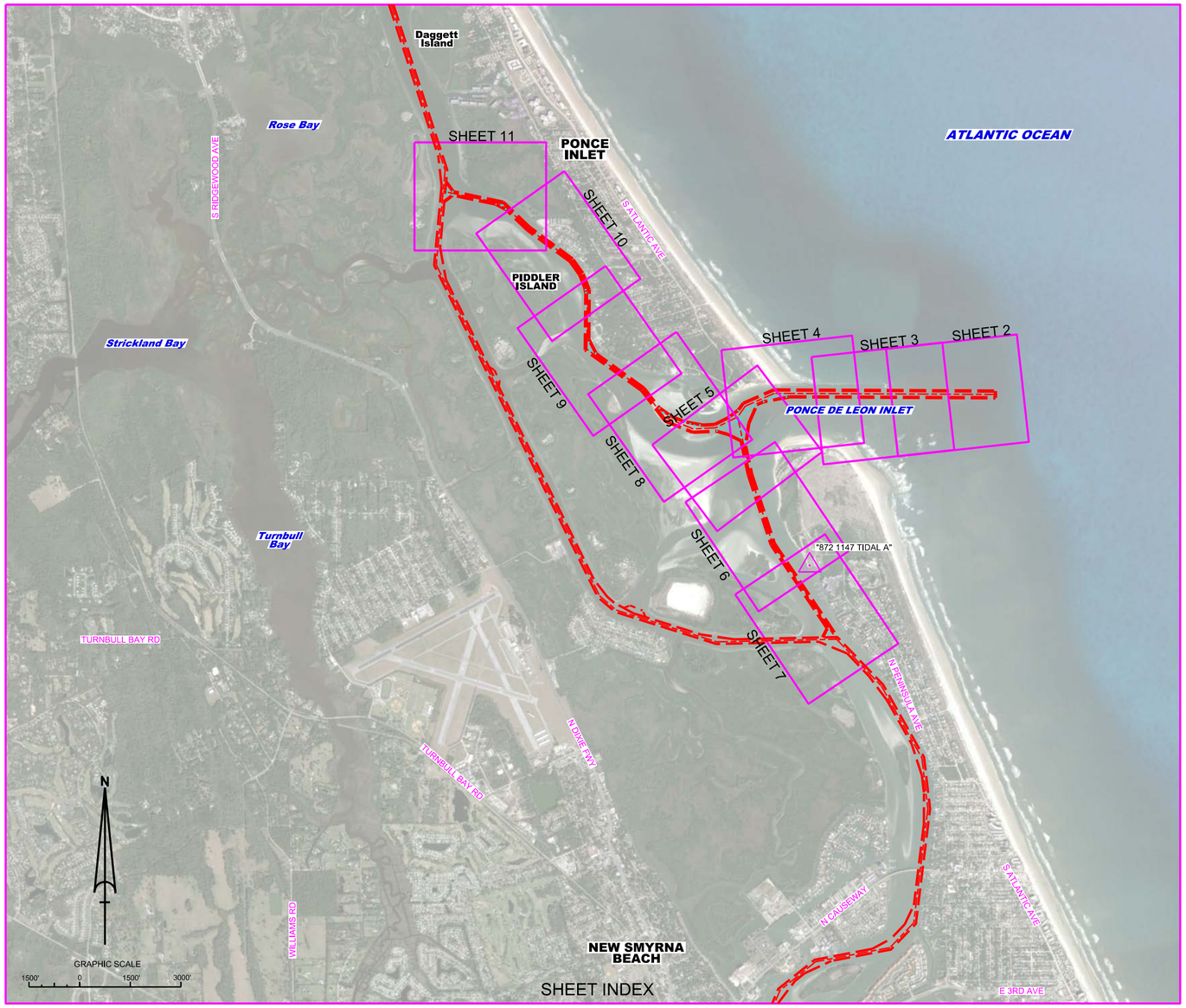
PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA
HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT



LOCATION MAP

SURVEY NOTES

1. REFER TO SURVEY NO. 16-151.
2. TIDAL REDUCTIONS WERE OBTAINED UTILIZING A REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW. KTD FILE NAME IS: "VOLUSIA-BREVARD (W-O_CANAVERALHBR_2016 05 06.KTD".
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).
5. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
6. THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:

   REFERENCE BASE LOCATED AT "872 1147 TIDAL A" (OPUS PID: DK6692)

   TIDE STAFF LOCATED FROM "872 1147 TIDAL 1" (NGS PID: AQ1522)

   TIDE STAFF LOCATED FROM "872 1138 TIDAL B" FOR QA CHECK (NGS PID: DM3649)
7. 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 GAGE SITES SPECIFIED BELOW:

   NOAA TIDAL STATION 872-1147 TIDAL A (OPUS PID: DK6692) FOR ALL CUTS.

   NOAA TIDAL STATION 872-1138 FOR QA CHECK (NGS PID: DM3649)

   VERTICAL MEASUREMENTS WERE MADE USING A ROSS SMART SOUNDER MODEL 835 WITH A DUAL-FREQUENCY 28/200 KHZ SINGLE-BEAM TRANSDUCER. ALL SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SB-36	19 JUL 2016	2S, 3S, 7N
SB-36	20 JUL 2016	1A, 1S, 2A, 3A, 3N, 4N, 12N, 13N
SB-36	21 JUL 2016	1A, 7N, 9N, 10N, 11N
SB-36	22 JUL 2016	5N, 6N, 8N

8. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
9. 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.
10. 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.

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

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone

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

Designed by: MRM
DWN by: MRM
Ckd by: GMB
Proj. No. V912EP-XX-XX-XXXX
Date: JUL 2016

16-151-HRD01.DGN
16-151-W-O_CANAVERALHBR.DGN
PONCE INLET-C-NGMCCF.DGN
16-151-C-BS-BRDR.DGN
Reference files
15-151-HH001.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

INDEX, LOCATION AND VICINITY

MAP

Scale: AS SHOWN

Drawing no.

