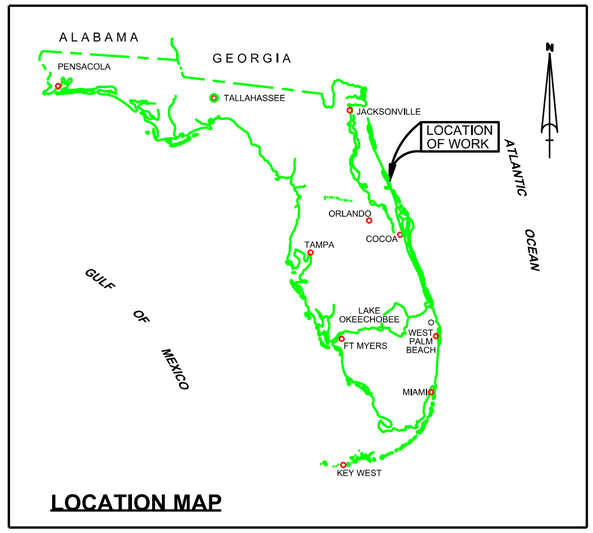
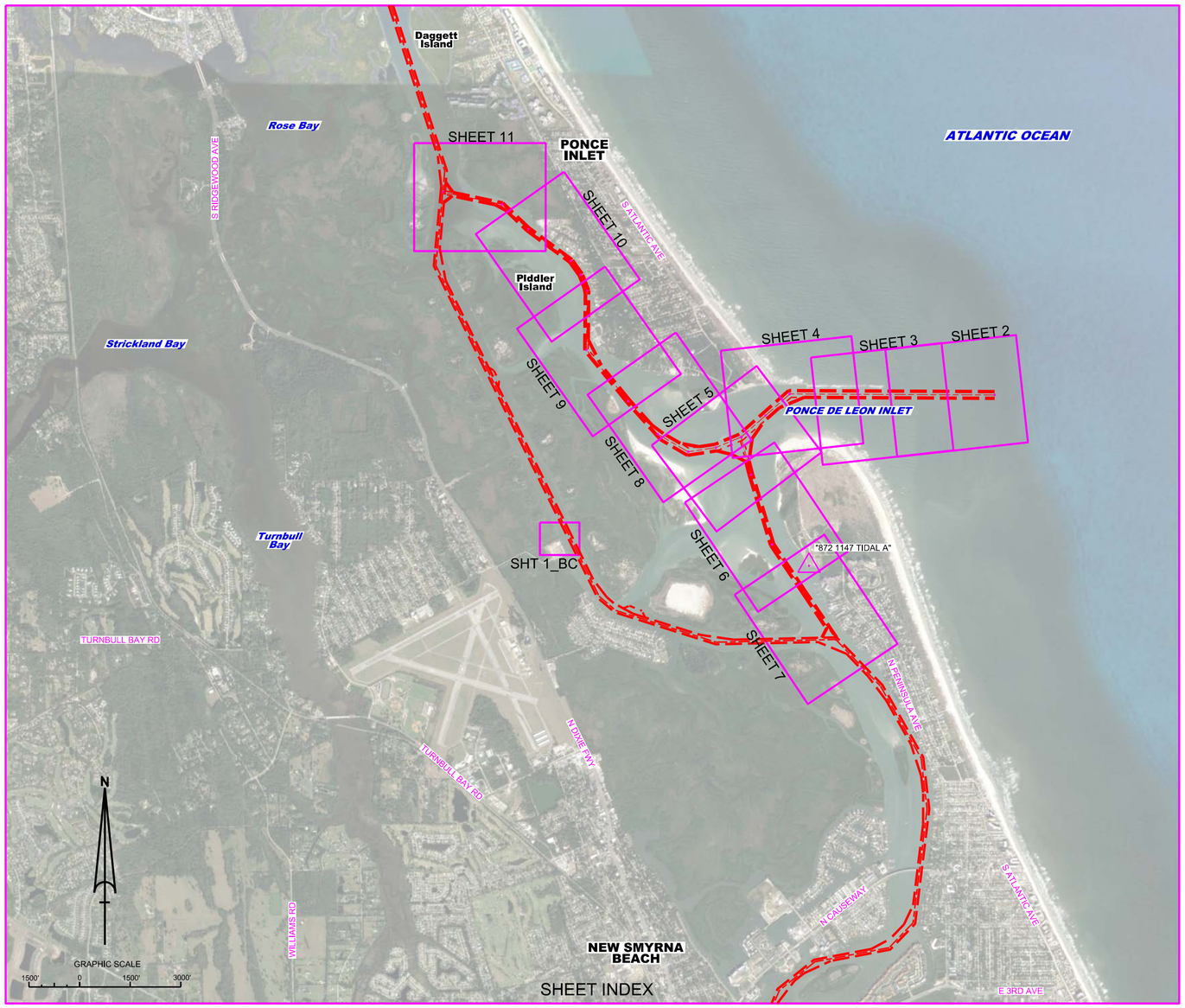
# PONCE DE LEON INLET
# VOLUSIA COUNTY, FLORIDA
# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT




LOCATION MAP




SURVEY NOTES

1. REFER TO SURVEY NO. 20-163.
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 (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATION:

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

   TIDE STAFF SET FROM "872-1147 TIDAL 1 (NGS PID: AQ1522)
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 GAUGE SITES SPECIFIED BELOW:

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

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

| VESSEL | DATE OF SURVEY | CUT |
|---|---|---|
| SB-36 | 14 APR 2020 | CUTS 2S, 3S |
| SB-36 | 15 APR 2020 | CUTS 1S, 2A, 3A, 3N, 7N, 13N |
| SB-36 | 16 APR 2020 | BARGE CANAL, USCG STATION |
| SB-36 | 17 APR 2020 | CUTS 6N, 8N THRU 12N |
| SB-36 | 21 APR 2020 | CUTS 1A, 2A, 4N, 5N |

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: GMR
Proj. No. W912EP-XX-X-XXXX
Date: APR 2020

20-163-VHB001.DGN
20-163-SB-BRDR.DGN
20-163-CAN&NCCF_2017.DGN
PONCE INLET C-NGM&CF_2017.DGN
W-O_CANAVERALHBR_2016 05 06.DGN
Reference files
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY20
7, 12 AND 15-FOOT PROJECT

INDEX, LOCATION AND VICINITY

MAP

Scale: AS SHOWN

Drawing no.

