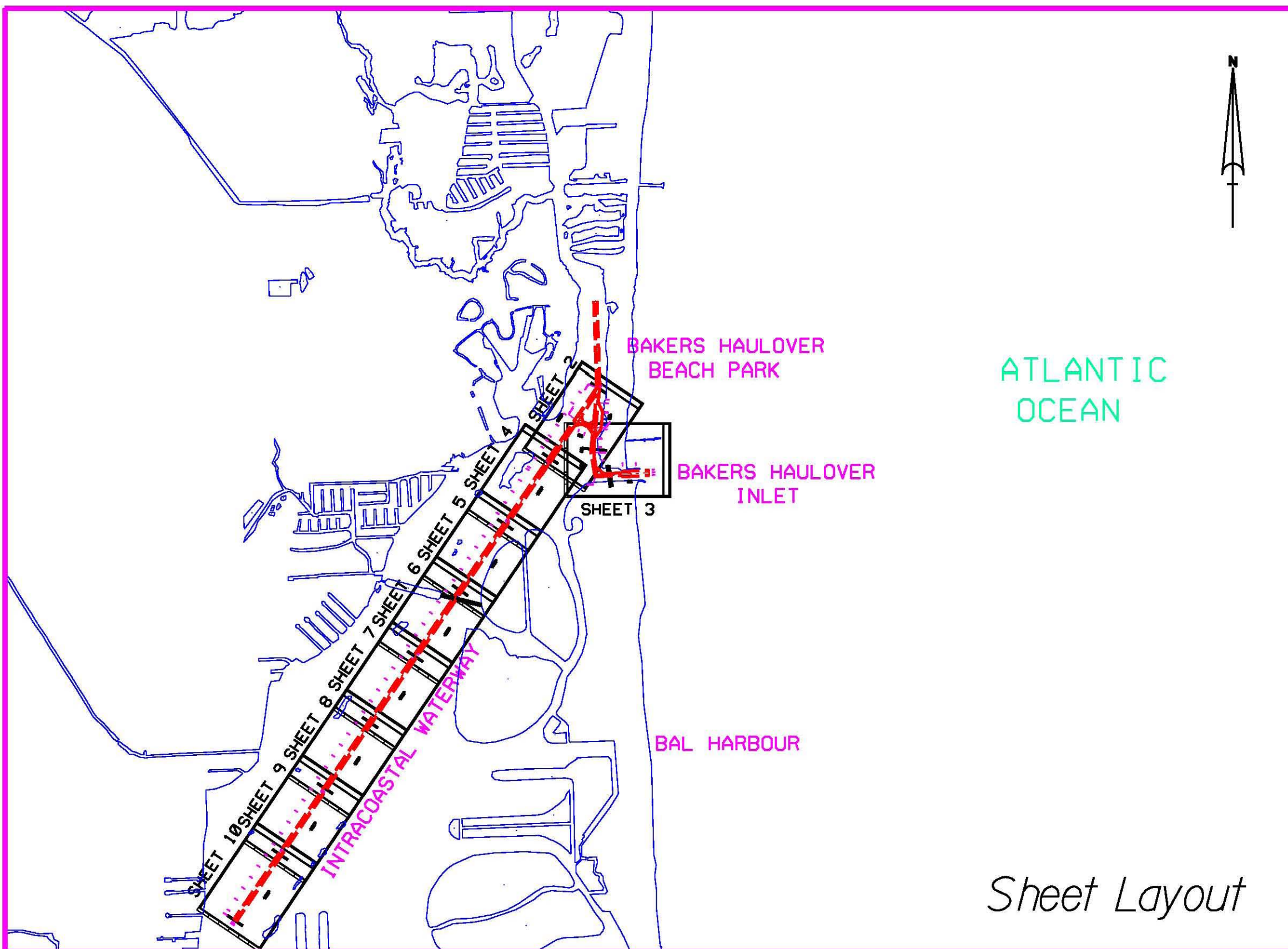


INTRACOASTAL WATERWAY, CUT DA-9 AND BAKERS HAULOVER INLET DADE COUNTY, FLORIDA PROJECT CONDITION SURVEY



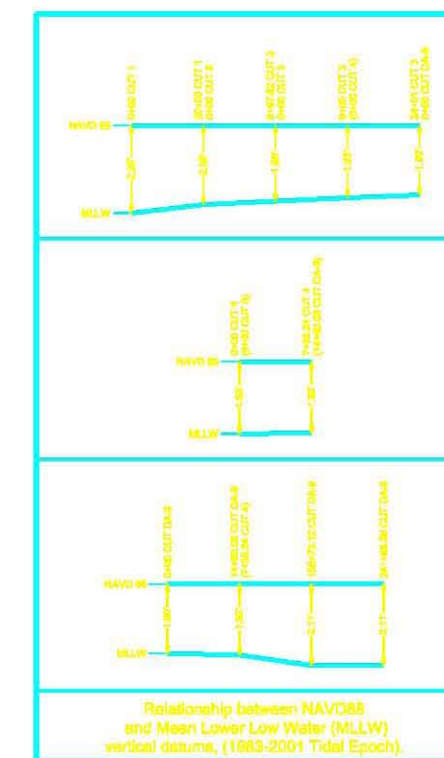
Sheet Layout

SURVEY NOTES:

1. REFER TO SURVEY NO. 09-163.
2. SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO NOAA'S REPORTED MEAN LOWER LOW WATER (MLLW) OF THE 1983-2001 TIDAL EPOCH.
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
4. TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC GPS AND REFERENCED TO MLLW. A KINEMATIC TIDE DATA FILE WAS CREATED AND USED FOR THIS PROJECT.
5. STATE PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83).
6. ALL AZIMUTHS ARE GRID, RECKONED CLOCKWISE FROM SOUTH.
7. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
8. SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC GPS FOR POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATIONS:
 *REFERENCE BASE LOCATED AT *3073 TIDAL F
 NORTHING: 943536.665'
 EASTING: 571694.6'
 NAVD83 ELEVATION: 2.65'
 *TIDE STAFF LOCATED AT *3073 TIDAL F