1

SHEET 01 OF 11

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-3 (07/16)	689,321	1,724,483	29°04'38,99"	80°53'46,32"
LT. BUOY-4 (07/16)	688,138	1,725,074	29°04'44,85"	80°53'59,65"
CAN BUOY-5 (07/16)	687,640	1,724,461	29°04'38,79"	80°54'05,27"

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: WRM
DWN by: WRM
Ckd by: GMR
Fig./No.: V6123EP-XX-XX-XXXX
Date(s): JUL 2016

XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
16-151VA-SOUN_CTA.DSN
PONCE INLET-C-NGMCCF.DGN
16-151C-BS-BRGR.DGN
Reference files:

16-151-HH-02.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 0+00 THRU STA. 20+00 CUT-1A

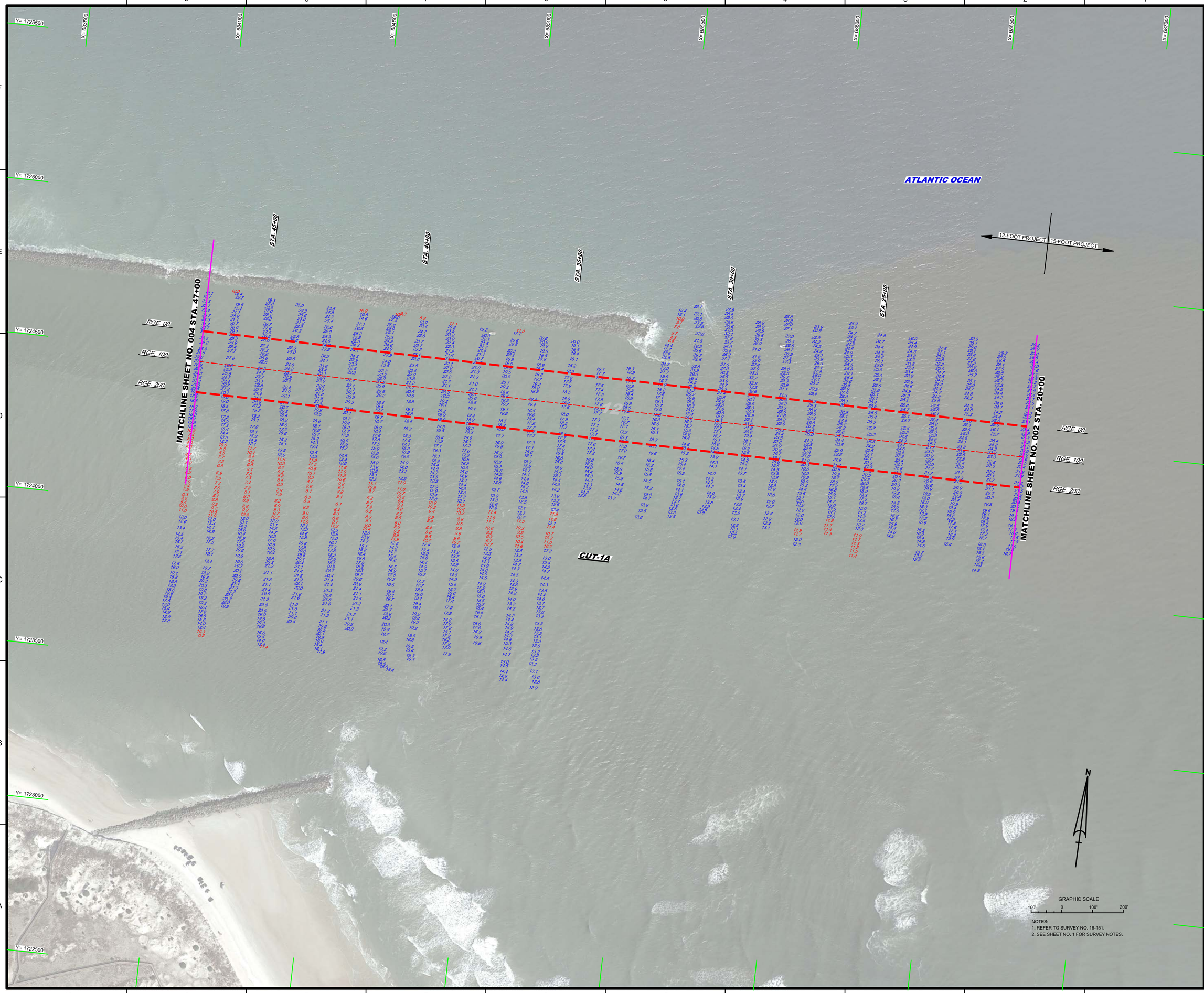
PLAN

Scale: AS SHOWN

Drawing no.

2

SHEET 02 OF 11



NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: WRM
DWN by: WRM
Ckd by: GMR
Dwg. No. V9123EP-XXX-XXXX
Date: JUL 2016

XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
16-151-VH-SOUR_CT-1A.DGN
PONCE INLET-C-NGMGCF.DGN
16-151-CAES-BRDR.DGN
Reference files:
16-151-VH-003.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 20+00 THRU STA. 47+00 CUT-1A

