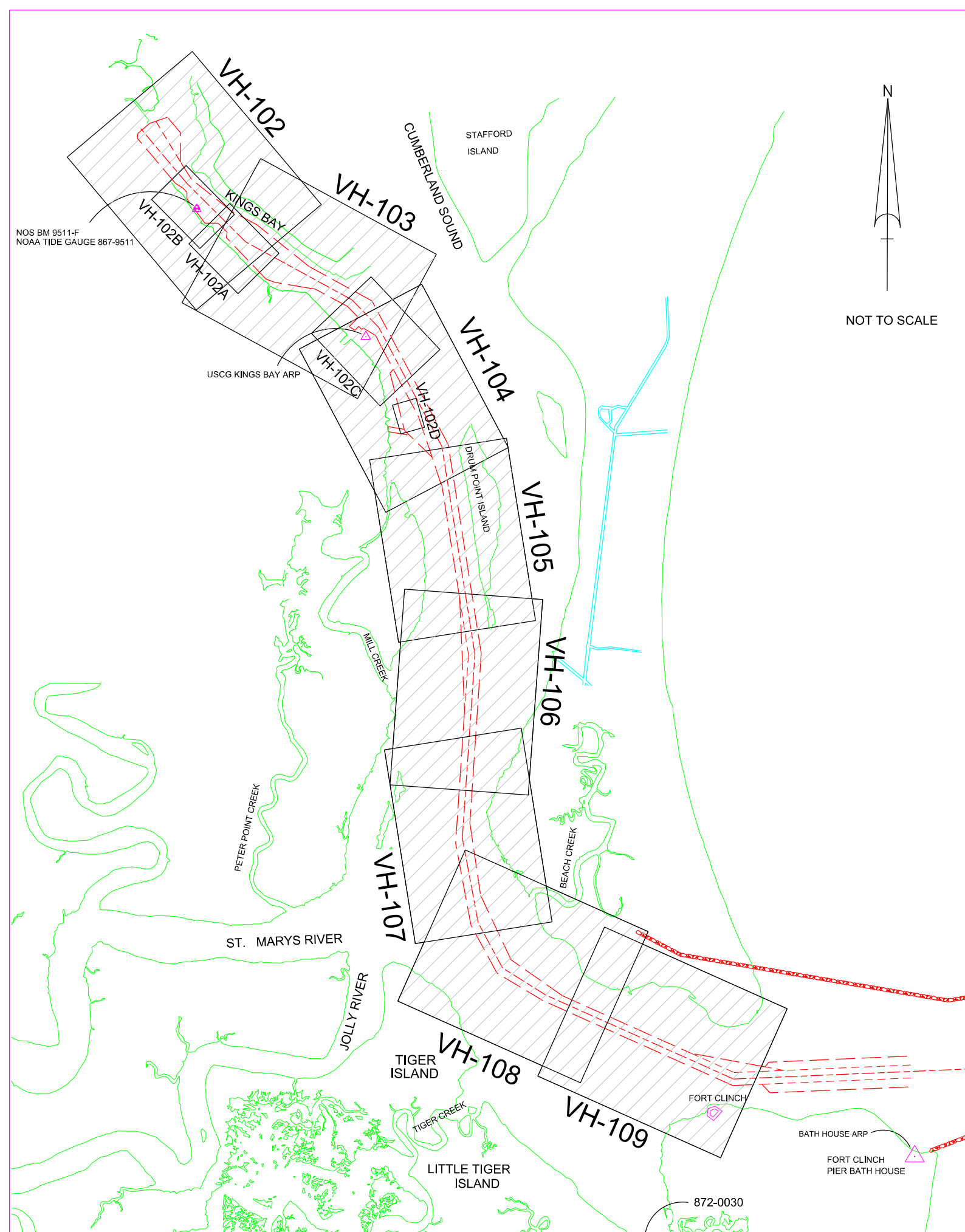


U.S. NAVY SUBMARINE BASE KINGS BAY, GEORGIA KINGS BAY INNER CHANNEL HYDROGRAPHIC EXAMINATION SURVEY 2ND QUARTER FY15



LEGEND	
	MONUMENT
	LIGHTED BEACON
	GREEN DAY BEACON
	RED DAY BEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	CAN BUOY
	NUN BUOY
	TIDE STAFF
	MAJOR CONTOUR
	MINOR CONTOUR
	MAJOR DEPRESSION
	MINOR DEPRESSION

DEPTH COLOR CODE	
≤ 39.9	
40.0 - 41.9	
42.0 - 45.9	
46.0 - 48.9	
≥ 49.0	

SURVEY NOTES:

- REFER TO SURVEY NO. 15-074. ALSO SHOWN IN THIS SURVEY ARE SOUNDINGS FROM BEFORE & AFTER-DREDGE SURVEY NO'S. 15-092 & 15-093.
- SOUNDINGS ARE IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER (MLLW) TIDAL DATUM.
- ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
- TIDAL REDUCTIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC (RTK) GPS USING A HYPACK KINEMATIC TIDAL DATUM MODEL (KINGSBAY-2013 06 26.KTD).
- PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE EAST ZONE OF GEORGIA 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 LOCATIONS:
REFERENCE BASE LOCATED AT "BATH HOUSE ARP" (OPUS PID # BBCB08), FOR RANGE-A THRU RANGE-C.
REFERENCE BASE LOCATED AT "USCG KINGS BAY ARP" (OPUS PID # BBDK29), FOR RANGE-D THRU RANGE-I.
- DEPTHS DEPICTED BY THIS SURVEY ARE REFERENCED TO MLLW, 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 BENCH MARKS ASSOCIATED WITH THE TIDE GAUGE SITES SPECIFIED BELOW:
NOAA TIDAL STATION 872-0030, FERNANDINA, FL, FOR RANGE-A THRU RANGE-G (OUTSIDE WRA)
NOAA TIDAL STATION 867-9511, KINGS BAY, GA, FOR RGE-G THRU RGE-I (INSIDE WRA)
- VERTICAL MEASUREMENTS WERE MADE USING AN R2 SONIC MODEL 2024 MULTIBEAM SYSTEM AND A ROSS MODEL 835B SMARTSOUNDER WITH A DUAL-FREQUENCY (28/200KHZ) TRANSDUCER. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY FROM RANGE-A THRU RANGE-D AND LOW FREQUENCY FROM RANGE-E THRU RANGE-I.

VESSEL	DATE OF SURVEY	AREA SURVEYED
FLI1	24 & 26 FEB 2015	RGE-A, STA 0+000 THRU RANGE-C, STA 22+547
FLI1	27 FEB 2015	RGE-D, STA 22+547 TO STA 30+547
SB-48	28 FEB & 1 MAR 2015	RGE-G, STA 39+200 THRU RGE-I, STA 48+175, REFIT WHARF & EHW-1 & 2
SB-48	23 MAR 2015	RGE-E, STA 30+748 THRU RANGE-G, STA TO 39+000
SB-48	25 MAR 2015	MSF
SB-48	31 MAR 2015	SITE-6 (SOUTH)

- 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 IN ACCORDANCE WITH USACE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 30 NOV 2013 AND EM 1110-2-6056, STANDARDS AND PROCEDURES FOR REFERENCING PROJECT ELEVATION GRADES TO NATIONWIDE VERTICAL DATUMS, 31 DEC 2010.

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
DRAWN BY: FAW
CHECKED BY: FAW
DATE: MAR 2015

INDEX LOG: 15-074-GB-SB-RD-001
Reference Map: 15-074-ABC-VH-01.DGN

U.S. NAVY INNER CHANNEL
KINGS BAY, GEORGIA
2ND QUARTER FY15 EXAMINATION SURVEY
44, 45 & 46-FOOT PROJECT
INDEX, LOCATION AND VICINITY
MAP

Scale: AS SHOWN
Drawing no. **V-101**
SHEET 01 OF 12



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

INDEX LOCATION
15-07-AR-BEGH-LE-DCN
15-07-AR-BEGH-LI-DCN
15-07-AR-BEGH-LN-DCN
15-07-AR-BEGH-LP-DCN
15-07-AR-BEGH-LR-DCN
15-07-AR-BEGH-LS-DCN
15-07-AR-BEGH-LT-DCN
15-07-AR-BEGH-LV-DCN
15-07-AR-BEGH-LW-DCN
15-07-AR-BEGH-LX-DCN
15-07-AR-BEGH-LY-DCN
15-07-AR-BEGH-LZ-DCN

U.S. NAVY INNER CHANNEL
KINGS BAY, GEORGIA
**2ND QUARTER FY15 EXAMINATION SURVEY
44, 45 & 46-FOOT PROJECT**
STA. 42+400 RANGE THRU STA. 49+242 RANGE-I
PLAN