9. VERTICAL MEASUREMENTS WERE MADE USING A ROSS SMART SOUNDER DUAL FREQUENCY 28/200KHZ SINGLE-BEAM TRANSDUCER. SOUNDINGS SHOWN ON THE MAP SHEETS ARE IN HIGH FREQUENCY (200KHZ).
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 AND IS NOT TO BE USED FOR NAVIGATION.
11. SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL AND QUALITY ASSURANCE REQUIREMENTS WERE FOLLOWED DURING THIS SURVEY IN ACCORDANCE WITH USACE EM 110-2-1003, HYDROGRAPHIC SURVEYING, 1 JAN 02.

VESSEL	DATE OF SURVEY	AREA
WB-32	30 SEP 2009	CUT DA-9, CUTS 2-4
WB-32	01 OCT 2009	CUT-1

9. AID TO NAVIGATION WERE LOCATED DURING THIS SURVEY.



Relationship between NAVD83 and Mean Lower Low Water (MLLW) vertical datums, (1983-2001 Tidal Epoch)

BENCHMARK	NAVD 83 ELEV.(FT)
3873 TIDAL 1	2.65

LEGEND	
+BM	BENCHMARK
⬆	LIGHTED BEACON
⬆	GREEN DAYBEACON
⬆	RED DAYBEACON
⬆	RED LIGHTED BUOY
⬆	GREEN LIGHTED BUOY
⬆	CAN BUOY
⬆	MIN BUOY
⬆	TIDE STAFF

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CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Drawn by	Checked by	Scale	Date
...

