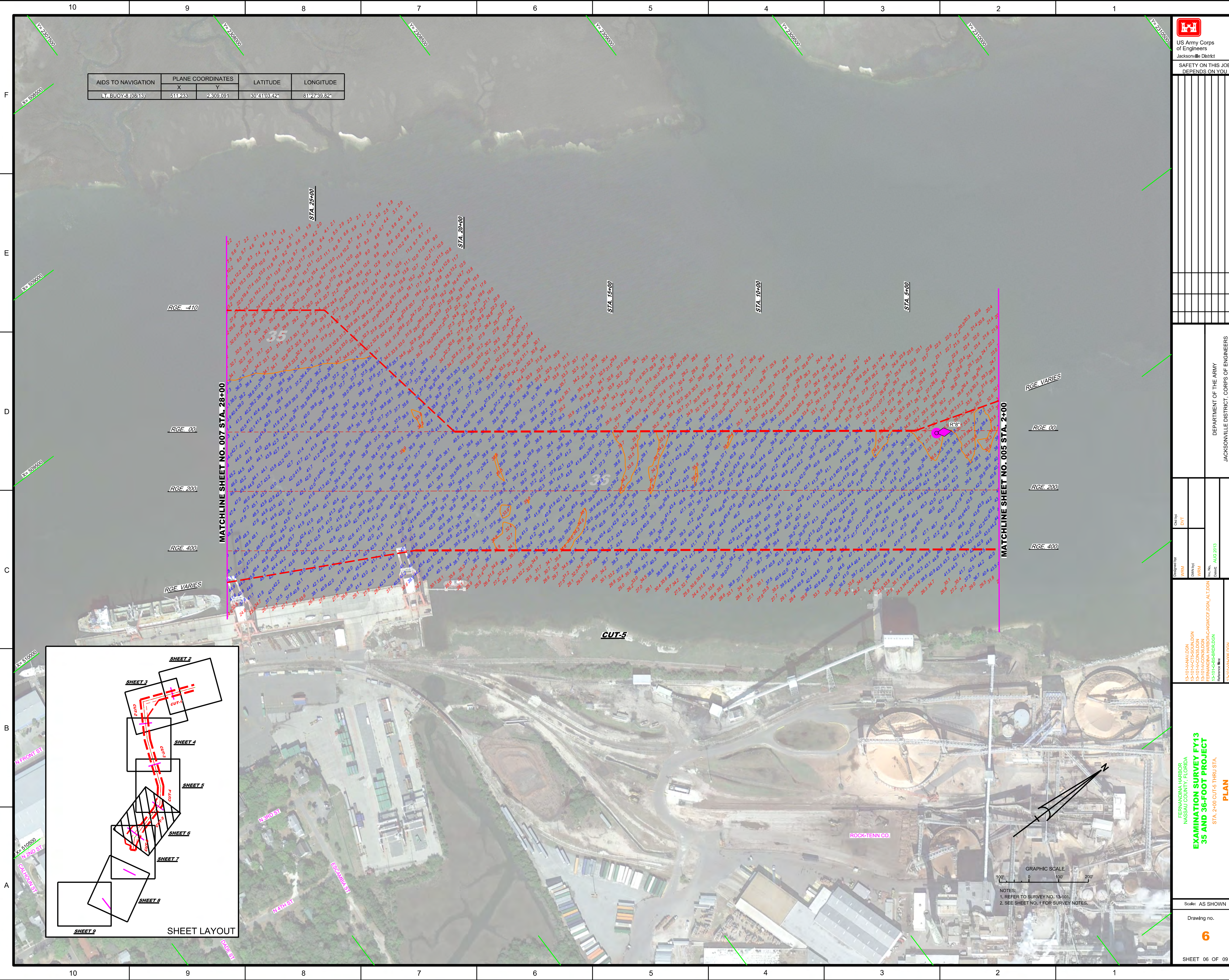
DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Checked by: DVT
Designed by: WRM
Drawn by: WRM
Reference File: 13-101-HARBORLDRN
Reference Date: AUG 2013