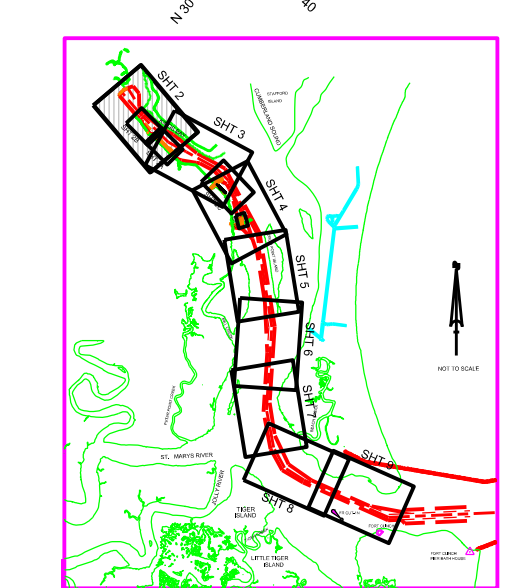
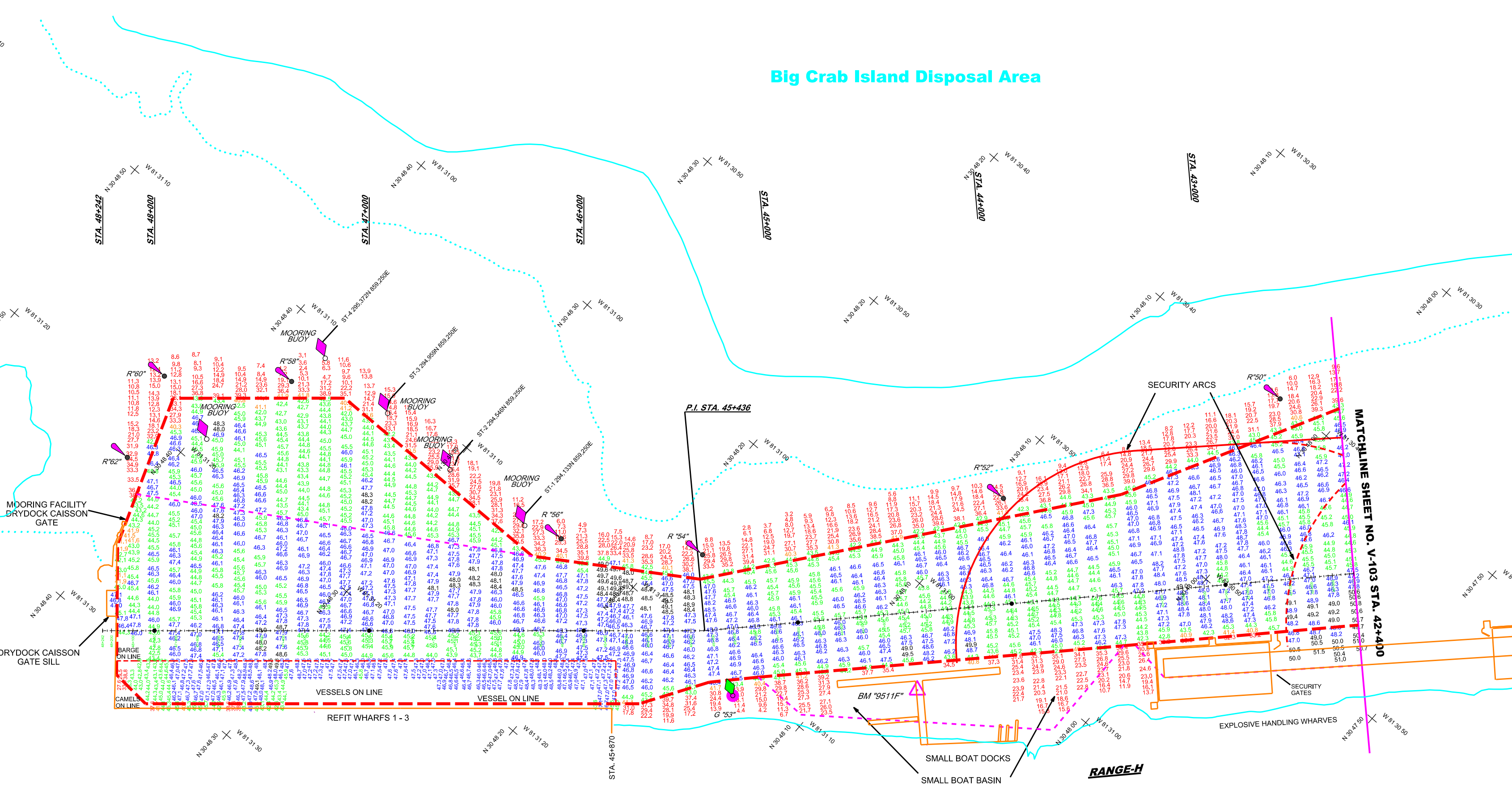
Scale: AS SHOWN

Drawing no.

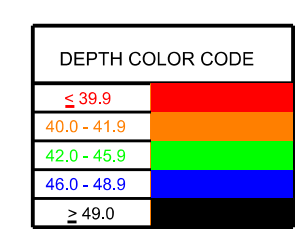
V-102

SHEET 02 OF 12

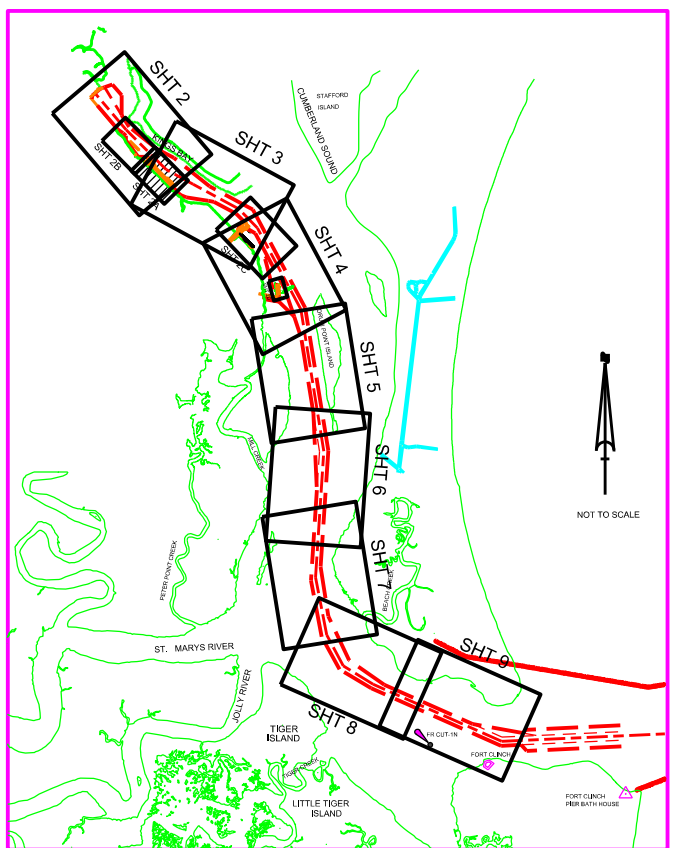
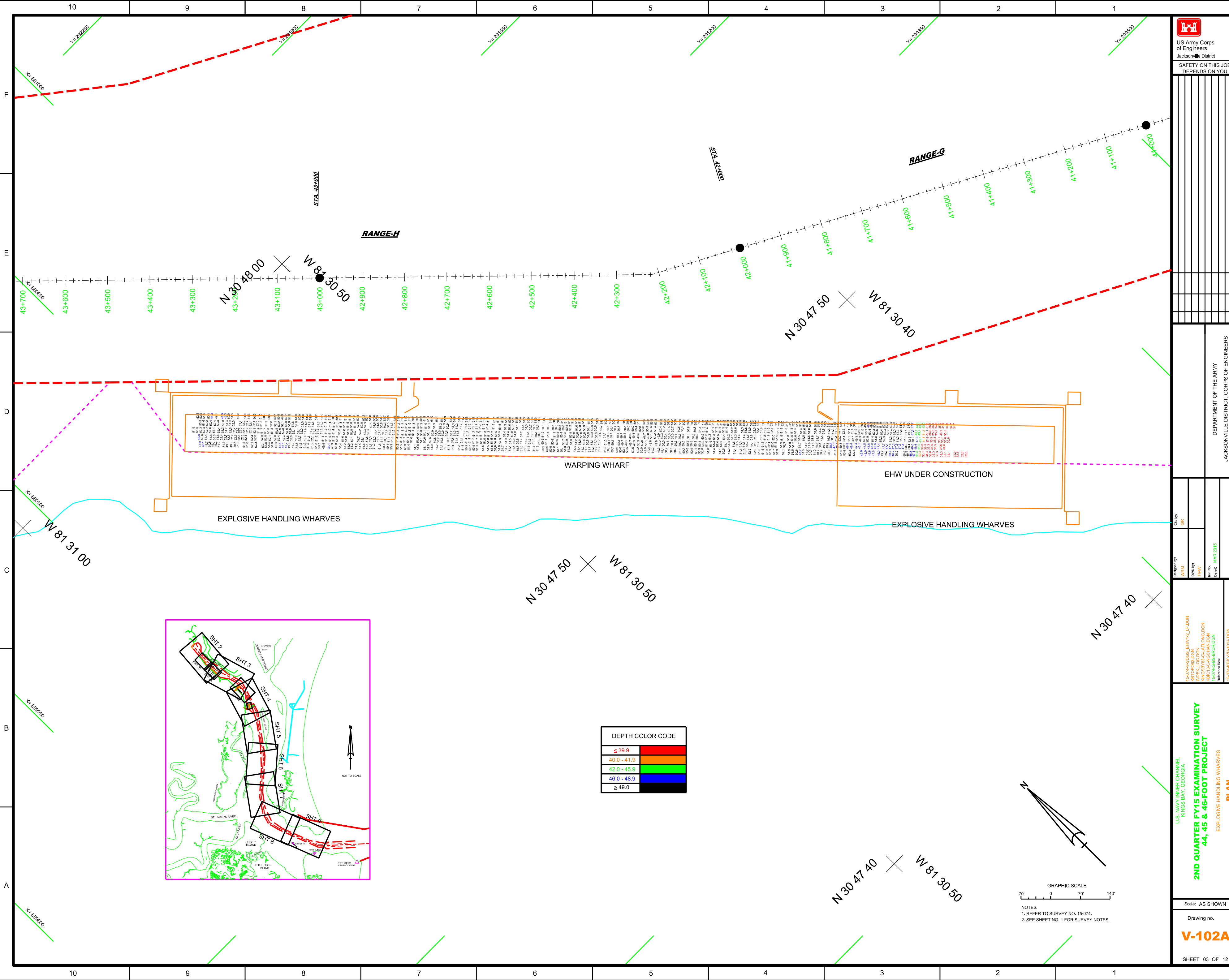
Big Crab Island Disposal Area