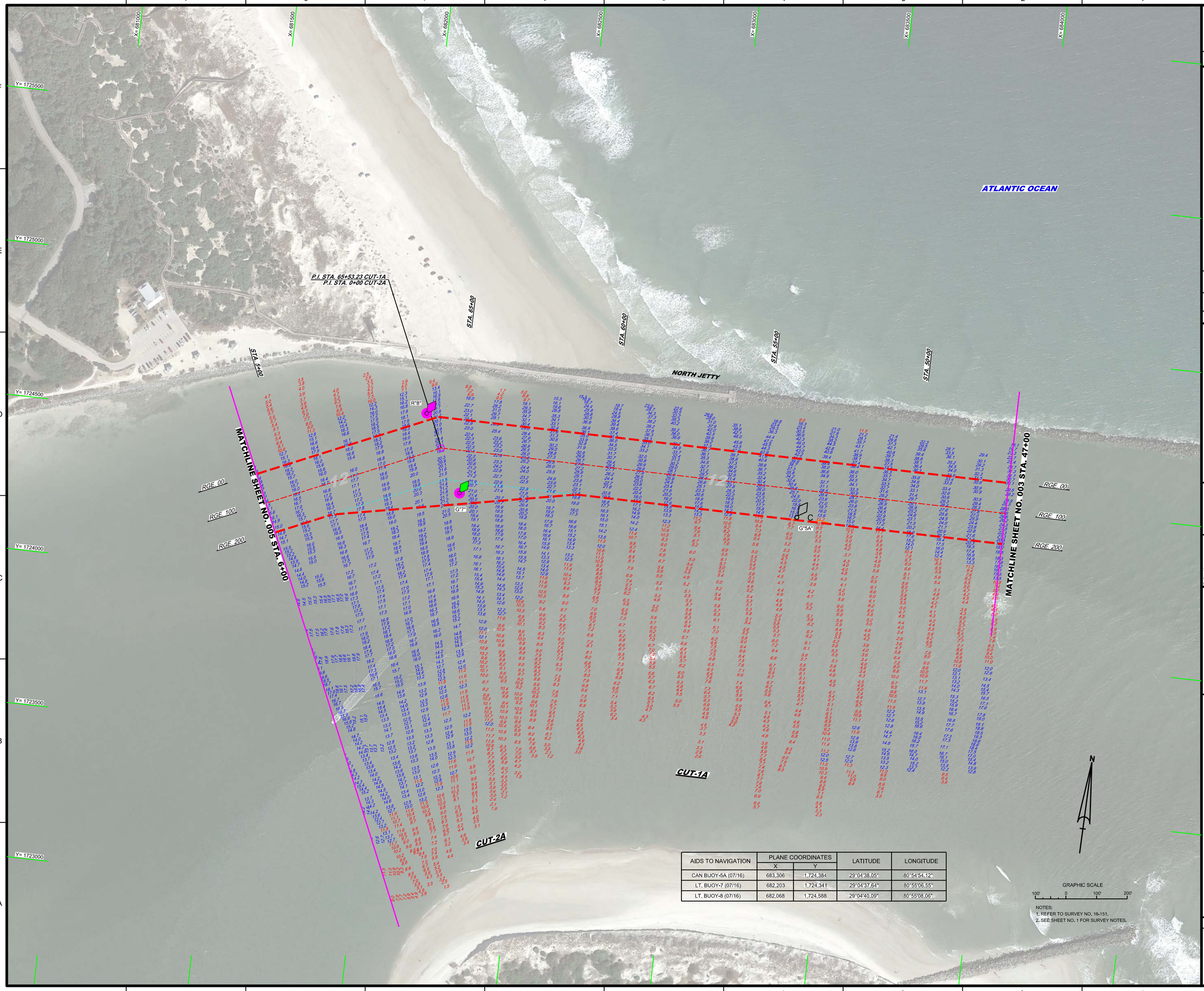
PLAN

Scale: AS SHOWN

Drawing no.

3

SHEET 03 OF 11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
CAN BUOY-5A (07/16)	683,306	1,724,384	29°04'38.05"	80°54'54.12"
LT. BUOY-7 (07/16)	682,203	1,724,341	29°04'37.64"	80°55'06.55"
LT. BUOY-8 (07/16)	682,068	1,724,588	29°04'40.09"	80°55'08.06"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: VIRM
DWN by: VIRM
Ckd by: GMR
Rev. No. V0912EP-XX-X-XXXX
Date: JUL 2016
G"5"

XX-XX-XXXX-X-XXXX-XXXX.DGN
16-151-X-SAA-XXXX.DGN
16-151-X-CONTOUR.DGN
16-151-X-SOUN_CTS.DGN
16-151-X-SOUN_CTA.DGN
16-151-X-SOUN_CTA.DGN
PONCE INLET-C-NGMCCF.DGN
16-151-C-BS-BRDR.DGN
16-151-V-H-004.DGN

Reference files:

File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 47+00 CUT-1A THRU STA. 6+00 CUT-2A