13-101-HARBORLDRN
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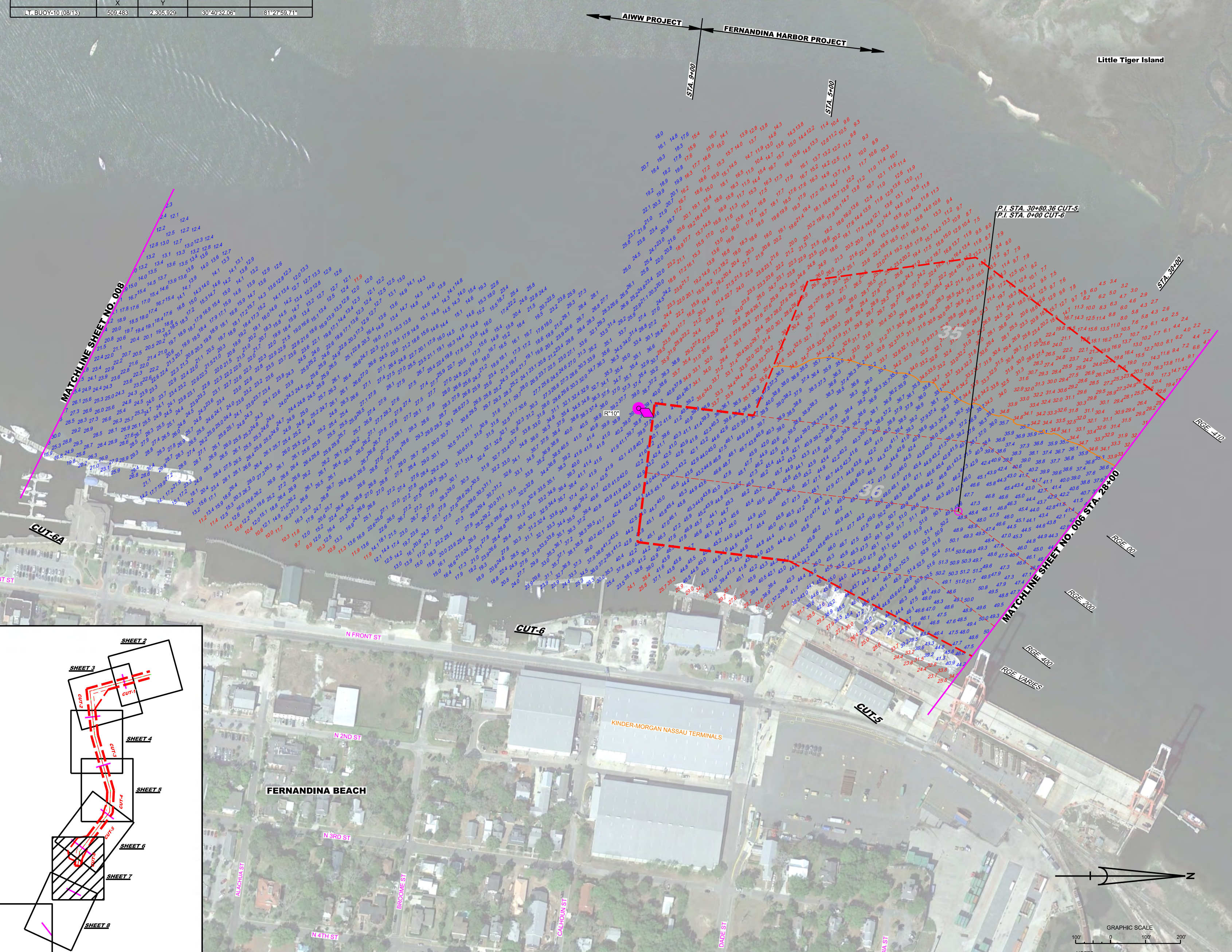
FERNANDINA HARBOR
NASSAU COUNTY, FLORIDA
**EXAMINATION SURVEY FY13
35 AND 36-FOOT PROJECT**
STA. 2+00 CUT-5 THRU STA. 2+00
PLAN