INTRACOASTAL WATERWAY
JACKSONVILLE DISTRICT, FLORIDA
PROJECT CONDITION SURVEY
8, 10 AND 11-FOOT PROJECT
COVER SHEET AND INDEX
PLAN

DRAWING NO.
1/6

SHEET 1 OF 10

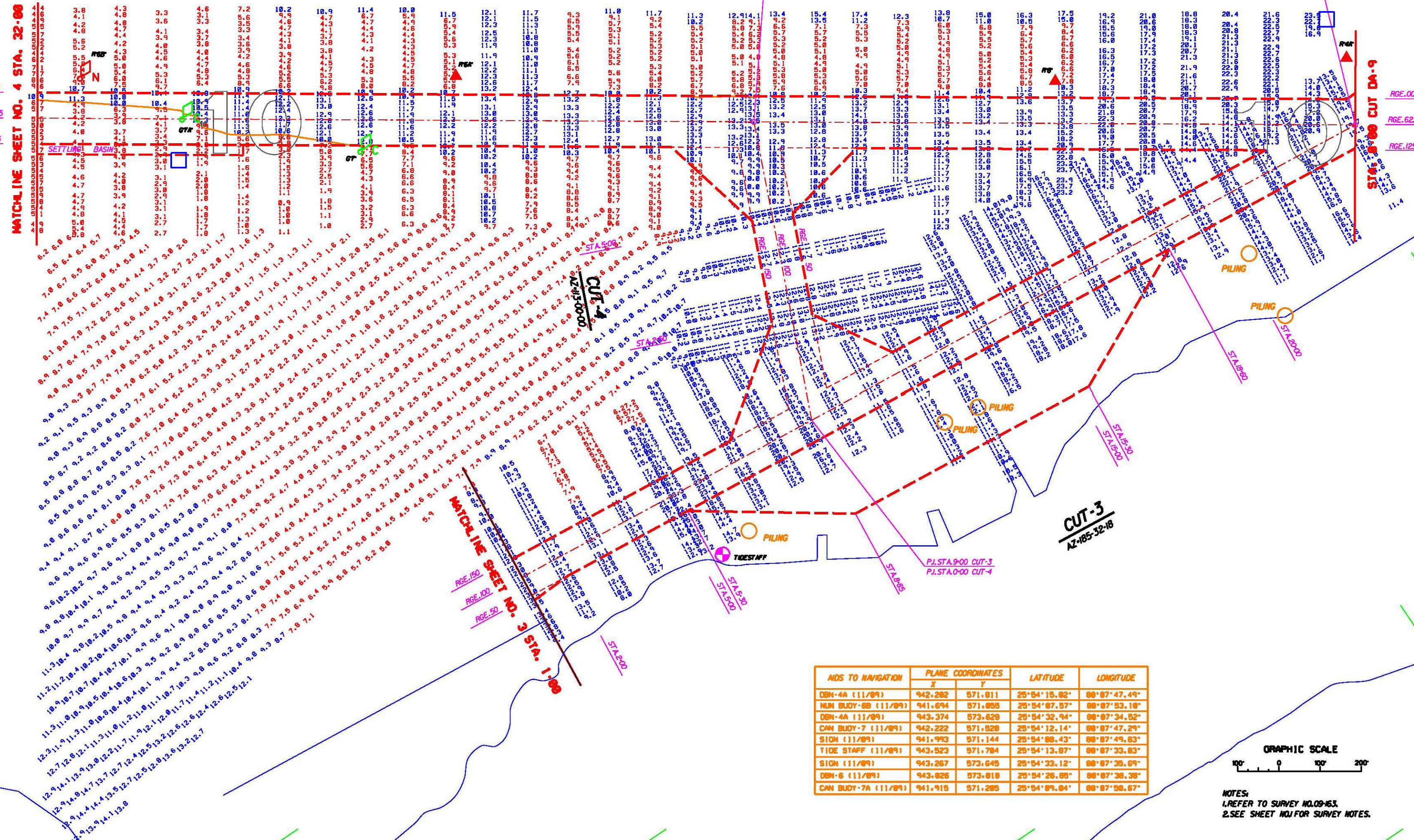
MW CUT DA-9
AZ-34-17-221

MATCHLINE SHEET NO. 4 STA. 32+00

MATCHLINE SHEET NO. 3 STA. 1+00

STA. 28+00 CUT DA-9

CUT-3
AZ-185-32-18



IDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-4A (11/89)	942,282	571,011	25°54'15.02"	80°07'47.49"
MAN BUDY-6B (11/89)	941,694	571,005	25°54'07.07"	80°07'53.10"
DBN-4A (11/89)	943,374	573,626	25°54'32.94"	80°07'34.52"
CAN BUDY-7 (11/89)	942,222	571,528	25°54'12.14"	80°07'47.29"
SION (11/89)	941,993	571,144	25°54'08.43"	80°07'49.63"
TIDE STAFF (11/89)	943,523	571,784	25°54'13.07"	80°07'33.63"
SION (11/89)	943,267	573,645	25°54'33.12"	80°07'35.69"
DBN-6 (11/89)	943,626	573,018	25°54'26.05"	80°07'36.38"
CAN BUDY-7A (11/89)	941,915	571,285	25°54'09.04"	80°07'58.67"