1

SHEET 01 OF 11

| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| G"3" | LT. BUOY-3 (04/20) | 689,365 | 1,724,441 | 29°04'38.57" | 80°53'45.84" |
| R"4" | LT. BUOY-4 (04/20) | 688,191 | 1,725,051 | 29°04'44.63" | 80°53'59.07" |
| G"5" | CAN BUOY-5 (04/20) | 687,658 | 1,724,505 | 29°04'39.22" | 80°54'05.09" |

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 20-163.
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

Chief by: CMR
Designed by: VIRM
DWN by: VIRM
Rev. No. V991ZEP-XX-X-XXXX
Date: APR 2020

DWG:XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
20-163-XXXXXXXXXXXXXX.DGN
20-163-VLSOUN_CTA.DGN
PONCE INLET-C-NGMCCF_2017.DGN
20-163-C-ES-SHDR.DGN
Reference files:
20-163-VH-002.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

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

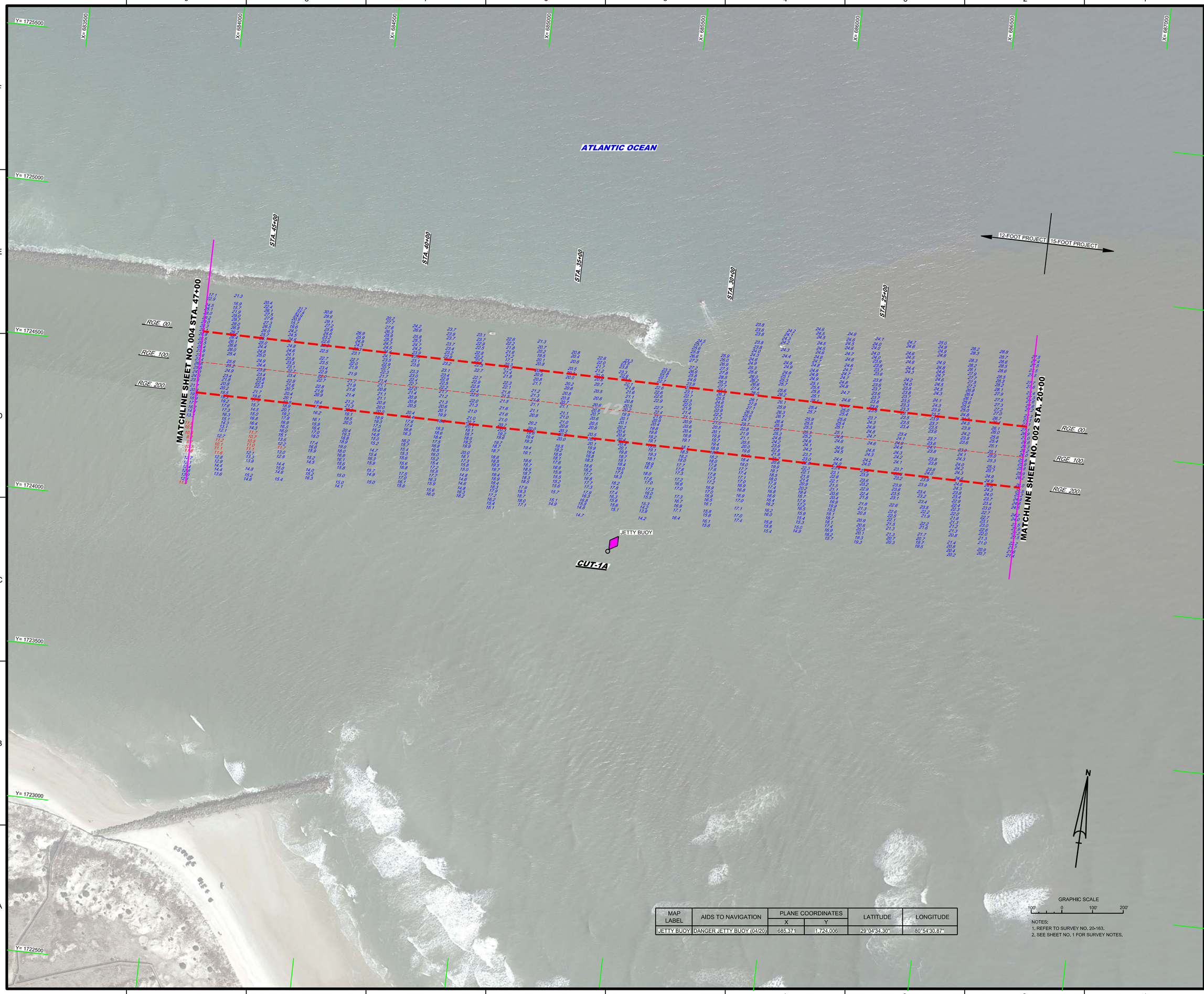
# PLAN

Scale: AS SHOWN

Drawing no.

2

SHEET 02 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| JETTY BUOY | DANGER JETTY BUOY (04/20) | 685,371 | 1,724,006 | 29°04'34.30" | 80°54'30.87" |

NOTES:
1. REFER TO SURVEY NO. 20-163.
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
Rev. No. V191215FT-XXX-X-XXXX
Date: APR 2020
Cad by: CMR
G15"

XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
20-163-A-SOUN_C1-A.DGN
PONCE INLET-C-NGMGCF_2017.DGN
20-163-A-DESIGN-BORDR.DGN
Reference files:
20-163-VH-003.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