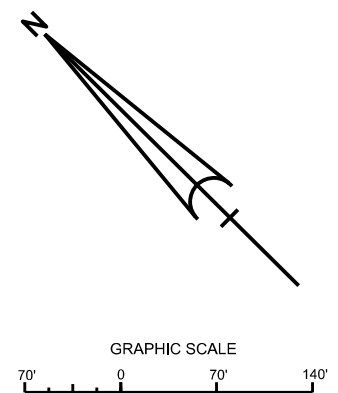
AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT- 50 (03/15)	861,978	291,818	30°48'02.73"	81°30'40.04"
LT- 52 (03/15)	860,790	292,501	30°48'09.56"	81°30'53.61"
LT- 53 (03/15)	859,273	292,868	30°48'13.27"	81°31'10.99"
LT- 54 (03/15)	859,683	293,400	30°48'18.52"	81°31'06.25"
LT- 56 (03/15)	859,314	293,950	30°48'23.99"	81°31'10.45"
LT- 58 (03/15)	859,060	295,383	30°48'38.18"	81°31'13.26"
LT- 60 (03/15)	858,696	295,851	30°48'42.83"	81°31'17.41"
LT- 62 (03/15)	858,295	295,737	30°48'41.73"	81°31'22.01"
MOORING BUOY (03/15)	859,251	294,120	30°48'25.67"	81°31'11.16"
MOORING BUOY (03/15)	859,224	294,553	30°48'29.96"	81°31'11.43"
MOORING BUOY (03/15)	859,237	294,945	30°48'33.84"	81°31'11.27"
MOORING BUOY (03/15)	859,244	295,333	30°48'37.68"	81°31'11.16"
MOORING BUOY (03/15)	858,599	295,510	30°48'39.47"	81°31'18.54"



NOTES:
1. REFER TO SURVEY NO. 15-074.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.
3. LAT/LONG GRID TICS ARE AT 10-SECOND INTERVALS.

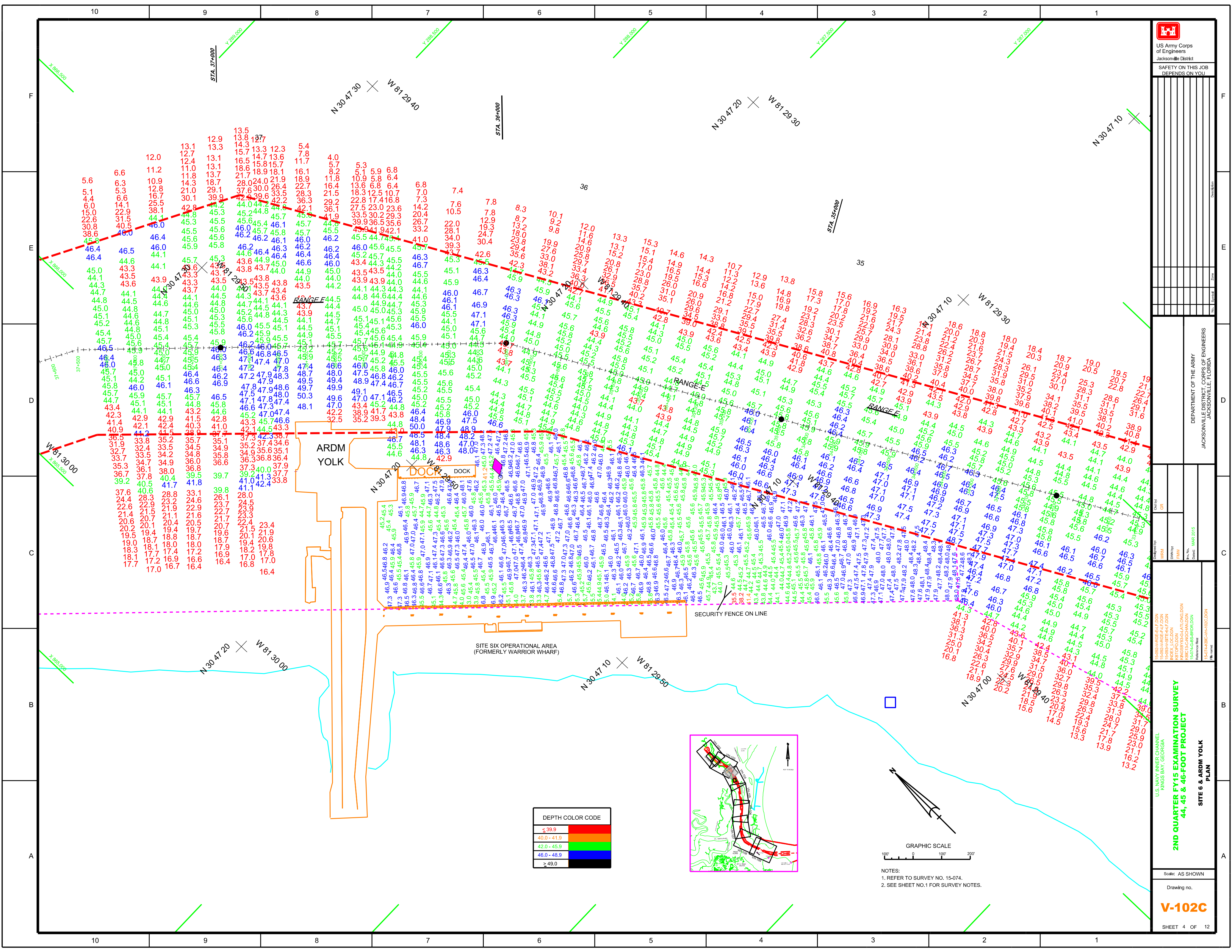


DEPTH COLOR CODE	
≤ 39.9	Red
40.0 - 41.9	Orange
42.0 - 45.9	Green
46.0 - 48.9	Blue
≥ 49.0	Black

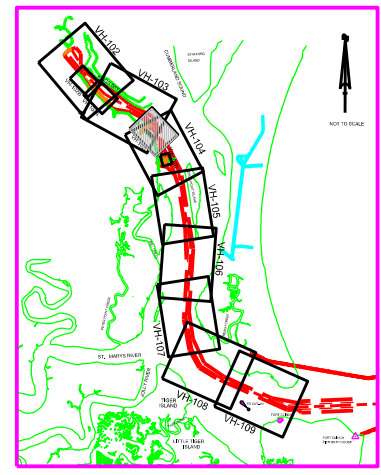


NOTES:
 1. REFER TO SURVEY NO. 15-074.
 2. SEE SHEET NO. 1 FOR SURVEY NOTES.

 US Army Corps of Engineers Jacksonville District SAFETY ON THIS JOB DEPENDS ON YOU	
Designed by: WRM	Checked by: GR
Drawn by: FHW	Date: MAR 2015
PROJECT: 15-074-ARBC-VH-102A.DGN TITLE: 2ND QUARTER FY15 EXAMINATION SURVEY 44, 45 & 46-FOOT PROJECT PLAN: EXPLOSIVE HANDLING WHARVES	
Scale: AS SHOWN Drawing no.: V-102A SHEET 03 OF 12	