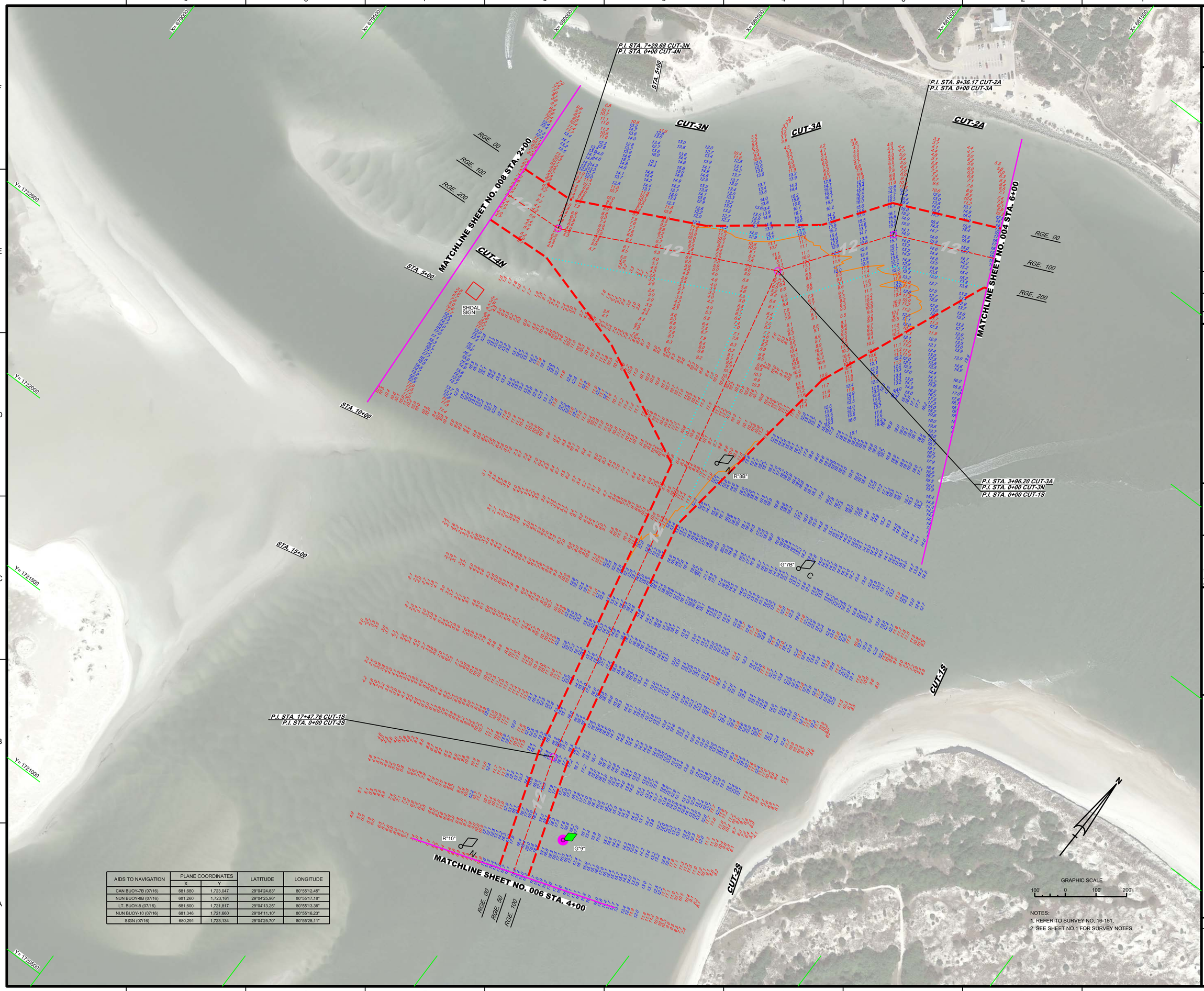
PLAN

Scale: AS SHOWN

Drawing no.

4

SHEET 04 OF 11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
CAN BUOY-7B (07/16)	681,680	1,723,047	29°04'24.83"	80°55'12.45"
NUN BUOY-8B (07/16)	681,260	1,723,161	29°04'25.96"	80°55'17.18"
LT. BUOY-9 (07/16)	681,600	1,721,817	29°04'13.25"	80°55'13.36"
NUN BUOY-10 (07/16)	681,346	1,721,660	29°04'11.10"	80°55'16.23"
SIGN (07/16)	680,291	1,723,134	29°04'25.70"	80°55'28.11"

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: WRM
DWN by: WRM
Chk by: GMR
Inv. No.: W912EP-XX-C-XXXX
Date: JUL 2016

16-151-HA-SOUN_C1S.DGN
16-151-HA-SOUN_C2A.DGN
16-151-HA-SOUN_C3A.DGN
16-151-HA-SOUN_C2S-1.DGN
16-151-HA-SOUN_C1A.DGN
16-151-HA-SOUN_C4N.DGN
16-151-HA-SOUN_C3N.DGN
PONCE INLET-C-NGMCCF.DGN
16-151-C-ABS-BRDR.DGN
Reference files:
16-151-HA-005.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 0+00 CUT-2A THRU STA. 9+36.17 &
STA. 0+00 CUT-1S THRU STA. 4+00 CUT-2S