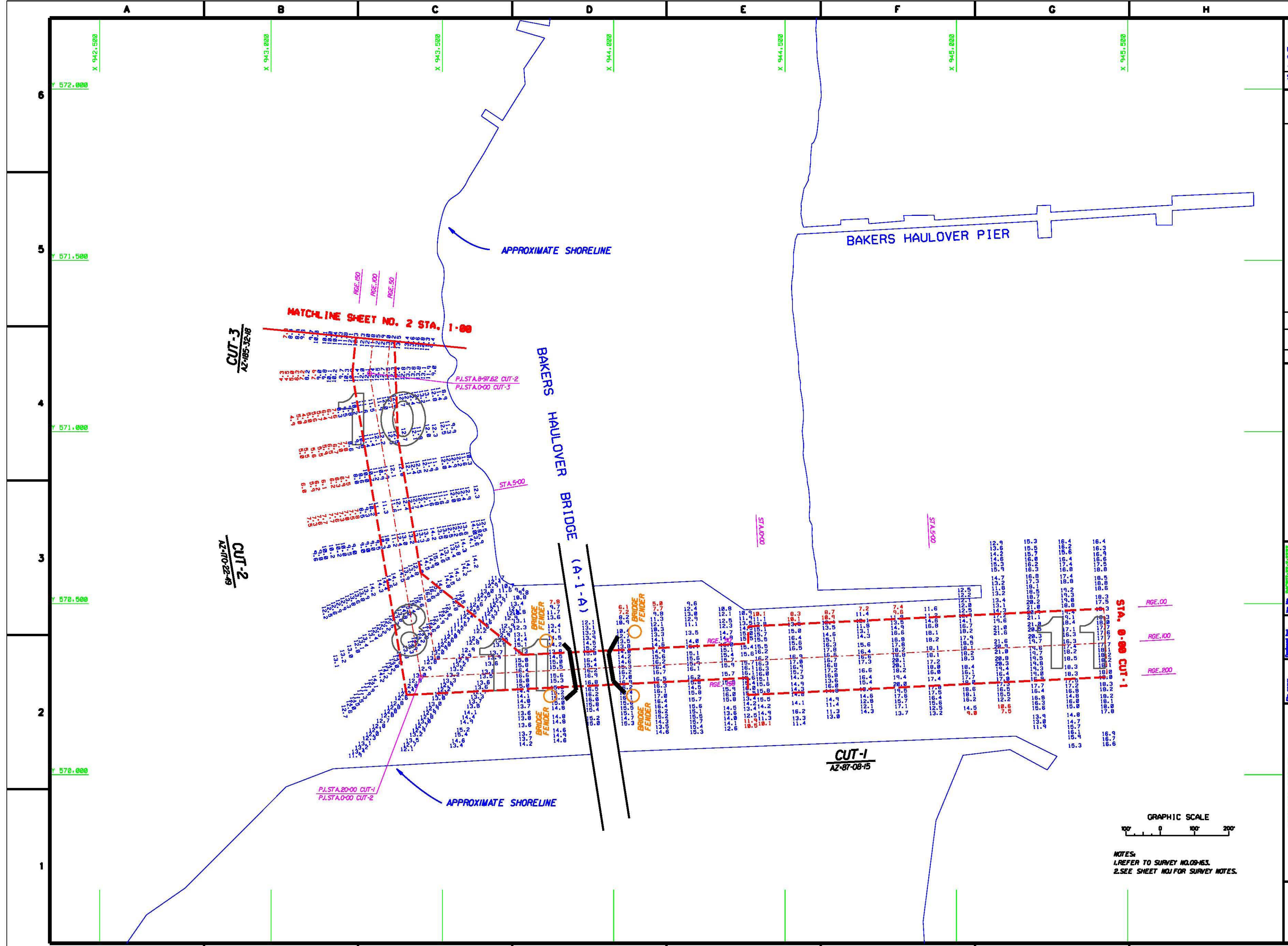


NOTES:
1. REFER TO SURVEY NO. 09-63.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT

Drawn by	Checked by	Scale	Project No.
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE
DATE	DATE	DATE	DATE

PROJECT CONDITION SURVEY
8 AND 10-FOOT PROJECT
STA. 1+00 THRU STA. 24+00 CUT-3