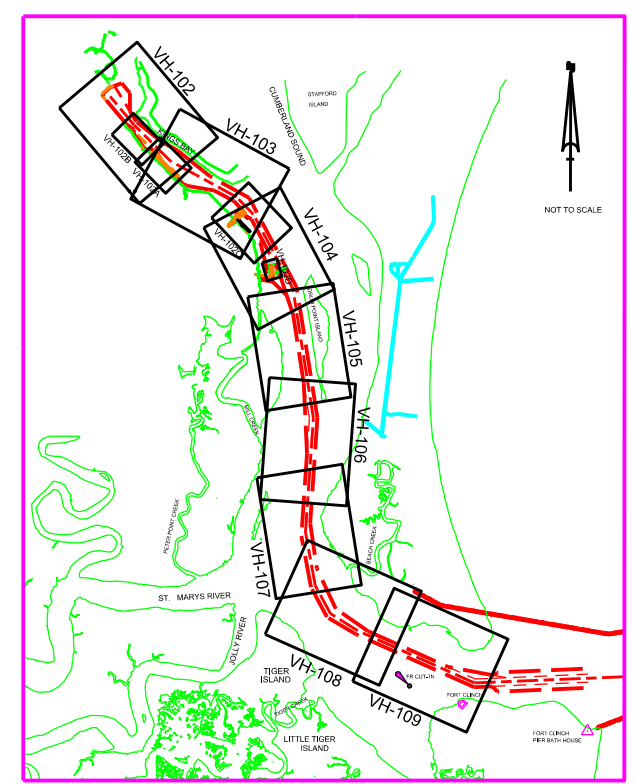
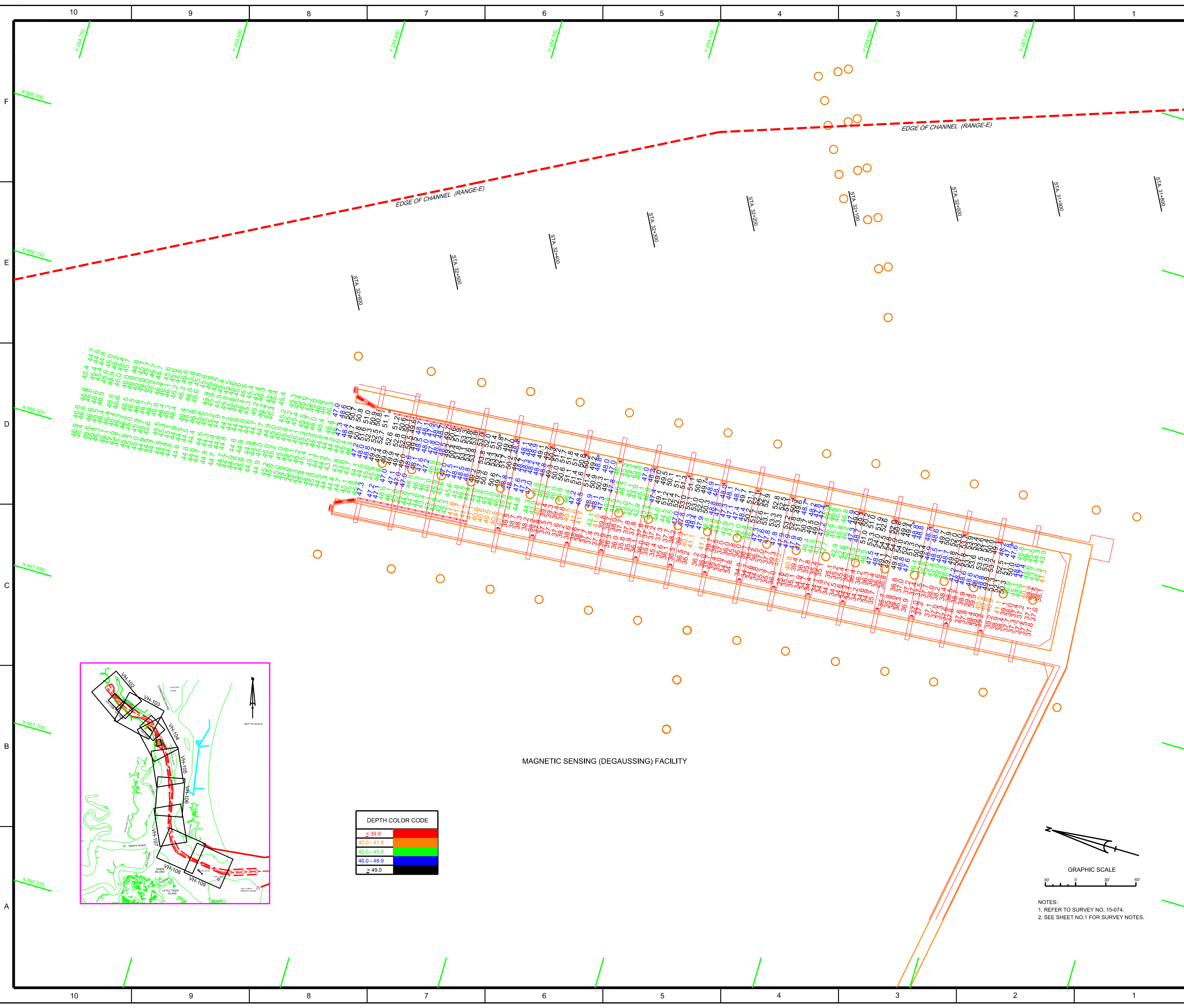


DEPTH COLOR CODE	
≤ 39.9	Red
40.0 - 41.9	Orange
42.0 - 45.9	Yellow
46.0 - 48.9	Green
> 49.0	Blue



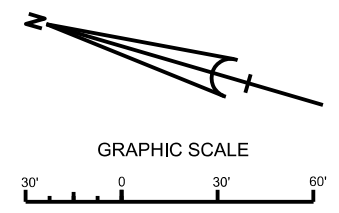
GRAPHIC SCALE
 100' 0 100' 200'

NOTES:
 1. REFER TO SURVEY NO. 15-074.
 2. SEE SHEET NO.1 FOR SURVEY NOTES.

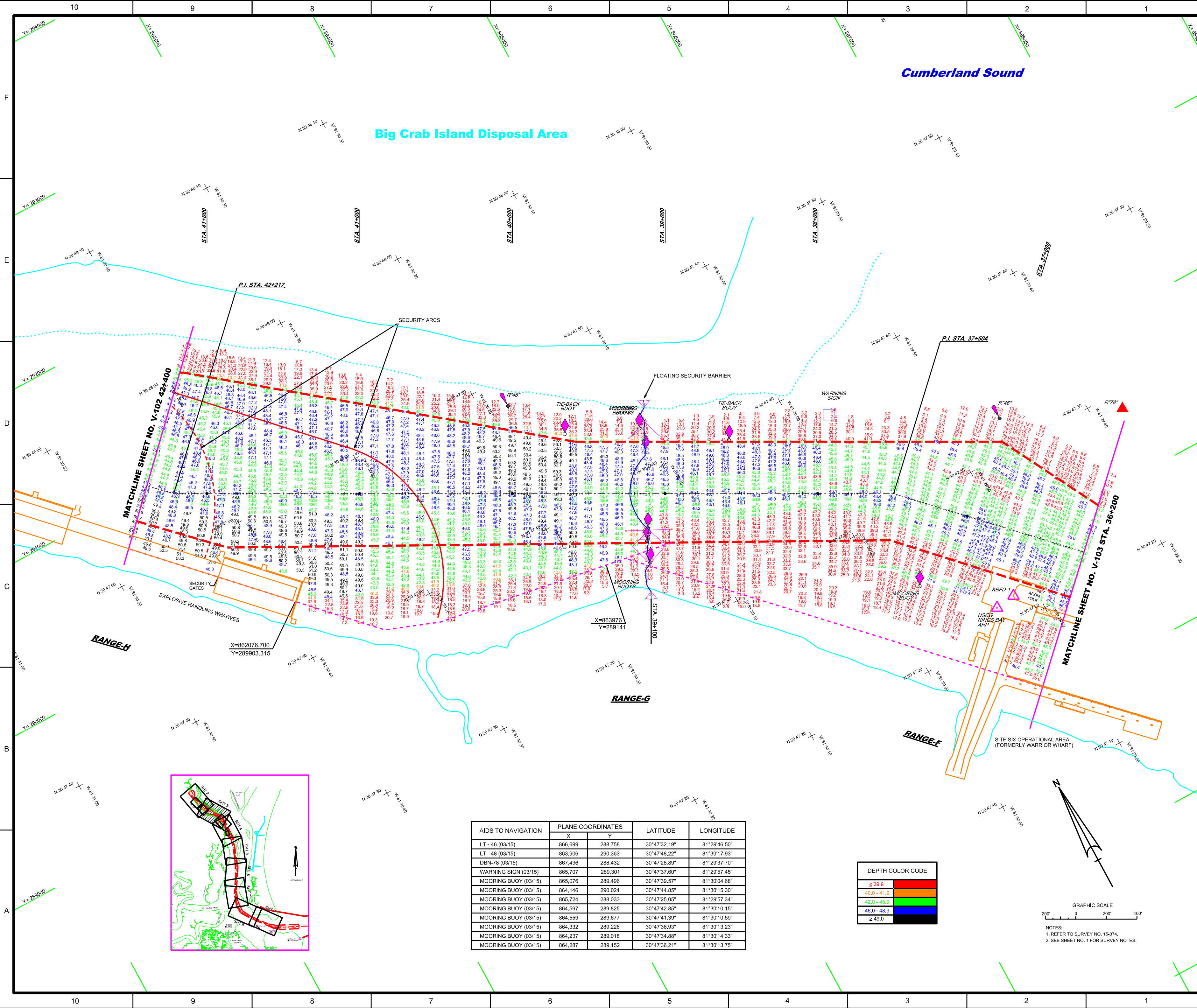


DEPTH COLOR CODE	
< 39.9	Red
40.0 - 41.9	Orange
42.0 - 45.9	Yellow
46.0 - 48.9	Green
> 49.0	Blue

MAGNETIC SENSING (DEGAUSSING) FACILITY

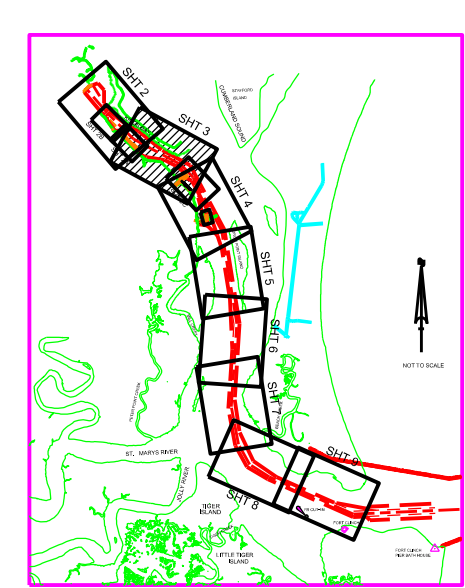


NOTES:
1. REFER TO SURVEY NO. 15-074.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