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

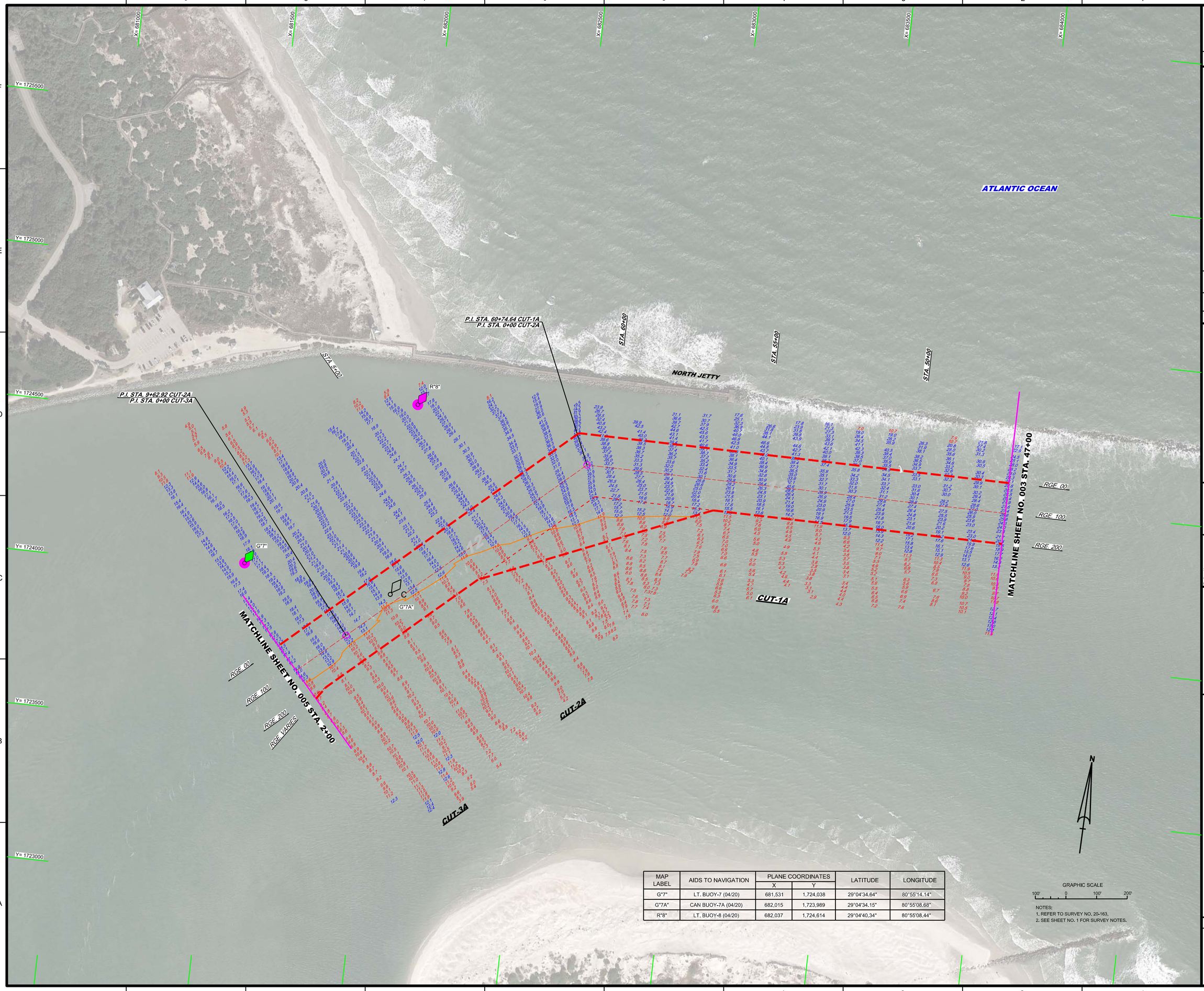
## PLAN

Scale: AS SHOWN

Drawing no.

3

SHEET 03 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| G"7" | LT. BUOY-7 (04/20) | 681,531 | 1,724,038 | 29°04'34.64" | 80°55'14.14" |
| G"7A" | CAN BUOY-7A (04/20) | 682,015 | 1,723,989 | 29°04'34.15" | 80°55'08.68" |
| R"8" | LT. BUOY-8 (04/20) | 682,037 | 1,724,614 | 29°04'40.34" | 80°55'08.44" |

NOTES:
1. REFER TO SURVEY NO. 20-163.
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

Checked by: CMR
Designed by: VRM
DWN by: VRM
Proj. No. V91P32E*-XXX-XXXXX
Date: APR 2020
G5"

20-163-VOL-XXXXXXL.DGN
20-163-AA-MAP.DGN
20-163-VCCONT1.DGN
20-163-A-SOUN_C1A.DGN
20-163-A-SOUN_C2A.DGN
20-163-A-SOUN_C3A.DGN
PONCE INLET-C-NGMGCF_2017.DGN
20-163-VER-BRDR.DGN
Reference files:
20-163-VH-004.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

STA. 47+00 CUT-1A THRU STA. 2+00 CUT-3A

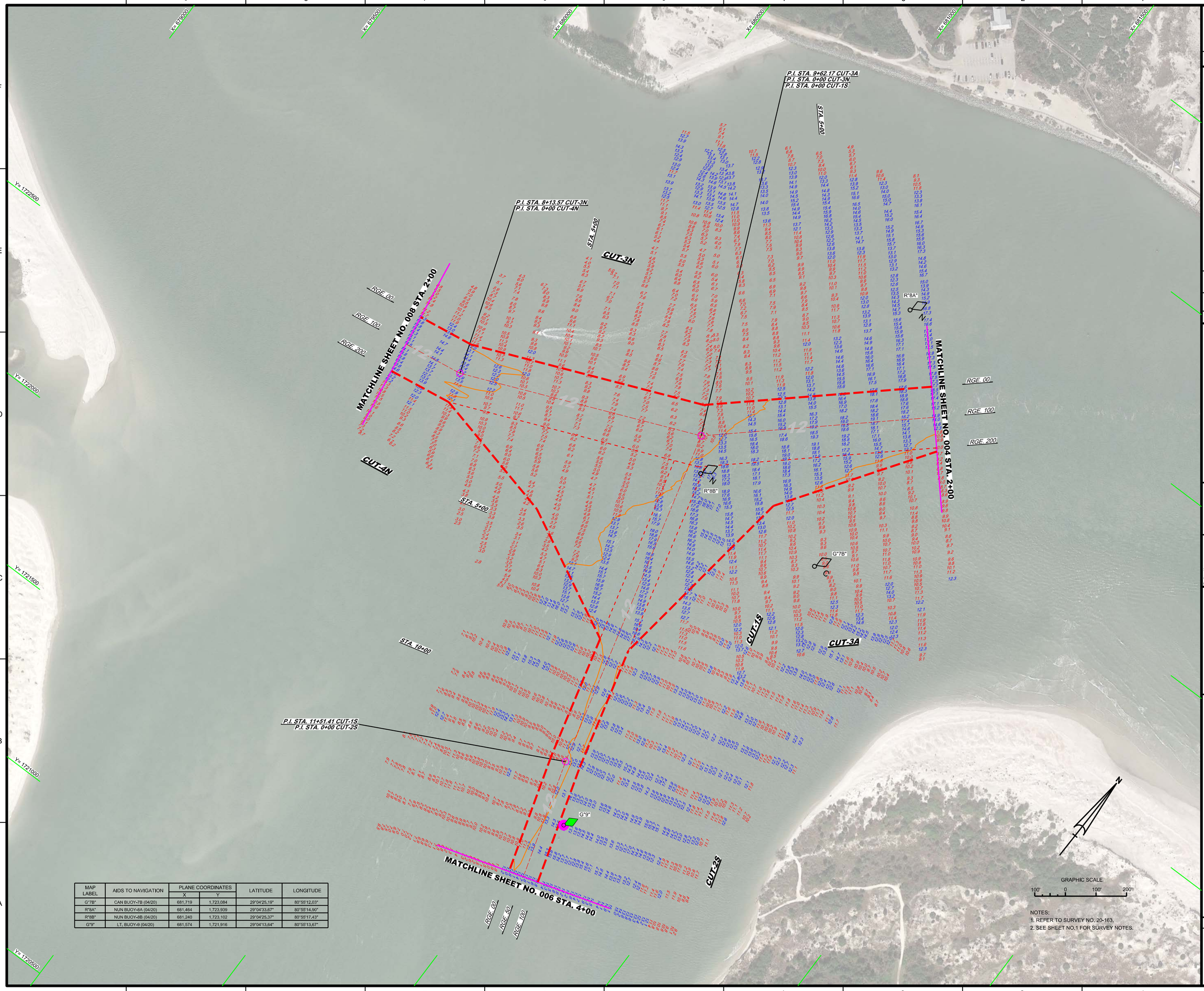
## PLAN

Scale: AS SHOWN

Drawing no.