STA. 0+00 THRU STA. 28+00 CUT-4
STA. 0+00 THRU STA. 32+00 CUT-5



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CORPS OF ENGINEERS
JACKSONVILLE DISTRICT

PROJECT: PROJECT NO. 3352-33-000
DRAWING NO. 3/6

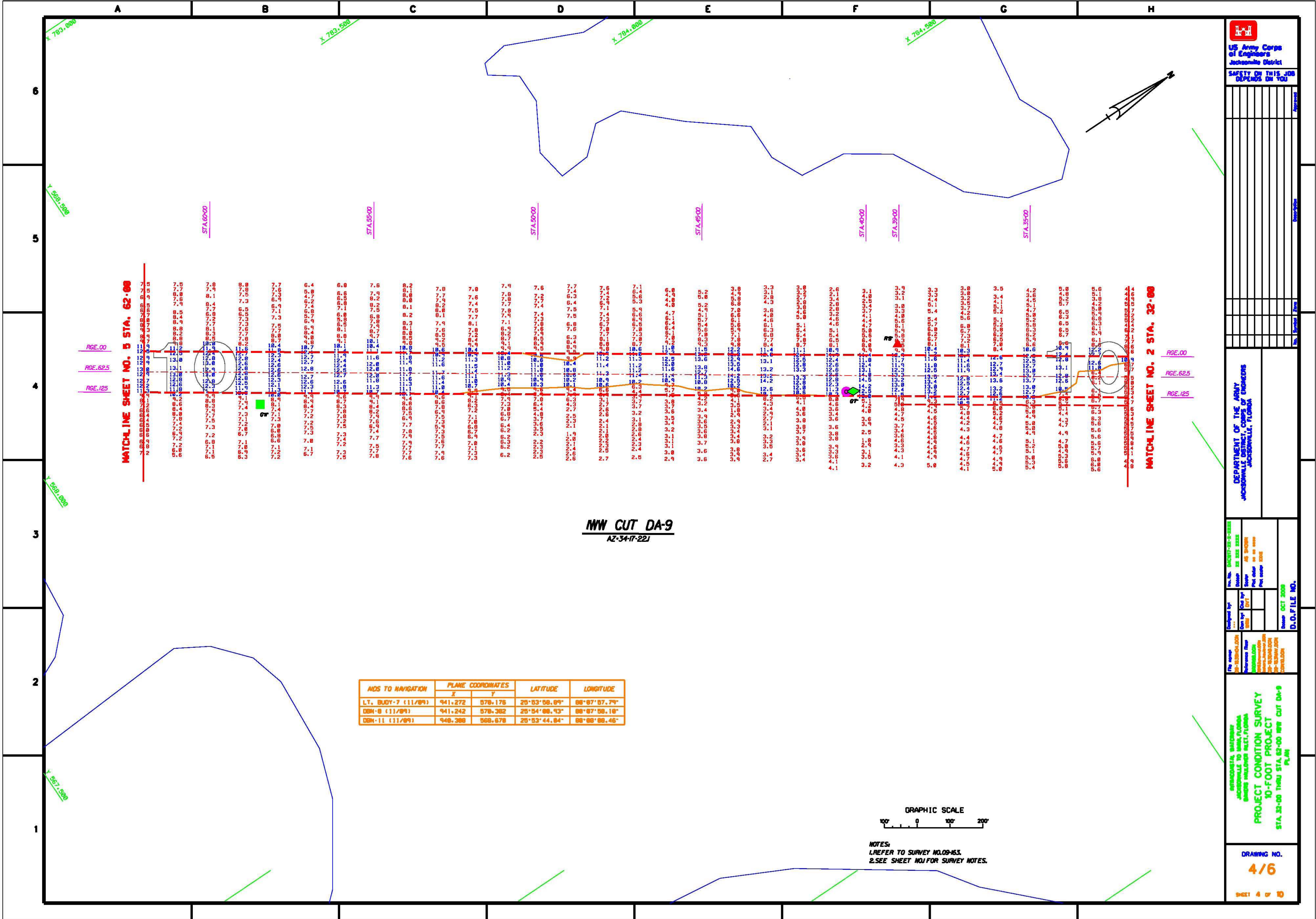
DESIGNED BY: J. J. ...
CHECKED BY: ...
DATE: ...