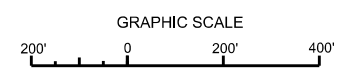
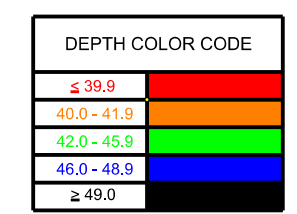


Big Crab Island Disposal Area

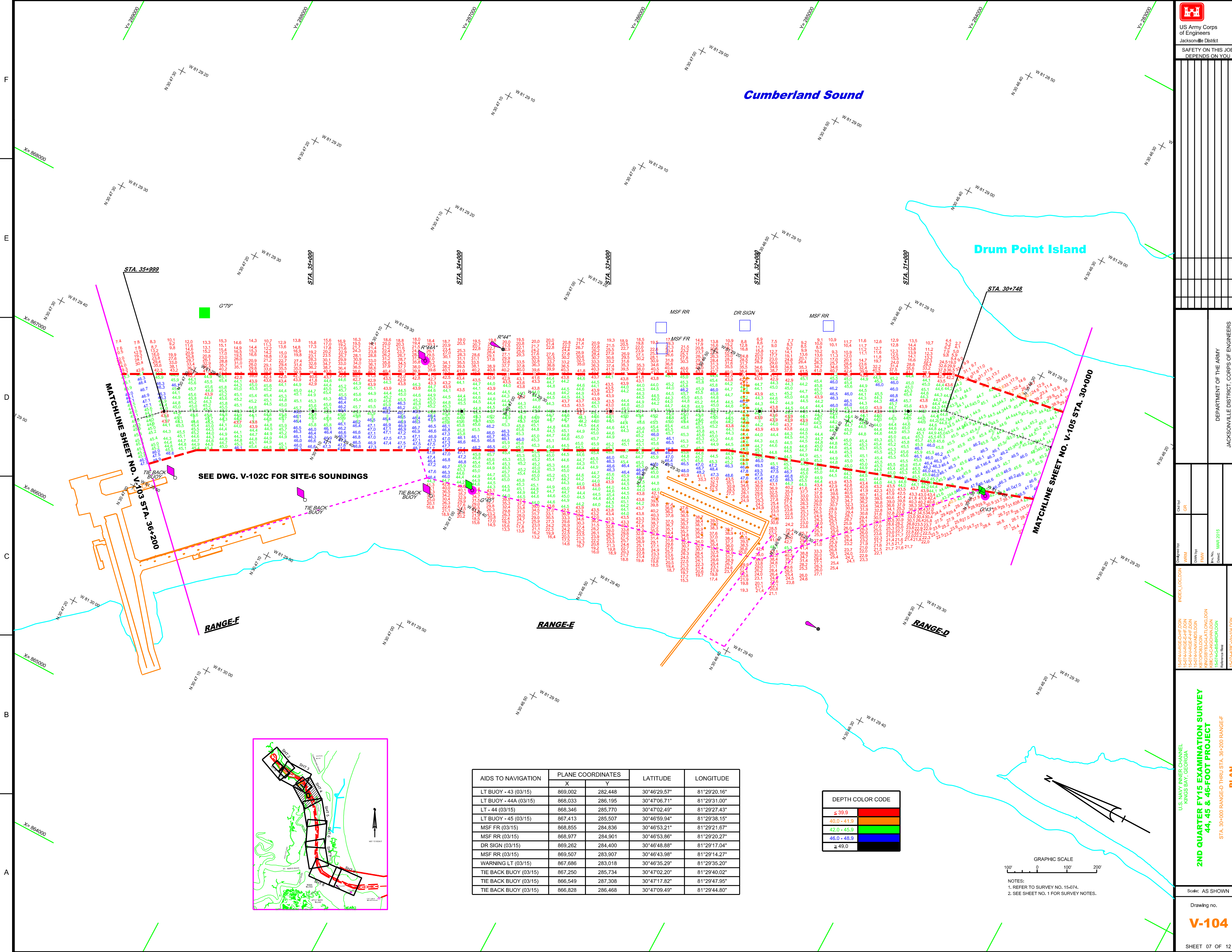
Cumberland Sound



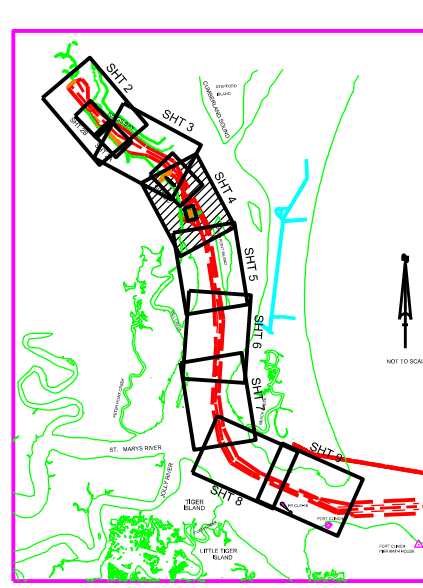
AIDS TO NAVIGATION	PLANE COORDINATES	LATITUDE	LONGITUDE	
	X	Y		
LT - 46 (03/15)	866,699	288,758	30°47'32.19"	81°29'46.50"
LT - 48 (03/15)	863,906	290,363	30°47'48.22"	81°30'17.93"
DBN-78 (03/15)	867,436	288,432	30°47'28.89"	81°29'37.70"
WARNING SIGN (03/15)	865,707	289,301	30°47'37.60"	81°29'57.45"
MOORING BUOY (03/15)	865,076	289,496	30°47'39.57"	81°30'04.68"
MOORING BUOY (03/15)	864,146	290,024	30°47'44.85"	81°30'15.30"
MOORING BUOY (03/15)	865,724	288,033	30°47'25.05"	81°29'57.34"
MOORING BUOY (03/15)	864,597	289,825	30°47'42.85"	81°30'10.15"
MOORING BUOY (03/15)	864,559	289,677	30°47'41.39"	81°30'10.59"
MOORING BUOY (03/15)	864,332	289,226	30°47'36.93"	81°30'13.23"
MOORING BUOY (03/15)	864,237	289,018	30°47'34.88"	81°30'14.33"
MOORING BUOY (03/15)	864,287	289,152	30°47'36.21"	81°30'13.75"



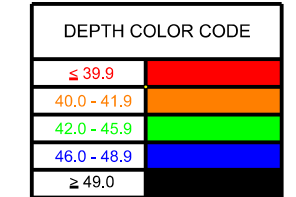
NOTES:
1. REFER TO SURVEY NO. 15-074.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