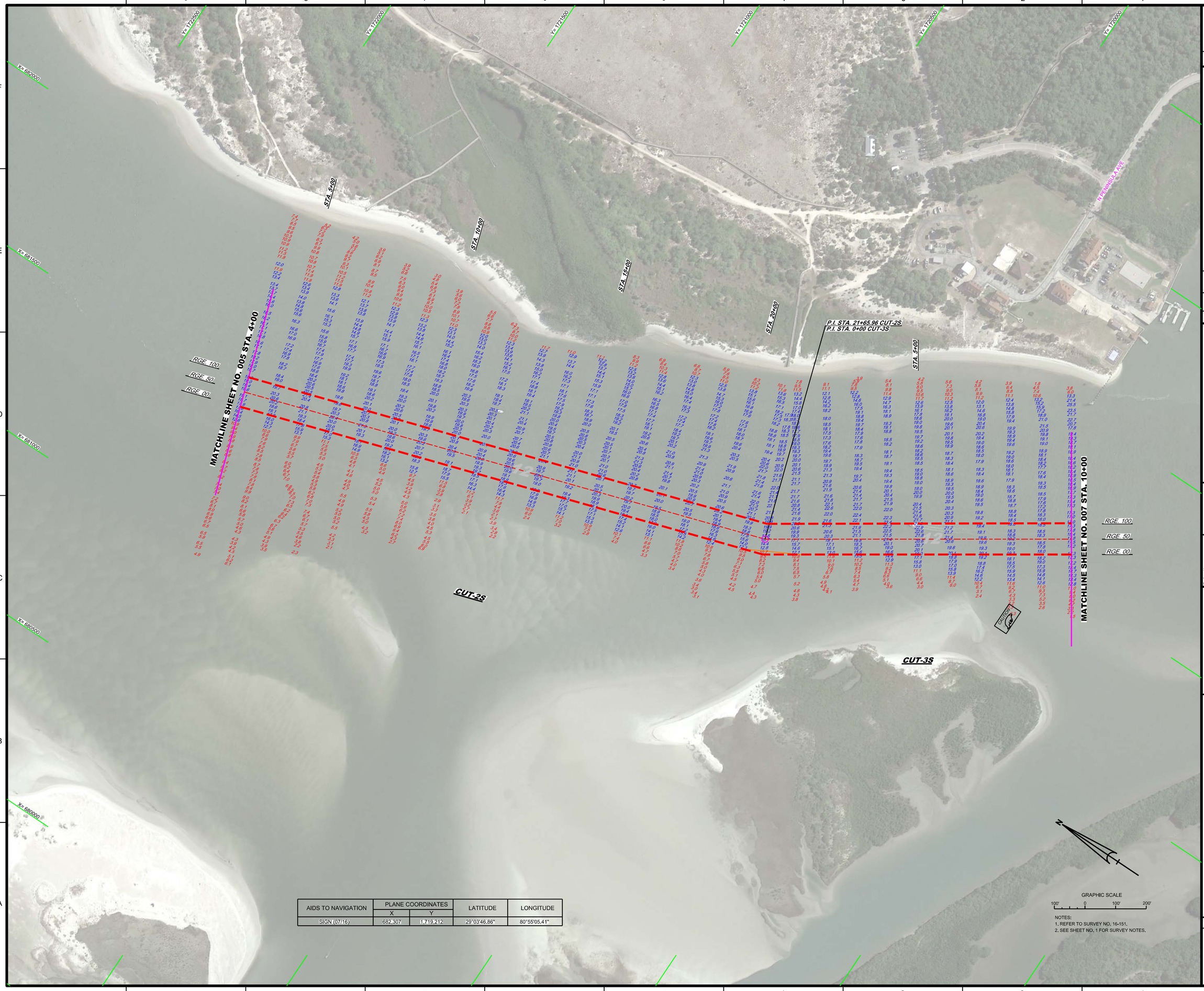
PLAN

Scale: AS SHOWN

Drawing no.

5

SHEET 05 OF 11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
SIGN (07/16)	682,307	1,719,212	29°03'46.86"	80°55'05.41"

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: VIRM
DWN by: VIRM
Ckd by: CMR
Rev. No. V9123EF-XX-X-XXXX
Date: JUL 2016

XXXXX-XXXX-XXXX-XX.DGN
XXXXXXXXX-XXXXXXXXX.DGN
16-151-V-NAV.DGN
16-151-V-CONTOUR.DGN
16-151-V-CUT-2S_3S.DGN
16-151-V-SOUN_CS5-2.DGN
PONCE INLET-C-NGMCCF.DGN
16-151-C-ESB-BKDR.DGN
Reference files:
16-151-V-VH-006.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 4+00 CUT-2S THRU STA. 10+00 CUT-3S

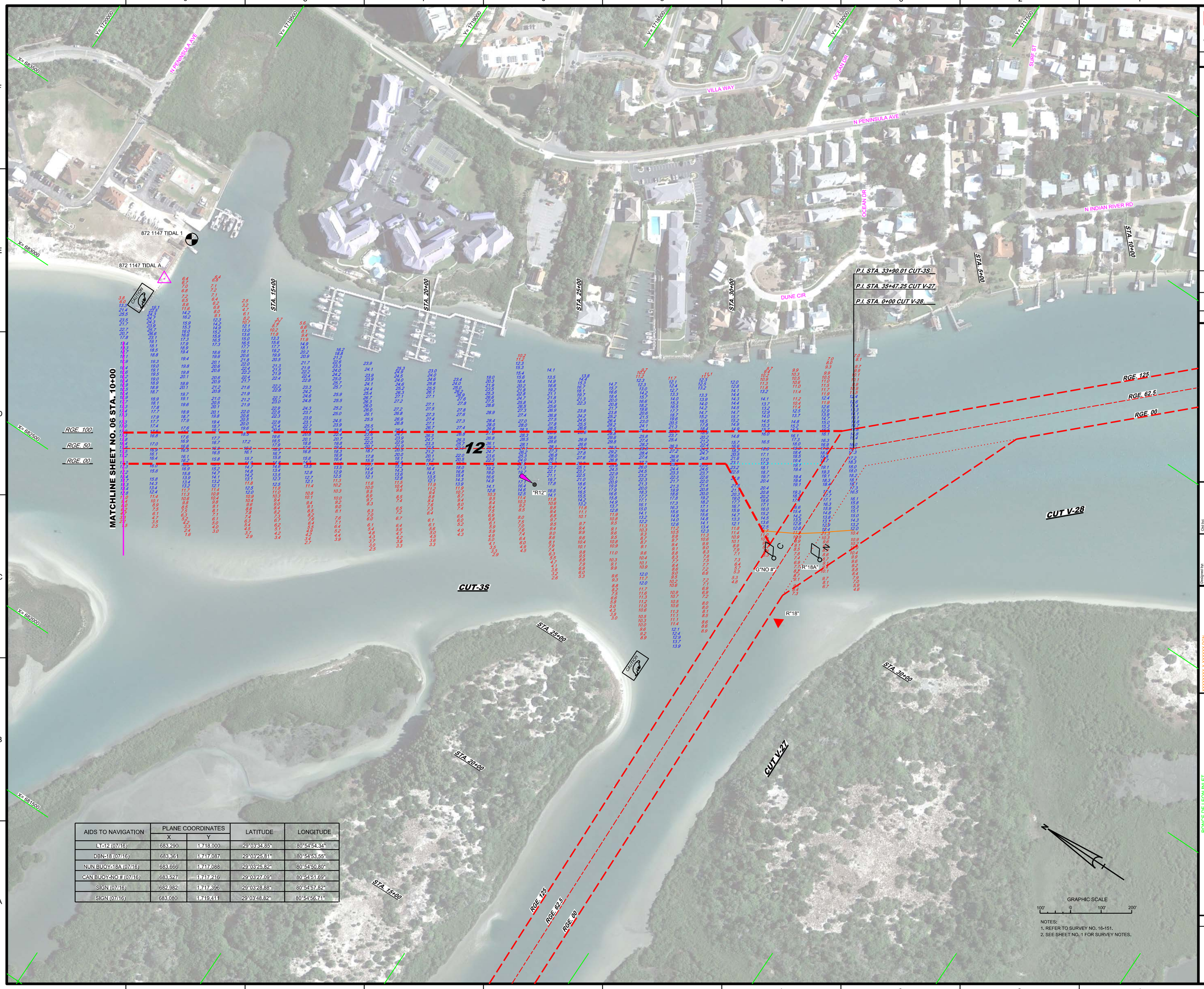
PLAN

Scale: AS SHOWN

Drawing no.