Scale: AS SHOWN
Drawing no. **6**
SHEET 06 OF 09



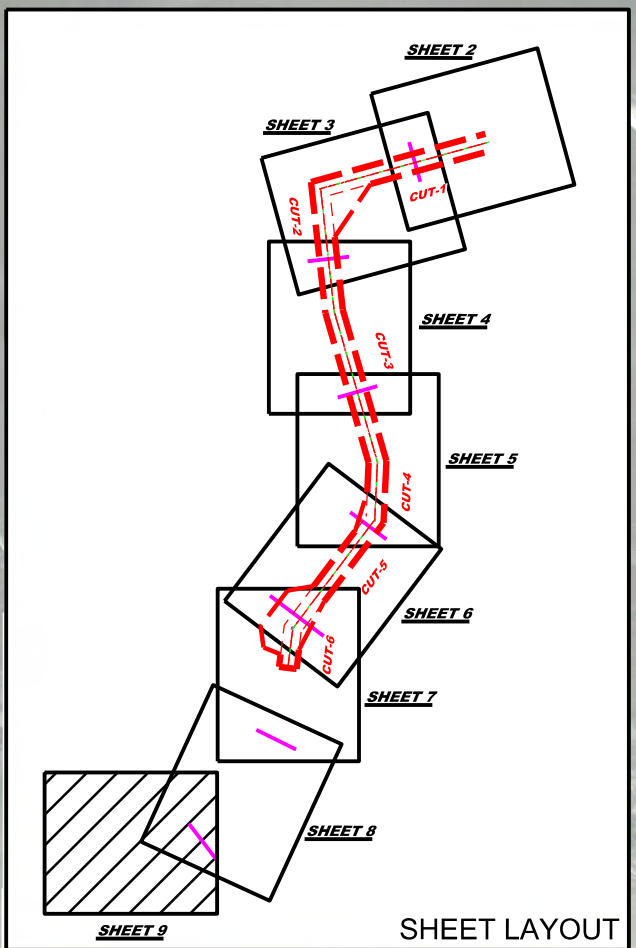
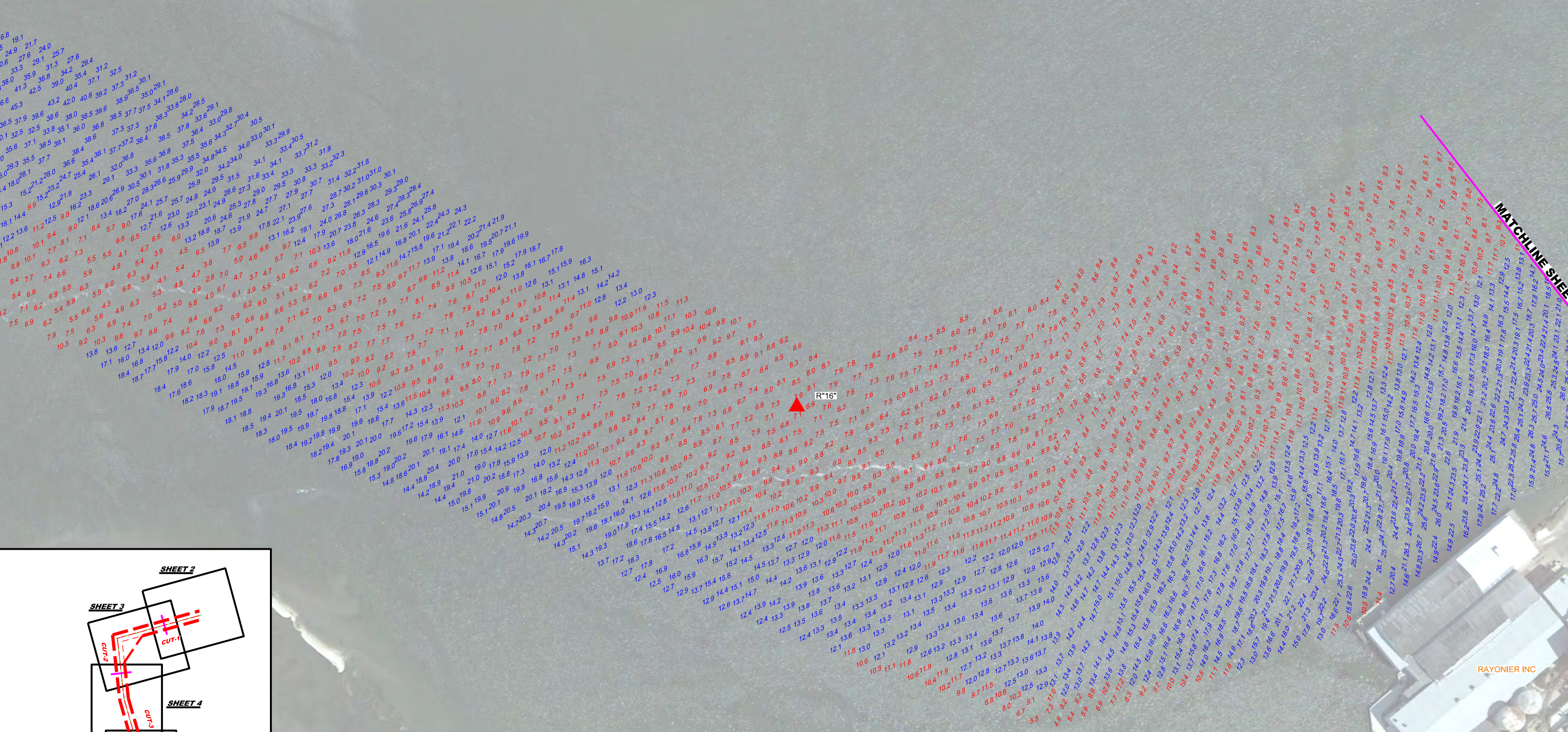
GRAPHIC SCALE
0 100 200
NOTES:
1. REFER TO SURVEY NO. 13-101.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-10 (08/13)	509,483	2,305,929	30°40'32.06"	81°27'59.71"



DESIGNED BY: WRM	CHECKED BY: DVT
DRAWN BY: WRM	DATE: AUG 2013
PROJECT: EXAMINATION SURVEY FY13 35 AND 36-FOOT PROJECT	STATIONING: STA. 28+00 CUT-5 THRU STA. 9+00 CUT-6
PROJECT LOCATION: FERNANDINA HARBOR, NASSAU COUNTY, FLORIDA	PROJECT NUMBER: 13-1014H-07-DEN
DATE: AUG 2013	SCALE: AS SHOWN
DRAWING NO. 7	SHEET 07 OF 09

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-16(08/13)	506.121	2,301.819	30°39'51.24"	81°28'38.01"



NOTES:
1. REFER TO SURVEY NO. 13-101.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

RAYONER INC