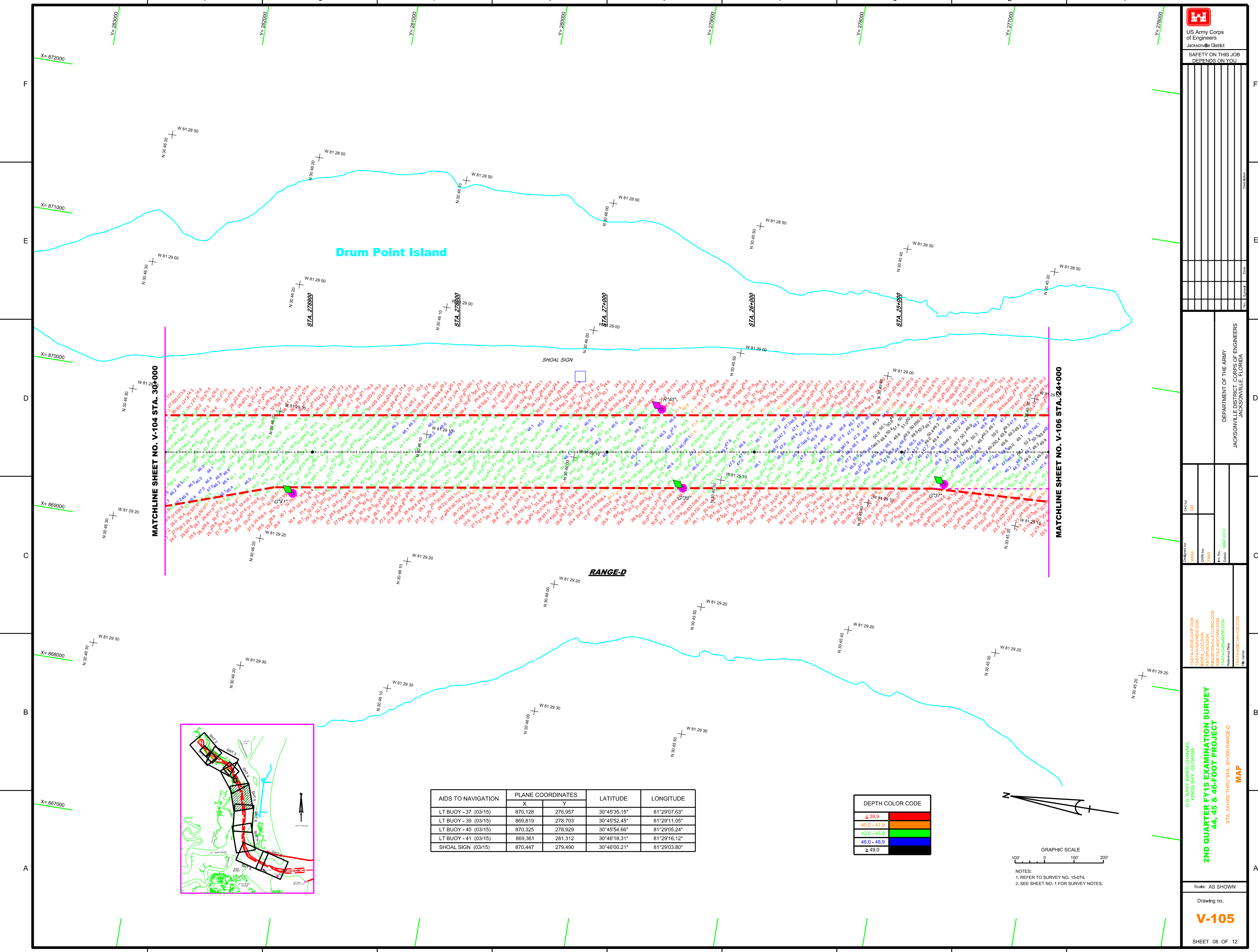
SEE DWG. V-102C FOR SITE-6 SOUNDINGS



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 43 (03/15)	869,002	282,448	30°46'29.57"	81°29'20.16"
LT BUOY - 44A (03/15)	868,033	286,195	30°47'06.71"	81°29'31.00"
LT - 44 (03/15)	868,346	285,770	30°47'02.49"	81°29'27.43"
LT BUOY - 45 (03/15)	867,413	285,507	30°46'59.94"	81°29'38.15"
MSF RR (03/15)	868,855	284,836	30°46'53.21"	81°29'21.67"
MSF RR (03/15)	868,977	284,901	30°46'53.86"	81°29'20.27"
DR SIGN (03/15)	869,262	284,400	30°46'48.88"	81°29'17.04"
MSF RR (03/15)	869,507	283,907	30°46'43.98"	81°29'14.27"
WARNING LT (03/15)	867,686	283,018	30°46'35.29"	81°29'35.20"
TIE BACK BUOY (03/15)	867,250	285,734	30°47'02.20"	81°29'40.02"
TIE BACK BUOY (03/15)	866,549	287,308	30°47'17.82"	81°29'47.95"
TIE BACK BUOY (03/15)	866,828	286,468	30°47'09.49"	81°29'44.80"



NOTES:
1. REFER TO SURVEY NO. 15-074.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.



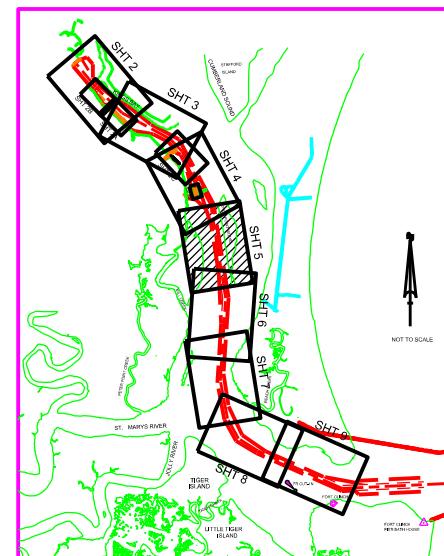
Drum Point Island

RANGE-D

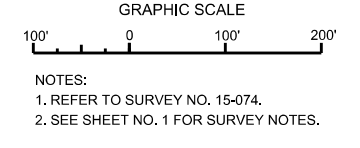
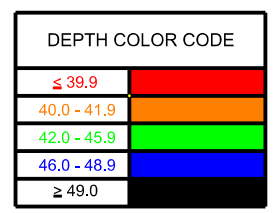
MATCHLINE SHEET NO. V-104 STA. 30+000

MATCHLINE SHEET NO. V-106 STA. 24+000

SHOAL SIGN



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 37 (03/15)	870,128	276,957	30°45'35.15"	81°29'07.63"
LT BUOY - 39 (03/15)	869,819	278,703	30°45'52.45"	81°29'11.05"
LT BUOY - 40 (03/15)	870,325	278,929	30°45'54.66"	81°29'05.24"
LT BUOY - 41 (03/15)	869,361	281,312	30°46'18.31"	81°29'16.12"
SHOAL SIGN (03/15)	870,447	279,490	30°46'00.21"	81°29'03.80"



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

Checked by:	GR
Designed by:	WRM
Drawn by:	FWW
Field No.:	18-000
Date:	MAR 2015
Revision:	

15-07-AR-BC-CH-108.DGN	15-07-AR-BC-CH-108.DGN
15-07-AR-BC-CH-109.DGN	15-07-AR-BC-CH-109.DGN
15-07-AR-BC-CH-110.DGN	15-07-AR-BC-CH-110.DGN
15-07-AR-BC-CH-111.DGN	15-07-AR-BC-CH-111.DGN
15-07-AR-BC-CH-112.DGN	15-07-AR-BC-CH-112.DGN
15-07-AR-BC-CH-113.DGN	15-07-AR-BC-CH-113.DGN
15-07-AR-BC-CH-114.DGN	15-07-AR-BC-CH-114.DGN
15-07-AR-BC-CH-115.DGN	15-07-AR-BC-CH-115.DGN
15-07-AR-BC-CH-116.DGN	15-07-AR-BC-CH-116.DGN
15-07-AR-BC-CH-117.DGN	15-07-AR-BC-CH-117.DGN
15-07-AR-BC-CH-118.DGN	15-07-AR-BC-CH-118.DGN
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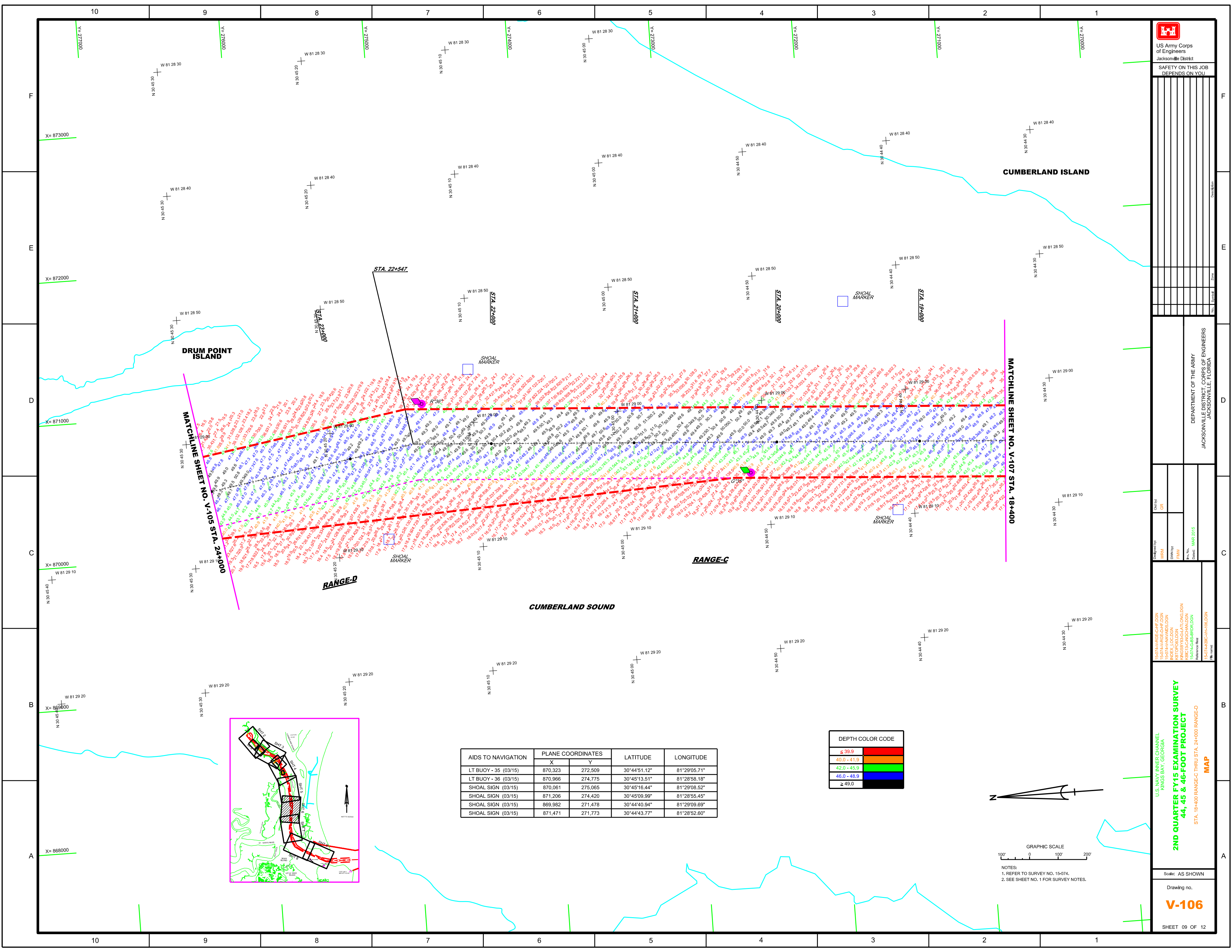
U.S. NAVY INNER CHANNEL
KINGS BAY, GEORGIA
**2ND QUARTER FY15 EXAMINATION SURVEY
44, 45 & 46-FOOT PROJECT**
MAP
STA. 18+400 RANGE-C THRU STA. 24+000 RANGE-D

Scale: AS SHOWN

Drawing no.