6

SHEET 06 OF 11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT-12 (07/16)	683,290	1,718,000	29°03'34.85"	80°54'54.34"
DBN-18 (07/16)	683,361	1,717,087	29°03'25.81"	80°54'53.55"
NUN BUOY-18A (07/16)	683,666	1,717,088	29°03'25.82"	80°54'50.80"
CAN BUOY-NO # (07/16)	683,527	1,717,216	29°03'27.09"	80°54'51.69"
SIGN (07/16)	682,982	1,717,396	29°03'28.88"	80°54'57.82"
SIGN (07/16)	683,080	1,719,411	29°03'48.82"	80°54'56.71"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: WRM
DWN by: WRM
Ckd by: GMR
Proj. No.: V6123EP-XX-XX-XXXX
Date: JUL 2016

X:\XXXXXXXX-XXXX-XX-XX-D.DGN
XXXXXXXXX-XXXXXXXX-XXXX-XX.DGN
16-151-XA-CON12.DGN
16-151-XA-NAV.DGN
16-151-XA-SURVEY.DGN
IWW-CA-GM-CF.DGN
PONCE INLET-CA-NGM-CCF.DGN
16-151-CA-BR-BRDR.DGN
Reference files:

16-151-HR-07.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 10+00 THRU STA. 33+90.01 CUT-3S

PLAN

Scale: AS SHOWN

Drawing no.

7

SHEET 07 OF 11

AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
SIGN (07/16)	678,909	1,723,012	29°04'24.49"	80°55'32.41"
SIGN (07/16)	679,620	1,723,058	29°04'24.95"	80°55'35.66"
SIGN (07/16)	679,065	1,723,397	29°04'28.31"	80°55'41.92"
SIGN (07/16)	678,236	1,724,434	29°04'38.58"	80°55'51.25"
SIGN (07/16)	678,464	1,724,067	29°04'34.94"	80°55'48.69"
SIGN (07/16)	678,761	1,723,639	29°04'30.70"	80°55'45.35"
SIGN (07/16)	678,264	1,723,271	29°04'27.06"	80°55'50.94"

P.I. STA. 6+57.38 CUT-4N
P.I. STA. 0+00 CUT-5N

P.I. STA. 9+28.21 CUT-5N
P.I. STA. 0+00 CUT-6N

P.I. STA. 10+41.64 CUT-6N
P.I. STA. 0+00 CUT-7N

MATCHLINE SHEET NO. 005 STA. 2+00

MATCHLINE SHEET NO. 009 STA. 3+00

STA. 5+00

STA. 10+00

RGE. 00
RGE. 50
RGE. 100

SHALLOW WATER

SHOAL SIGN

CAUTION

CUT-4N

CUT-5N

CUT-6N

CUT-7N

GRAPHIC SCALE
100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 16-151.
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
DWN by: WRM
Ckd by: GMR
Proj. No. V912EP-XX-XX-XX
Date: JUL 2016

16-151-HAV.DGN

16-151-A-CONF.DGN
16-151-AA-SOUN_CON.DGN
16-151-AA-SOUN_CIN.DGN
16-151-AA-SOUN_CIN_DGN
16-151-AA-SOUN_CIN.DGN
16-151-AA-SOUN_CTS.DGN
PONCE INLET-C-NGMCCF.DGN
16-151-C-BR-BRDR.DGN
Reference files
16-151-HR-08.DGN
File name:

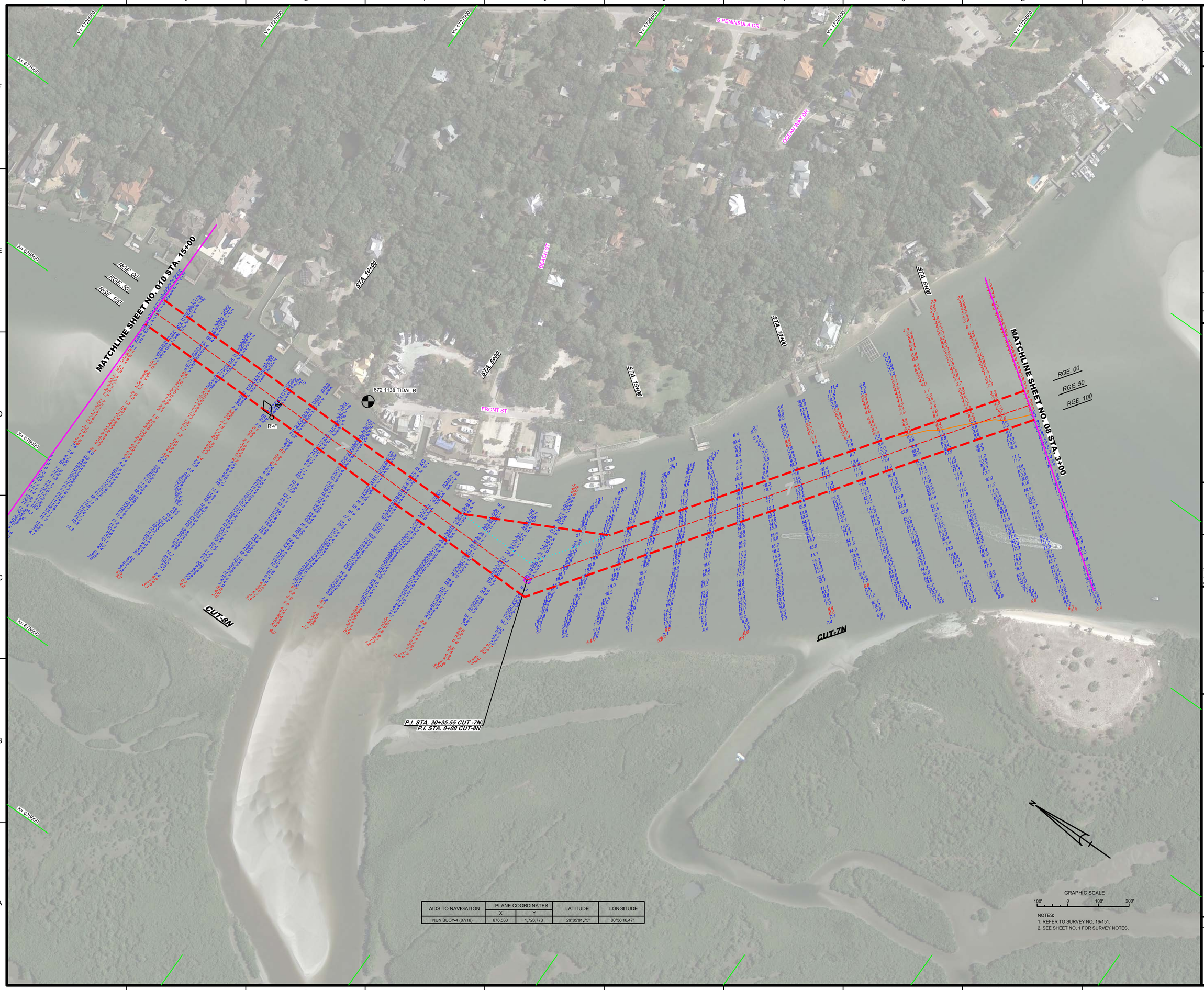
PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT
STA. 2+00 CUT-4N THRU STA. 3+00 CUT-7N
PLAN