4

SHEET 04 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| G"7B" | CAN BUOY-7B (04/20) | 681,719 | 1,723,084 | 29°04'25.19" | 80°55'12.03" |
| R"8A" | NUN BUOY-8A (04/20) | 681,464 | 1,723,939 | 29°04'33.67" | 80°55'14.90" |
| R"8B" | NUN BUOY-8B (04/20) | 681,240 | 1,723,102 | 29°04'25.37" | 80°55'17.43" |
| G"9" | LT. BUOY-9 (04/20) | 681,574 | 1,721,916 | 29°04'13.64" | 80°55'13.67" |

NOTES:
1. REFER TO SURVEY NO. 20-163.
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

Cad by: CMR
Designed by: VIRM
DWN by: VIRM
Rev. No. V9912EP-XX-X-XXXX
Date: APR 2020

20-163-A-ZONE12.DGN
20-163-A-SOUN_CHA.DGN
20-163-A-SOUN_CAN.DGN
20-163-A-SOUN_CIN.DGN
20-163-A-SOUN_CTS.DGN
20-163-A-SOUN_CTS.DGN
PONCE INLET-C-NGMCCF_2017.DGN
20-163-C-RSERDR.DGN
Reference files:
20-163-VH005.DGN
File name:

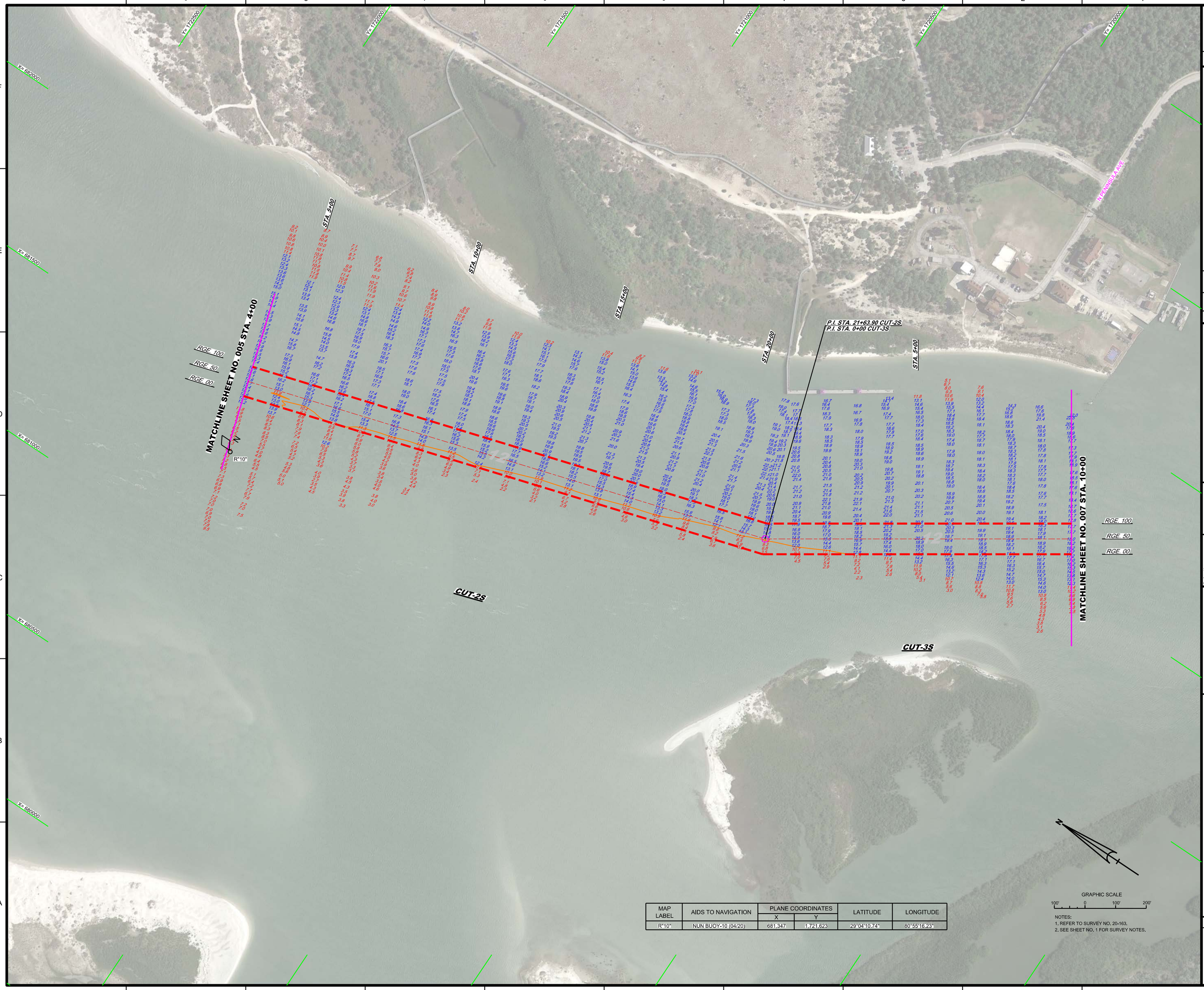
PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
## 7, 12 AND 15-FOOT PROJECT
STA. 0+00 CUT-3A THRU STA. 9+62.17 CUT-3A
STA. 0+00 CUT-1S THRU STA. 4+00 CUT-3S
## PLAN

Scale: AS SHOWN

Drawing no.
5

SHEET 05 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| R"10" | NUN BUOY-10 (04/20) | 681,347 | 1,721,623 | 29°04'10.74" | 80°55'16.23" |

NOTES:
1. REFER TO SURVEY NO. 20-163.
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: MRM
DWN by: MRM
CKD by: GMR
Proj. No. V912EP-XX-XX-XXXX
Date: APR 2020

20-163-XA-NAV.DGN
20-163-XA-CON12.DGN
20-163-XA-CON15.DGN
20-163-XA-SOUL_CZS.DGN
PONCE INLET-C-NGMCDF_2017.DGN
20-163-C-BB-BRGR.DGN
Reference files
20-163-XR-H06.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