PROJECT CONDITION SURVEY
8 AND 11-FOOT PROJECT
STA. 0+00 CUT-1 THRU STA. 1+00 CUT-3
PLAN

DRAWING NO. 3/6



NOTES:
1. REFER TO SURVEY NO. 09-163.
2. SEE SHEET NO. 4 FOR SURVEY NOTES.



MATCHLINE SHEET NO. 5 STA. 62+00

MATCHLINE SHEET NO. 2 STA. 32+00

MW CUT DA-9
AZ-34-17-221

IDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUDY-7 (11/89)	941.272	578.178	25°03'08.89"	88°07'07.79"
DBN-8 (11/89)	941.242	578.382	25°04'08.93"	88°07'58.18"
DBN-11 (11/89)	948.388	568.678	25°03'44.84"	88°08'08.46"



NOTES:
1. REFER TO SURVEY NO. 09-163.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

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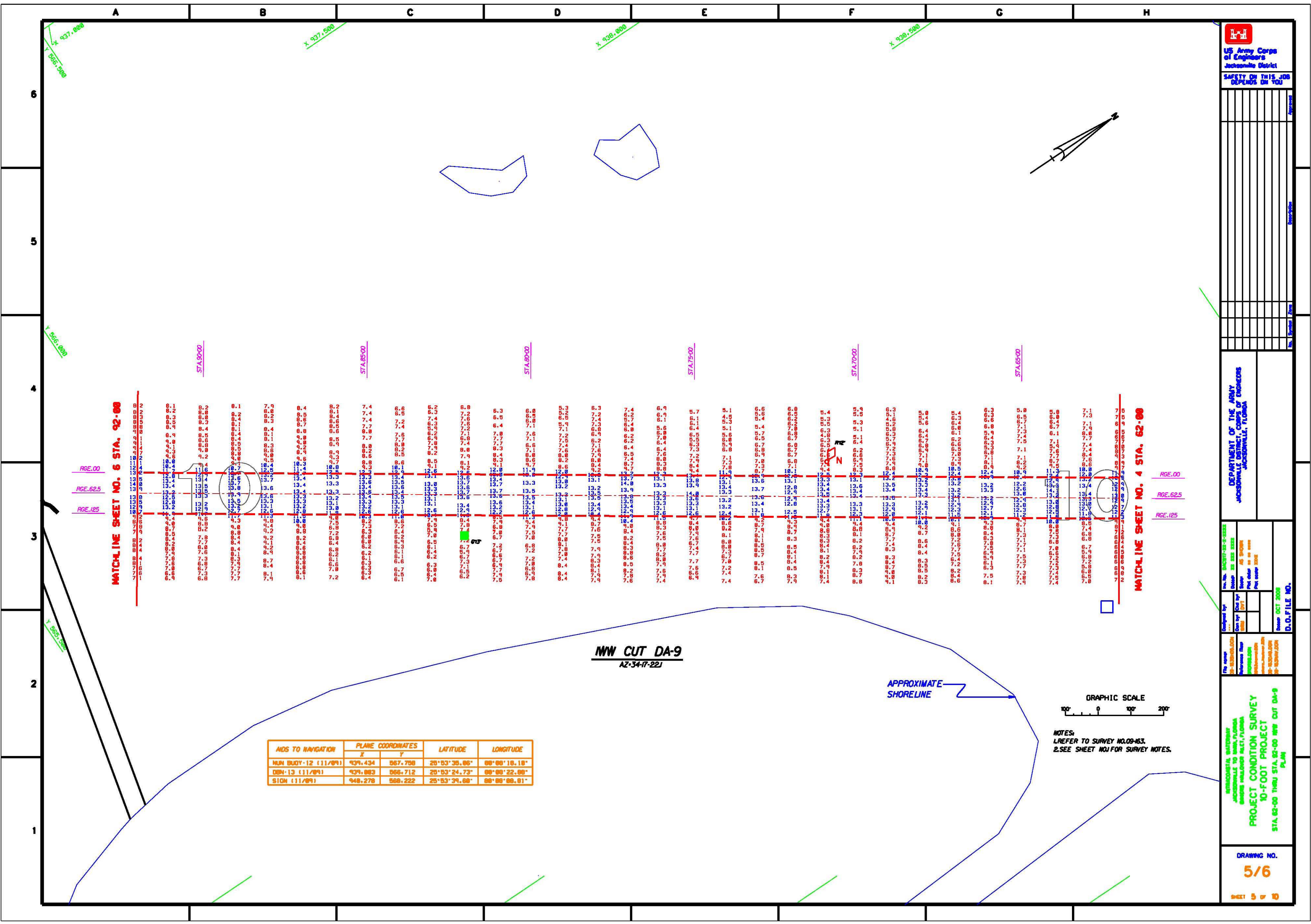
DEPARTMENT OF THE ARMY
Jacksonville District of Engineers

Drawn by: **W. J. BROWN**
Checked by: **W. J. BROWN**
Date: **08/20/09**
Scale: **AS SHOWN**
Plot color: **as is**
Plot scale: **1:1**

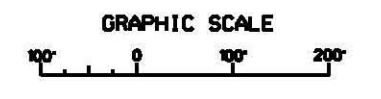
PROJECT CONDITION SURVEY
10-FOOT PROJECT
STA. 32+00 THRU STA. 62+00 MW CUT DA-9
PLAN

DRAWING NO.
4/6

SHEET 4 of 10



MDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
MUN BUOY-12 (11/89)	939.434	967.798	28°53'38.88"	88°08'18.18"
DBN-13 (11/89)	939.883	966.712	28°53'24.73"	88°08'22.88"
SI0N (11/89)	948.278	966.222	28°53'39.68"	88°08'08.01"



NOTES:
1. REFER TO SURVEY NO. 09-63.
2. SEE SHEET NO. 4 FOR SURVEY NOTES.