V-106

SHEET 09 OF 12



MATCHLINE SHEET NO. V-105 STA. 24+000

MATCHLINE SHEET NO. V-107 STA. 18+400

STA. 22+547

STA. 23+000

STA. 22+000

STA. 21+000

STA. 20+000

STA. 19+000

DRUM POINT ISLAND

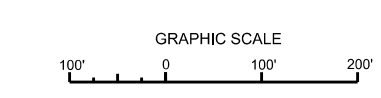
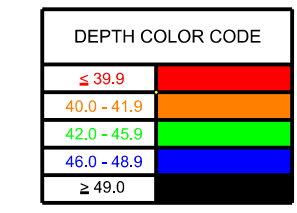
CUMBERLAND ISLAND

CUMBERLAND SOUND

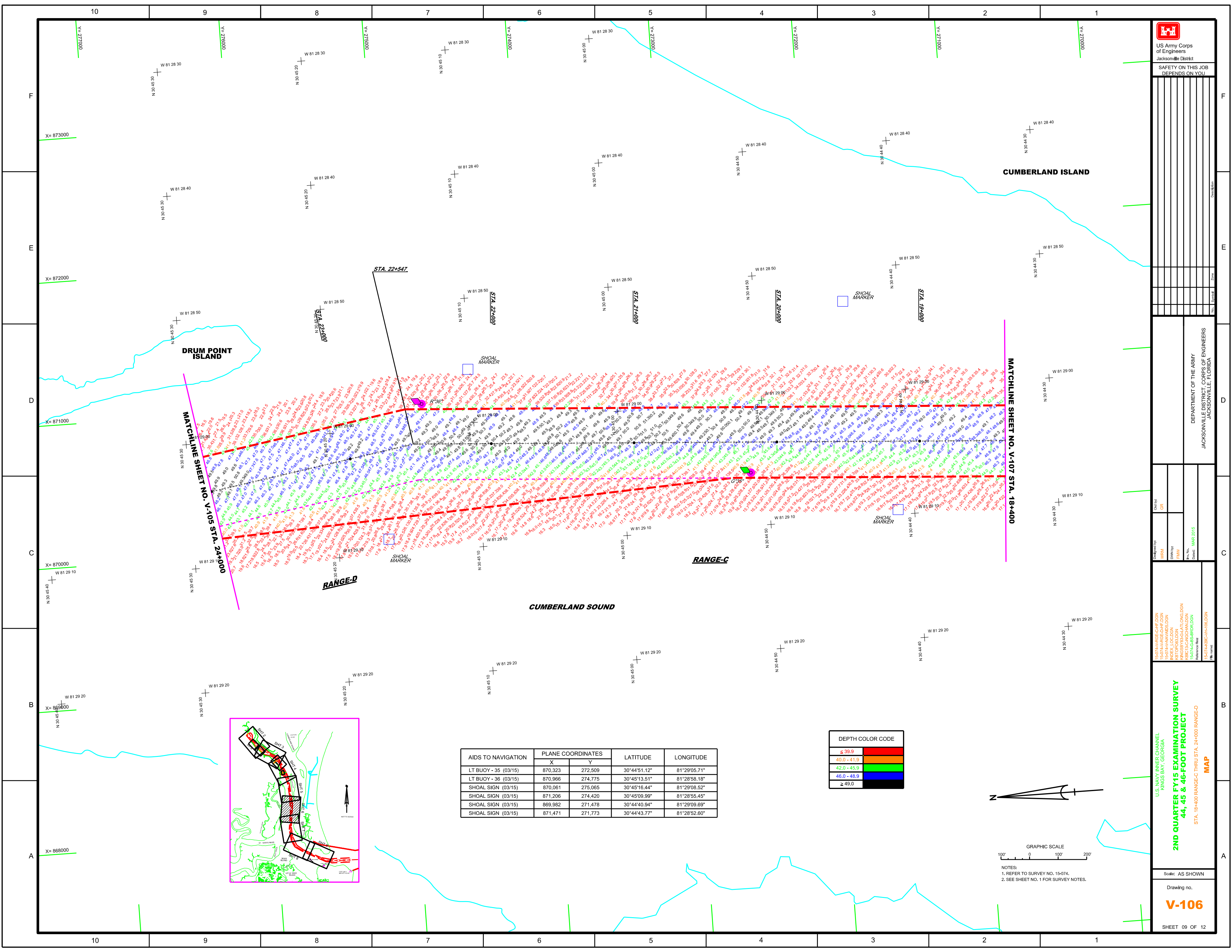
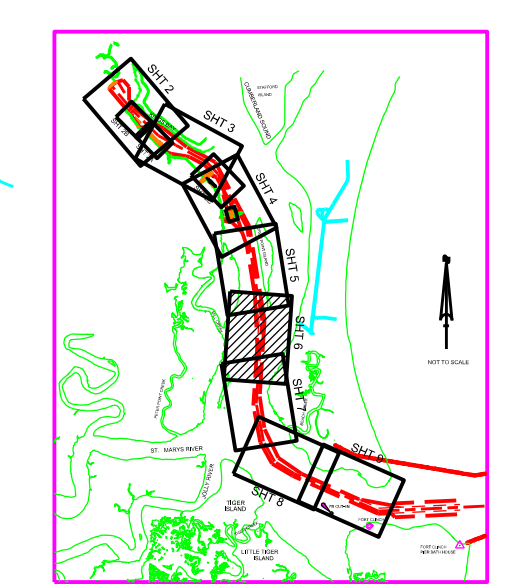
RANGE-C

RANGE-D

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 35 (03/15)	870,323	272,509	30°44'51.12"	81°29'05.71"
LT BUOY - 36 (03/15)	870,966	274,775	30°45'13.51"	81°28'58.18"
SHOAL SIGN (03/15)	870,061	275,065	30°45'16.44"	81°29'08.52"
SHOAL SIGN (03/15)	871,206	274,420	30°45'09.99"	81°28'55.45"
SHOAL SIGN (03/15)	869,982	271,478	30°44'40.94"	81°29'09.69"
SHOAL SIGN (03/15)	871,471	271,773	30°44'43.77"	81°28'52.60"



NOTES:
1. REFER TO SURVEY NO. 15-074.
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

Drawn by: GRL
 Check by: GRL

Scale: AS SHOWN

DATE: MAR 2015

- 15-07-A-RANGE-B-FW.DGN
- 15-07-A-RANGE-B-HF.DGN
- 15-07-A-RANGE-C-FW.DGN
- 15-07-A-RANGE-C-HF.DGN
- 15-07-A-RANGE-A-FW.DGN
- 15-07-A-RANGE-A-HF.DGN
- 15-07-A-BRC-VH-107.DGN

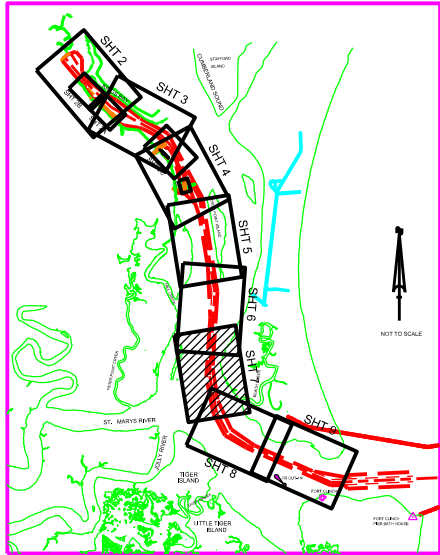
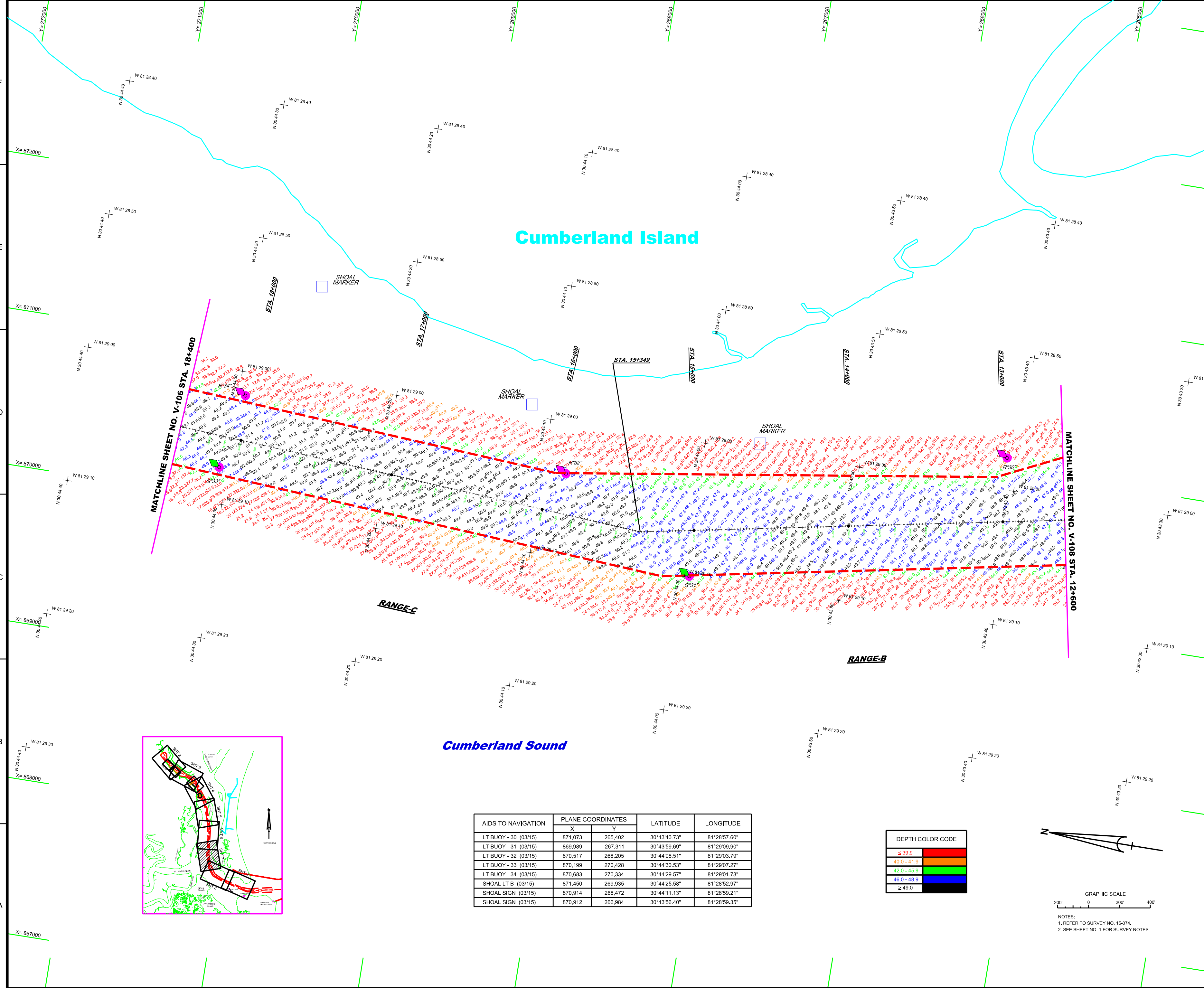
U.S. NAVY INNER CHANNEL
 KINGS BAY, GEORGIA