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

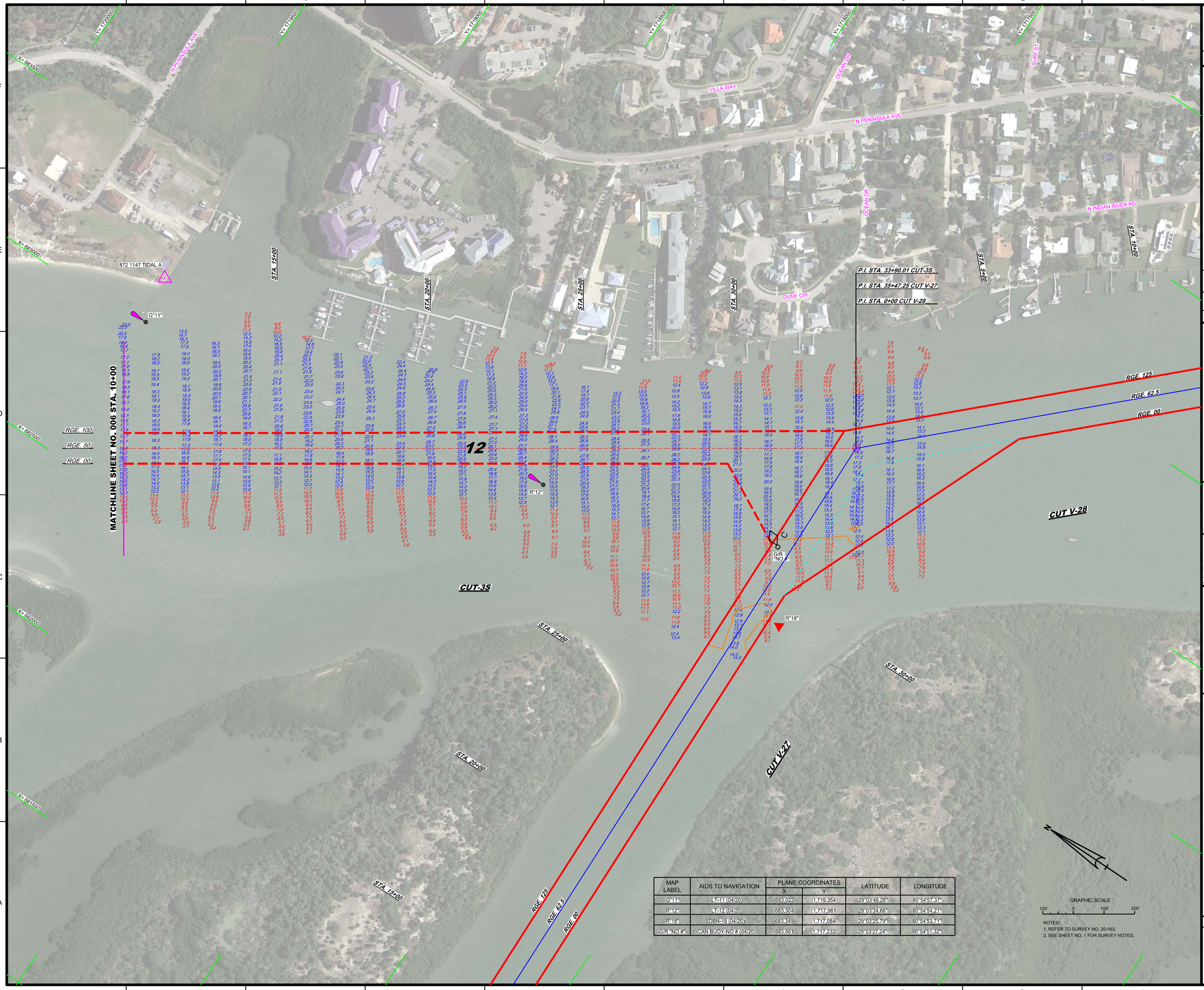
## PLAN

Scale: AS SHOWN

Drawing no.

6

SHEET 06 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| G"11" | LT-11 (04/20) | 683,022 | 1,719,354 | 29°03'48.26" | 80°54'57.37" |
| R"12" | LT-12 (04/20) | 683,304 | 1,717,981 | 29°03'34.66" | 80°54'54.21" |
| R"18" | DBN-18 (04/20) | 683,349 | 1,717,084 | 29°03'25.79" | 80°54'53.71" |
| G/R "NO.#" | CAN BUOY-NO # (04/20) | 683,561 | 1,717,232 | 29°03'27.24" | 80°54'51.32" |

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 20-163.
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: VIRM
DWN by: VIRM
Chk by: CMR
Rev. No. V0912EP-XX-X-XXXX
Date: APR 2020

X:\XXXXXXXX-XXXXXX-X.DGN
XXXXXXXX-XXXXXX-XXXX.DGN
XXXXXXXX-XXXXXX.DGN
XXXXXXX-XXXXXXX.DGN
XXXXXXXX-XXXXXXXX.DGN
NWW-CNGIXCCF_ARC.DGN
PONCE INLET-C-NGMCCF_2017.DGN
20-163-PES-BNDRLD.DGN
Reference files:
20-163-VH007.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
## 7, 12 AND 15-FOOT PROJECT
STA. 10+00 THRU STA. 33+90.01 CUT-3S