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Jacksonville District

SAFETY ON THIS JOB
DEPENDS ON YOU

NO.	NAME	DATE

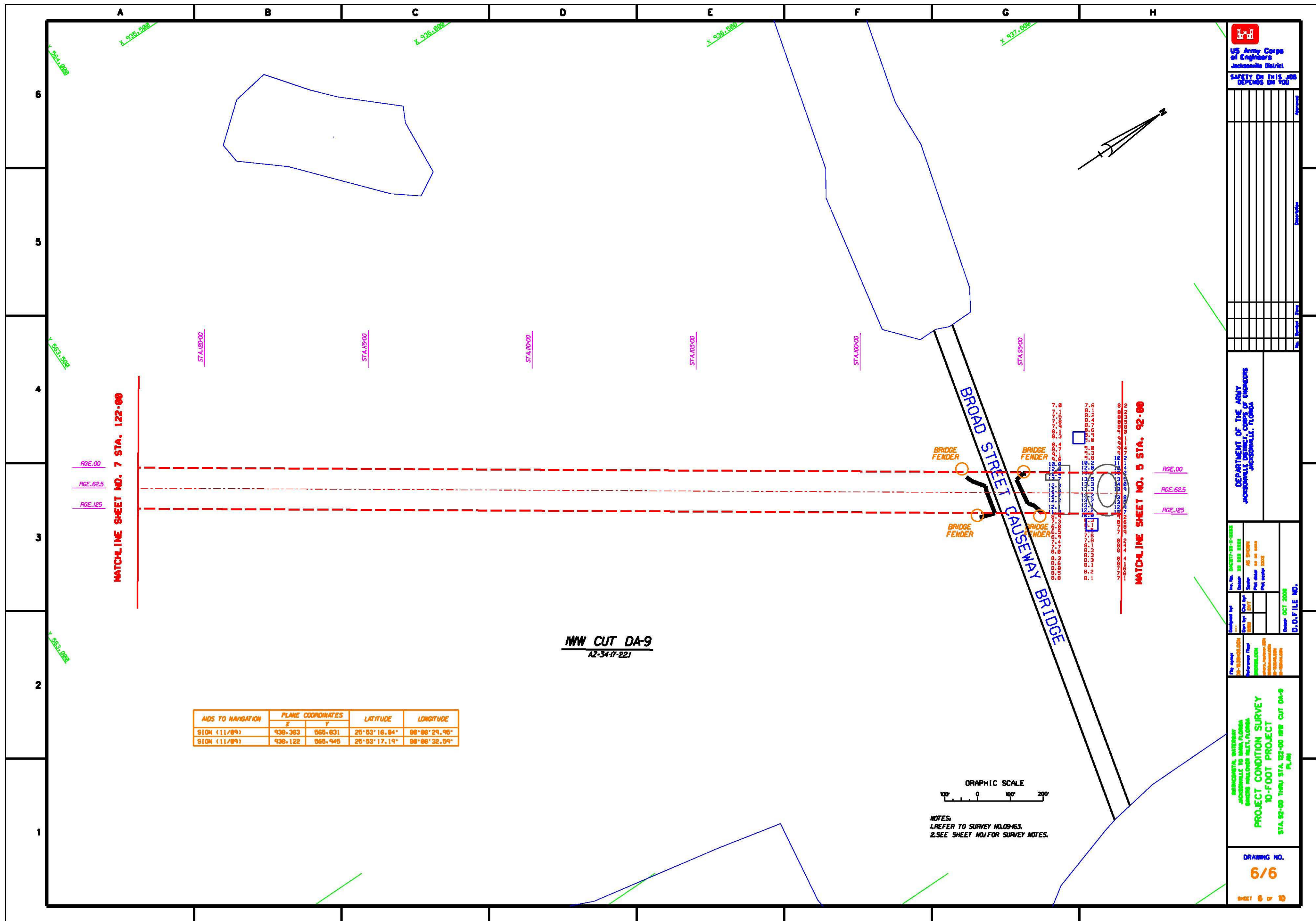
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS
JACKSONVILLE DISTRICT

Drawn by	
Checked by	
Scale	AS SHOWN
Plot date	
Plot scale	

PROJECT CONDITION SURVEY
10-FOOT PROJECT
STA 92+00 THRU STA 122+00 NW CUT DA-9
PLAN

DRAWING NO.
6/6

SHEET 6 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
SIGM (11/89)	936.263	966.631	25°53'16.84"	08°09'29.96"
SIGM (11/89)	936.122	966.946	25°53'17.19"	08°09'32.59"



NOTES:
1. REFER TO SURVEY NO. 09-163.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

NW CUT DA-9
AZ-34-17-221