Scale: AS SHOWN

Drawing no.
8

SHEET 08 OF 11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
NUN BUOY-4 (07/16)	676,530	1,726,773	29°05'01.75"	80°56'10.47"

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: WRM
DWN by: WRM
Ckd by: GMR
Prj. No. V91ZEP-XXX-XXXX
Date: JUL 2016

XX-XXXX-XX-XXXX-XX.DGN
XXXXXXXX-XX-XXXXXXX.DGN
16-151-VICONT.DGN
16-151-NANAV.DGN
16-151-XSECT-FINALDGN
16-151-XSCUR_CFN.DGN
PONCE INLET-C-NGMCF.DGN
16-151-CABS-BRDR.DGN
Reference files:
16-151-VH-009.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 3+00 CUT-7N THRU STA. 15+00 CUT-8N

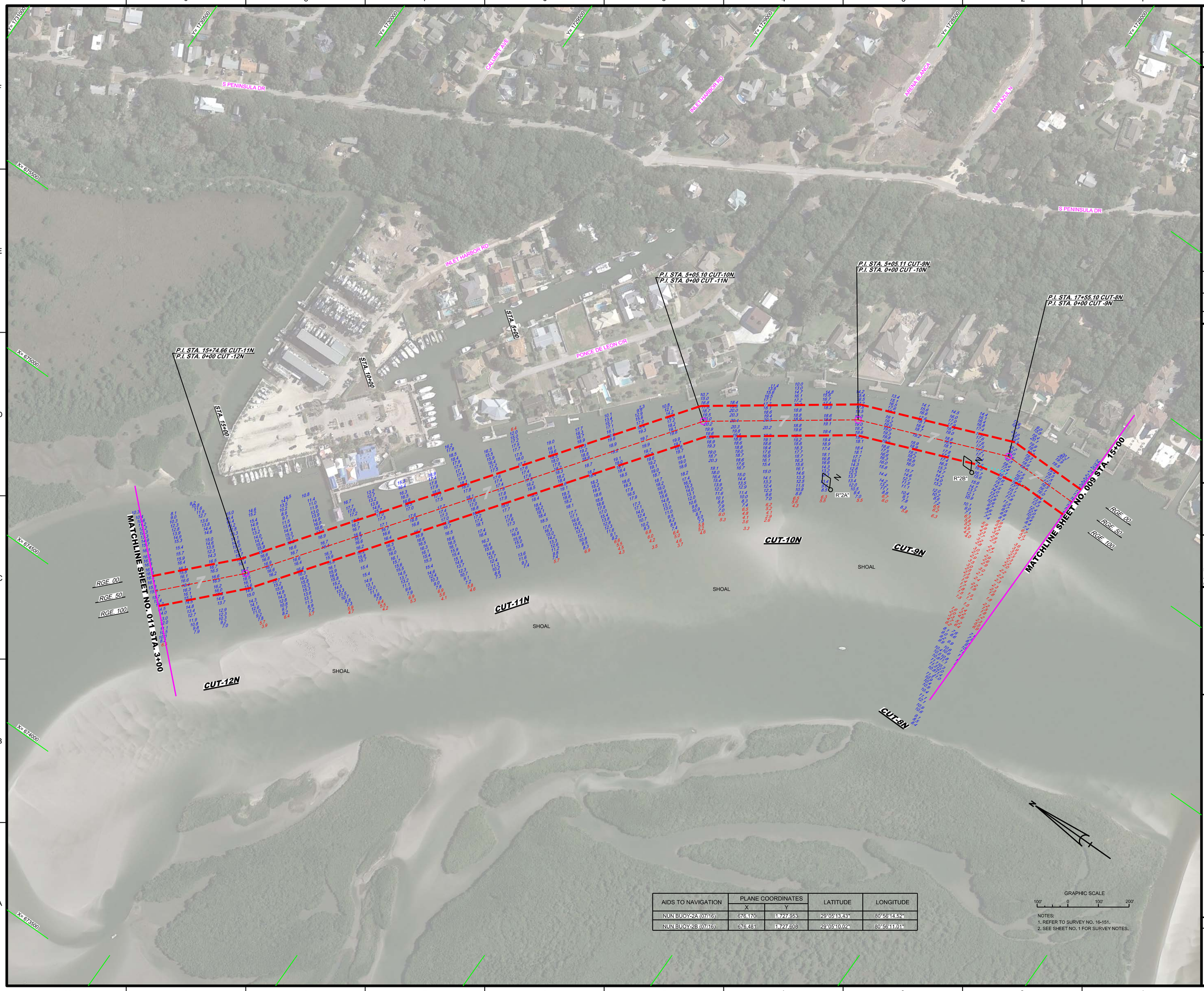
PLAN

Scale: AS SHOWN

Drawing no.