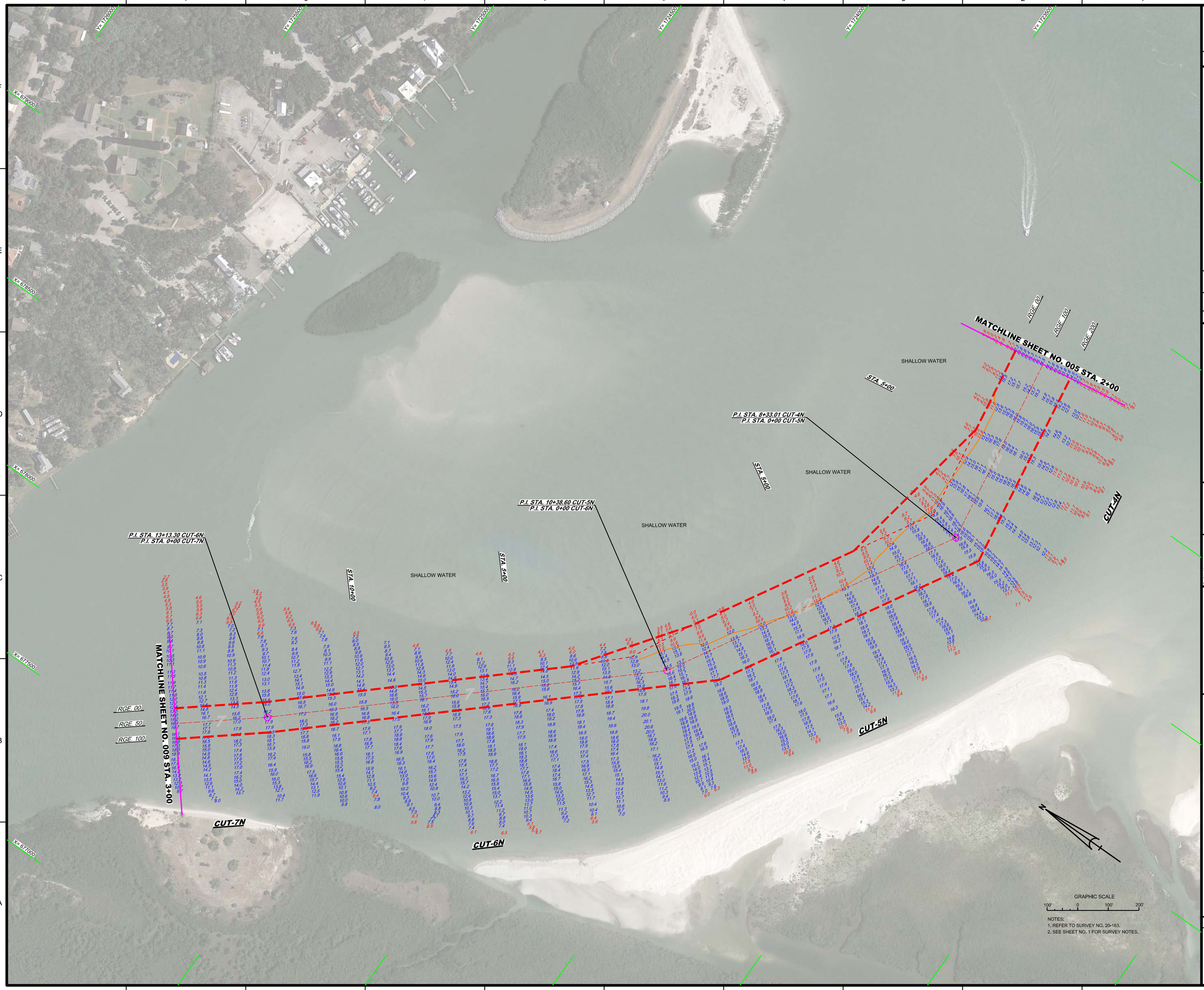
## PLAN

Scale: AS SHOWN

Drawing no.

7

SHEET 07 OF 11




NOTES:
1. REFER TO SURVEY NO. 20-163.
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.: V6312EP-XX-XX-XXX
Date: APR 2020

20-163-A-CON12.DGN
20-163-A-SOUN_CAN.DGN
20-163-A-SOUN_CEN.DGN
20-163-A-SOUN_CTN.DGN
20-163-A-SOUN_CTN.DGN
PONCE INLET-C-NGMCCF_2017.DGN
20-163-B-BRDR.DGN
Reference files
20-163-VR-008.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

STA. 2+00 CUT-4N THRU STA. 3+00 CUT-7N

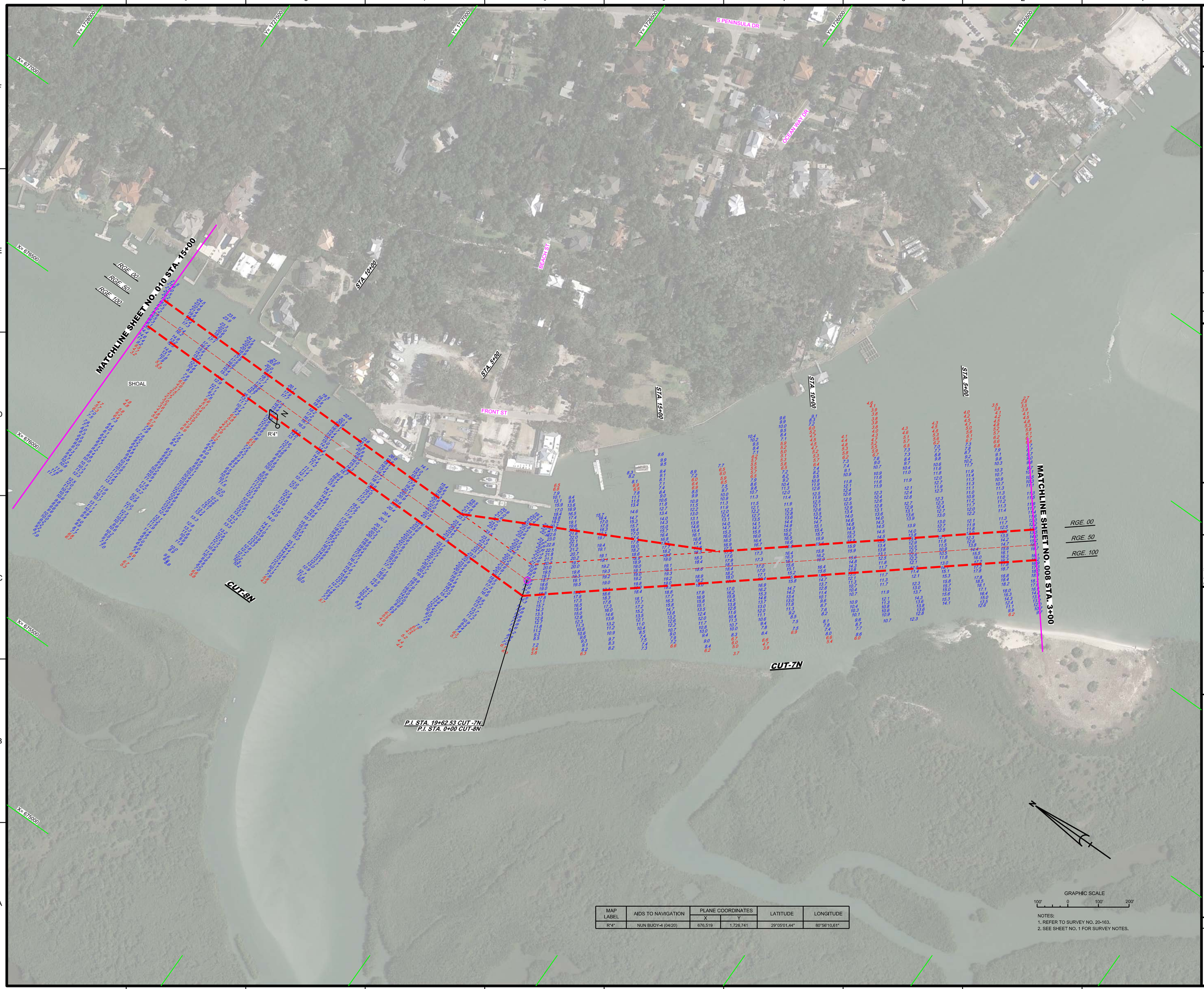
## PLAN

Scale: AS SHOWN

Drawing no.

8

SHEET 08 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| R"4" | NUN BUOY-4 (04/20) | 676,519 | 1,726,741 | 29°05'01.44" | 80°56'10.61" |

NOTES:
1. REFER TO SURVEY NO. 20-163.
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.: V6912EP-XX-XX-XXX
Date: APR 2020

XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
20-163A-MAV.DGN
20-163A-SOUL_TOP.DGN
20-163A-SOUL_CSN.DGN
PONCE INLET-C-NGMCDF_2017.DGN
20-163-C-BR-BRDR.DGN
Reference files
20-163-VR-009.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