**2ND QUARTER FY15 EXAMINATION SURVEY
 44, 45 & 46-FOOT PROJECT**

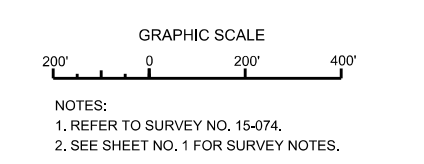
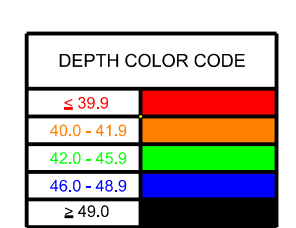
STA. 12+600 RANGE-A THRU STA. 19+400 RANGE-C

MAP

SHEET 10 OF 12



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT BUOY - 30 (03/15)	871,073	265,402	30°43'40.73"	81°28'57.60"
LT BUOY - 31 (03/15)	869,989	267,311	30°43'59.69"	81°29'09.90"
LT BUOY - 32 (03/15)	870,517	268,205	30°44'08.51"	81°29'03.79"
LT BUOY - 33 (03/15)	870,199	270,428	30°44'30.53"	81°29'07.27"
LT BUOY - 34 (03/15)	870,683	270,334	30°44'29.57"	81°29'01.73"
SHOAL LT B (03/15)	871,450	269,935	30°44'25.58"	81°28'52.97"
SHOAL SIGN (03/15)	870,914	268,472	30°44'11.13"	81°28'59.21"
SHOAL SIGN (03/15)	870,912	266,984	30°43'56.40"	81°28'59.35"



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

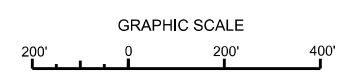
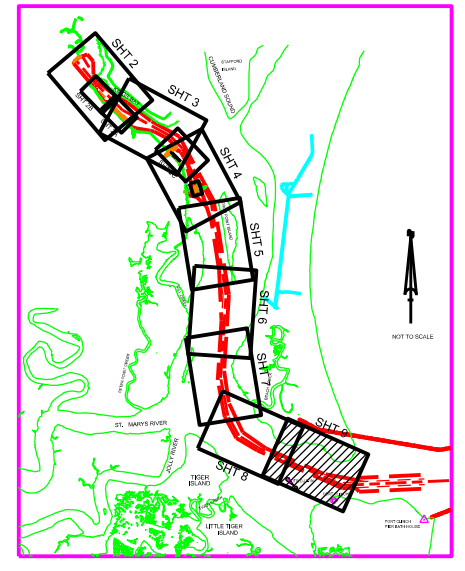
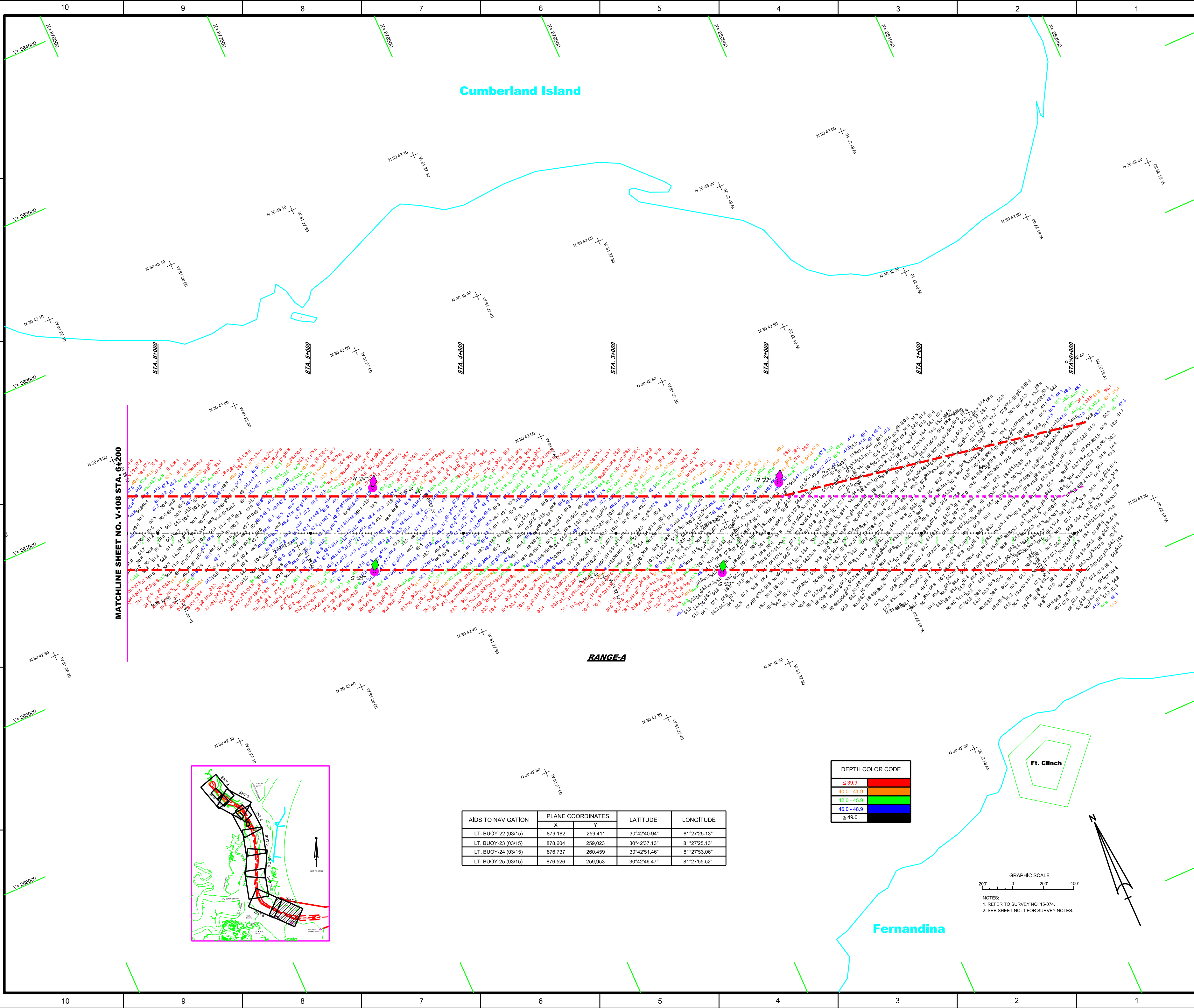
Checked By: GRL
Drawn By: FHW
Project No: 15-074-ARBC-VH-109-DGN
Revision Date: MAR 2015

15-074-ARBC-VH-109-DGN
INDEX LOCATION
15-074-ARBC-VH-109-DGN
15-074-ARBC-VH-109-DGN
Reference Sheet: 15-074-ARBC-VH-109-DGN

U.S. NAVY INNER CHANNEL
KINGS BAY, GEORGIA
2ND QUARTER FY15 EXAMINATION SURVEY
44, 45 & 46-FOOT PROJECT
STA. 0+00 THRU STA. 6+200 RANGE-A
PLAN

Scale: AS SHOWN
Drawing no.
V-109
SHEET 12 OF 12

Cumberland Island



NOTES:
1. REFER TO SURVEY NO. 15-074.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