9

SHEET 09 OF 11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
NUN BUOY-2A (07/16)	676,170	1,727,953	29°05'13.43"	80°56'14.52"
NUN BUOY-2B (07/16)	676,481	1,727,608	29°05'10.02"	80°56'11.01"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: VIRM
DWN by: VIRM
Chkd by: CMR
Rev. No.: W912EP-XX-X-XXXX
Date: JUL 2016

16-151-VH-XX-C.DGN
16-151-VH-SOUN_C12N.DGN
16-151-VH-SOUN_C11N.DGN
16-151-VH-SOUN_C10N.DGN
16-151-VH-SOUN_C9N.DGN
16-151-VH-SOUN_C8N.DGN
PONCE INLET-C-NGMCCF.DGN
16-151-C-ESB-BRDR.DGN
Reference files:
16-151-VH-310.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT
STA. 15+00 CUT-8N THRU STA. 3+00 CUT-12N

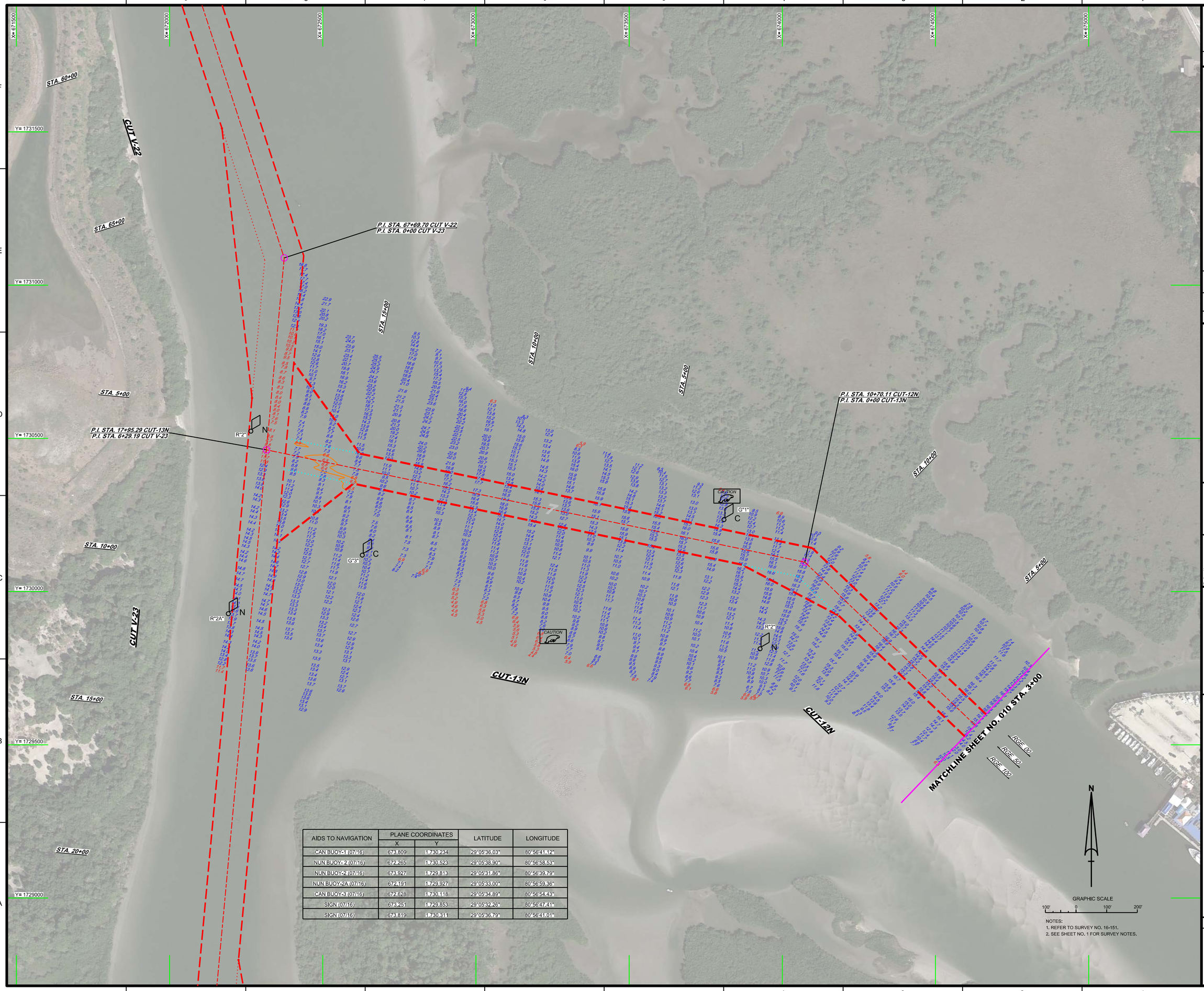
PLAN

Scale: AS SHOWN

Drawing no.

10

SHEET 10 OF 11



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
CAN BUOY-1 (07/16)	673,809	1,730,234	29°05'36.03"	80°56'41.12"
NUN BUOY- 2 (07/16)	672,265	1,730,523	29°05'38.90"	80°56'58.53"
NUN BUOY-2 (07/16)	673,927	1,729,813	29°05'31.86"	80°56'39.79"
NUN BUOY-2A (07/16)	672,191	1,729,927	29°05'33.00"	80°56'59.36"
CAN BUOY-3 (07/16)	672,628	1,730,118	29°05'34.89"	80°56'54.43"
SIGN (07/16)	673,251	1,729,853	29°05'32.26"	80°56'47.41"
SIGN (07/16)	673,819	1,730,311	29°05'36.79"	80°56'41.01"

NOTES:
1. REFER TO SURVEY NO. 16-151.
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

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

Designed by: VIRM
DWN by: VIRM
Ckd by: GMR
Rev. No. V0912EP-XX-X-XXXX
Date: JUL 2016

XX-XXXX-XXX-XXXX.DGN
16-151-XX-XXXX.DGN
16-151-XX-NAV.DGN
16-151-X-SOUN_CT3N.DGN
16-151-X-SOUN_CT12N.DGN
MVVC-NGINCCF.DGN
PONCE INLET-C-NGINCCF.DGN
16-151-C-RS-RDR.DGN
Reference files:
16-151-VH011.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDRO EXAMINATION SURVEY FY16
7, 12 AND 15-FOOT PROJECT

STA. 3+00 CUT-12N THRU STA. 17+95.29 CUT-13N

PLAN

Scale: AS SHOWN

Drawing no.

11

SHEET 11 OF 11