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

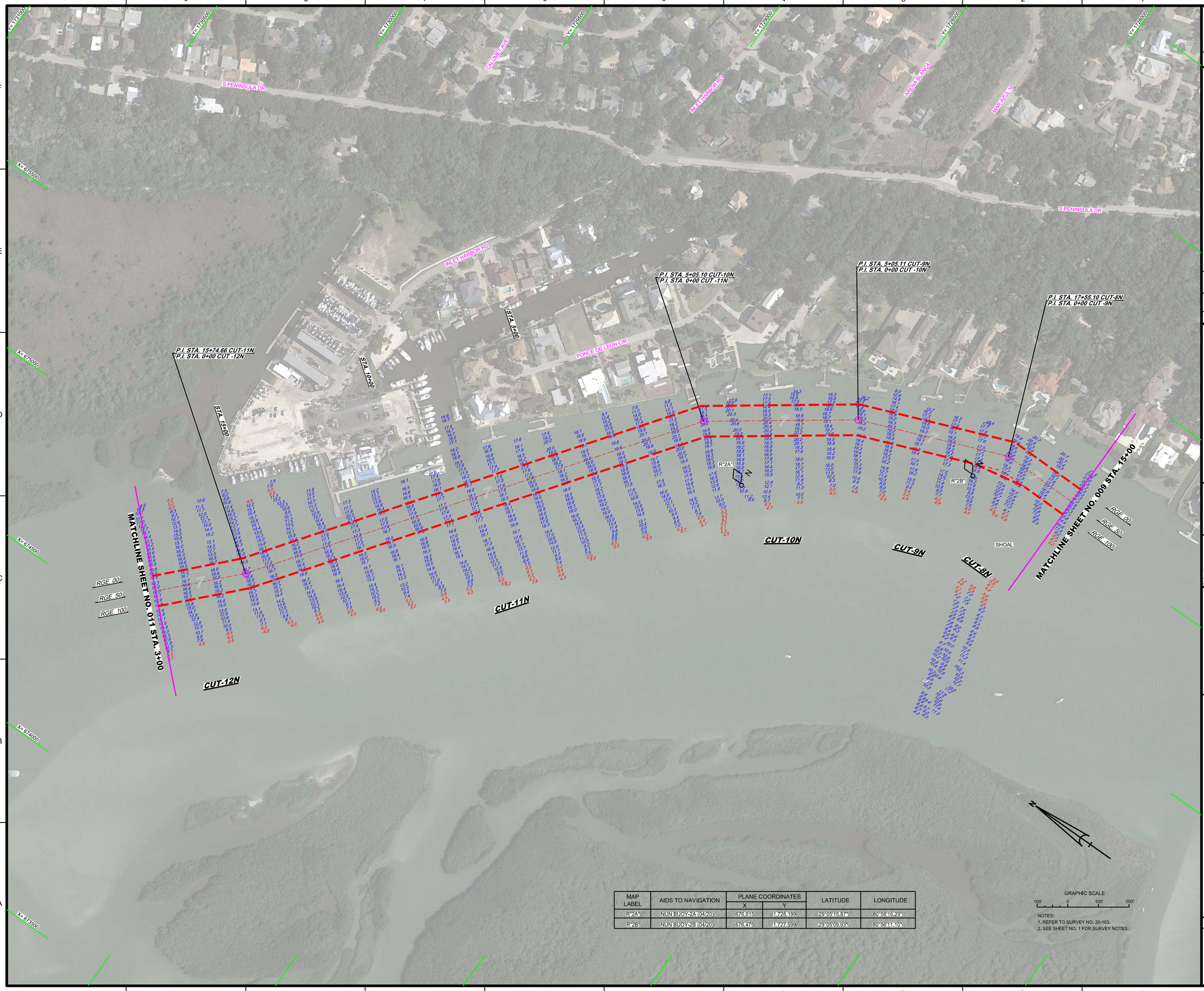
## PLAN

Scale: AS SHOWN

Drawing no.

9

SHEET 09 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| R"2A" | NUN BUOY-2A (04/20) | 676,015 | 1,728,199 | 29°05'15.87" | 80°56'16.29" |
| R"2B" | NUN BUOY-2B (04/20) | 676,475 | 1,727,599 | 29°05'09.93" | 80°56'11.10" |

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 20-163.
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. V912EP-X-XX-XXXX
Date: APR 2020

20-163-X-SOUL.DGN
20-163-X-SOUL_C12N.DGN
20-163-X-SOUL_C11N.DGN
20-163-X-SOUL_C10N.DGN
20-163-X-SOUL_C9N.DGN
20-163-X-SOUL_C8N.DGN
PONCE INLET-C-NGMCCF_2017.DGN
20-163-C-BR-BRDR.DGN
Reference files

20-163-XH-010.DGN
File name

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

STA. 15+00 CUT-8N THRU STA. 3+00 CUT-12N

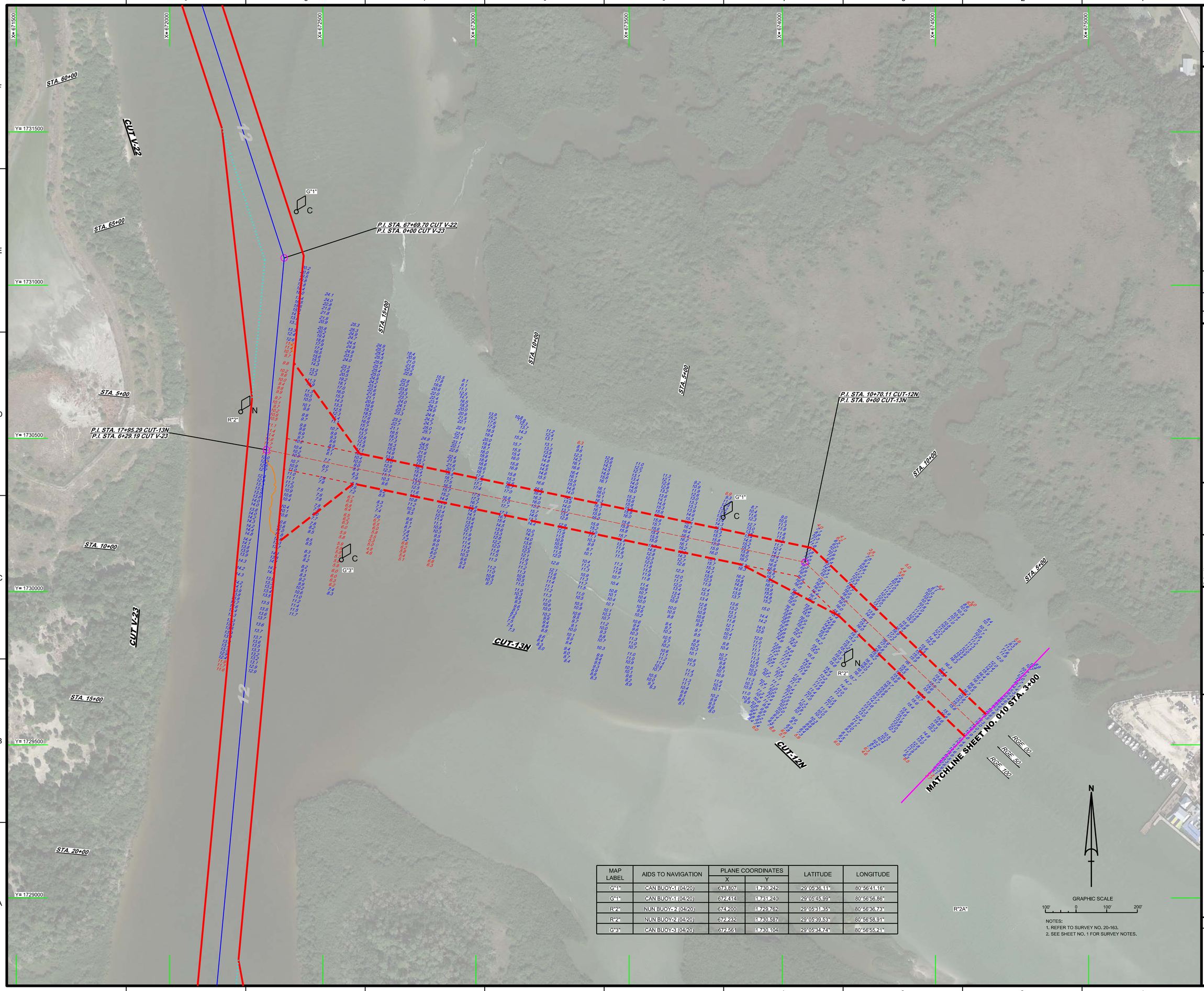
## PLAN

Scale: AS SHOWN

Drawing no.

10

SHEET 10 OF 11




| MAP LABEL | AIDS TO NAVIGATION | PLANE COORDINATES | | LATITUDE | LONGITUDE |
|---|---|---|---|---|---|
| | | X | Y | | |
| G"1" | CAN BUOY-1 (04/20) | 673,807 | 1,730,242 | 29°05'36.11" | 80°56'41.16" |
| G"1" | CAN BUOY-1 (04/20) | 672,414 | 1,731,240 | 29°05'45.99" | 80°56'56.86" |
| R"2" | NUN BUOY- 2 (04/20) | 674,200 | 1,729,762 | 29°05'31.35" | 80°56'36.73" |
| R"2" | NUN BUOY-2 (04/20) | 672,232 | 1,730,587 | 29°05'39.53" | 80°56'58.91" |
| G"3" | CAN BUOY-3 (04/20) | 672,561 | 1,730,104 | 29°05'34.74" | 80°56'55.21" |

NOTES:
1. REFER TO SURVEY NO. 20-163.
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
Chk by: CMR
Rev. No.: V9912EP-XX-X-XXXX
Date: APR 2020

20-163-A-NAV.DGN
20-163-A-CONT2.DGN
20-163-A-SOUN_CT3N.DGN
20-163-A-SOUN_CT12N.DGN
NWIS-NGINCCF_AEC.DGN
PONCE INLET-C-NGINCCF_2017.DGN
20-163-C-ESHDR.DGN
Reference files:
20-163-VH011.DGN
File name:

PONCE DE LEON INLET
VOLUSIA COUNTY, FLORIDA

# HYDROGRAPHIC EXAM SURVEY FY20
# 7, 12 AND 15-FOOT PROJECT

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

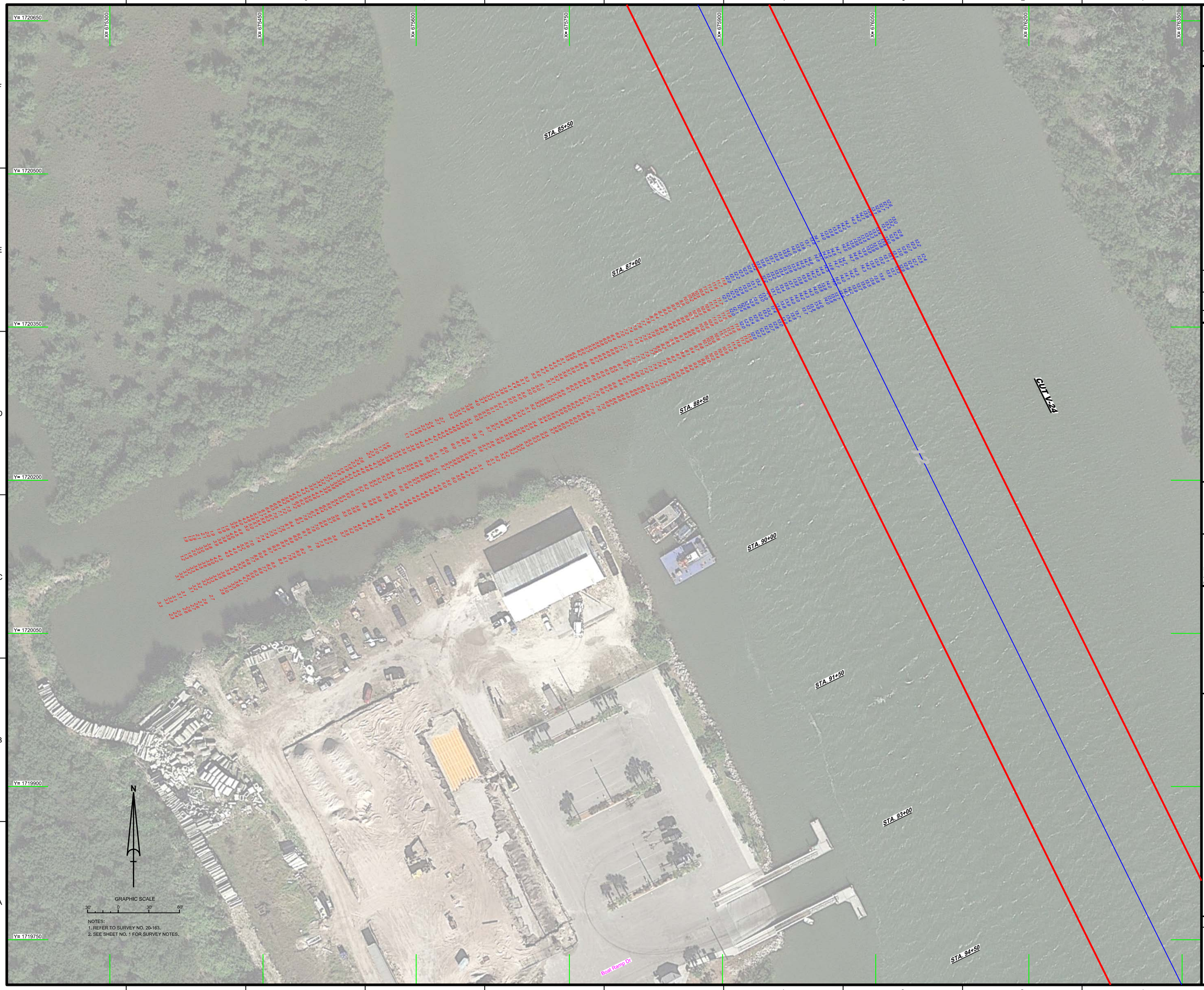
## PLAN

Scale: AS SHOWN

Drawing no.

11

SHEET 11 OF 11




NOTES:
1. REFER TO SURVEY NO. 20-163.
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 |
|---|---|---|

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