LOCATION MAP

TAMPA HARBOR
MULLET KEY CHANNEL
(ZONE 2)
HILLSBOROUGH / PINELLAS COUNTIES, FLORIDA
EXAMINATION SURVEY FY18
43-FOOT PROJECT

SURVEY ZONE	CUTS
2	MULLET KEY CHANNEL, CUT-A (TB), CUT-B)TB)
3	CUT-C (TB), CUT-D (TB), CUT-E (TB)
4	CUT-F, CUT-G, GADSDEN POINT CUT
5	CUT-J, CUT-J2, CUT-K
6	CUT-A (HB), CUT-C (HB), CUT-D (HB)

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

SURVEY NOTES

1. REFER TO SURVEY NO. 18-146.
2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO THE NOAA REPORTED MLLW TIDAL DATUM RELATIVE TO THE 1983-2001 TIDAL EPOCH.
3. TIDAL REDUCTIONS WERE OBTAINED UTILIZING A REAL-TIME KINEMATIC (RTK) GPS AND REFERENCED TO MLLW UTILIZING A HYPACK KINEMATIC TIDE DATUM (KTD) MODEL NAMED "SPC-FL-WEST-2010-12-07.KTD."
4. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (+) SIGN.
5. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR THE WEST ZONE OF FLORIDA AND REFERENCED TO NORTH AMERICAN DATUM OF 1983 (NAD83).
6. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
7. THIS SURVEY WAS PERFORMED USING REAL-TIME KINEMATIC (RTK) GPS POSITIONING WITH THE FOLLOWING REFERENCE BASE LOCATIONS:

   REFERENCE BASE LOCATED AT "TH-89 USE" (PID: AG0988)

   REFERENCE BASE LOCATED AT "872 6384 K 2004" (OPUS PID: BBBT27)

   TIDESTAFF LOCATED FROM "872 6367 C" (PID: AG7401)

   TIDESTAFF LOCATED FROM "872 6384 E " (OPUS PID: AG7341)
8. 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 BENCH MARKS ASSOCIATED WITH THE TIDE GAGE SITES SPECIFIED BELOW:

   NOAA TIDAL STATION "872 6367 C" FOR MULLET KEY CHANNEL (PID: AG7401)
9. VERTICAL MEASUREMENTS WERE MADE USING A ROSS SMART SOUNDER DUAL-FREQUENCY 28/200 KHZ SINGLE-BEAM TRANSDUCER AND A R2 SONIC 2024 MULTI-BEAM SYSTEM. SOUNDINGS SHOWN ARE IN HIGH FREQUENCY.

VESSEL	DATE OF SURVEY	CUT
SV JACKSONVILLE	16-18 MAY 2018	MULLET KEY CUT

10. AIDS TO NAVIGATION WERE LOCATED DURING THIS SURVEY.
11. 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.
12. 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.

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: VRM
Cad by: GMR
DWN by: VRM
Trv. No.
Date: MAY 2018

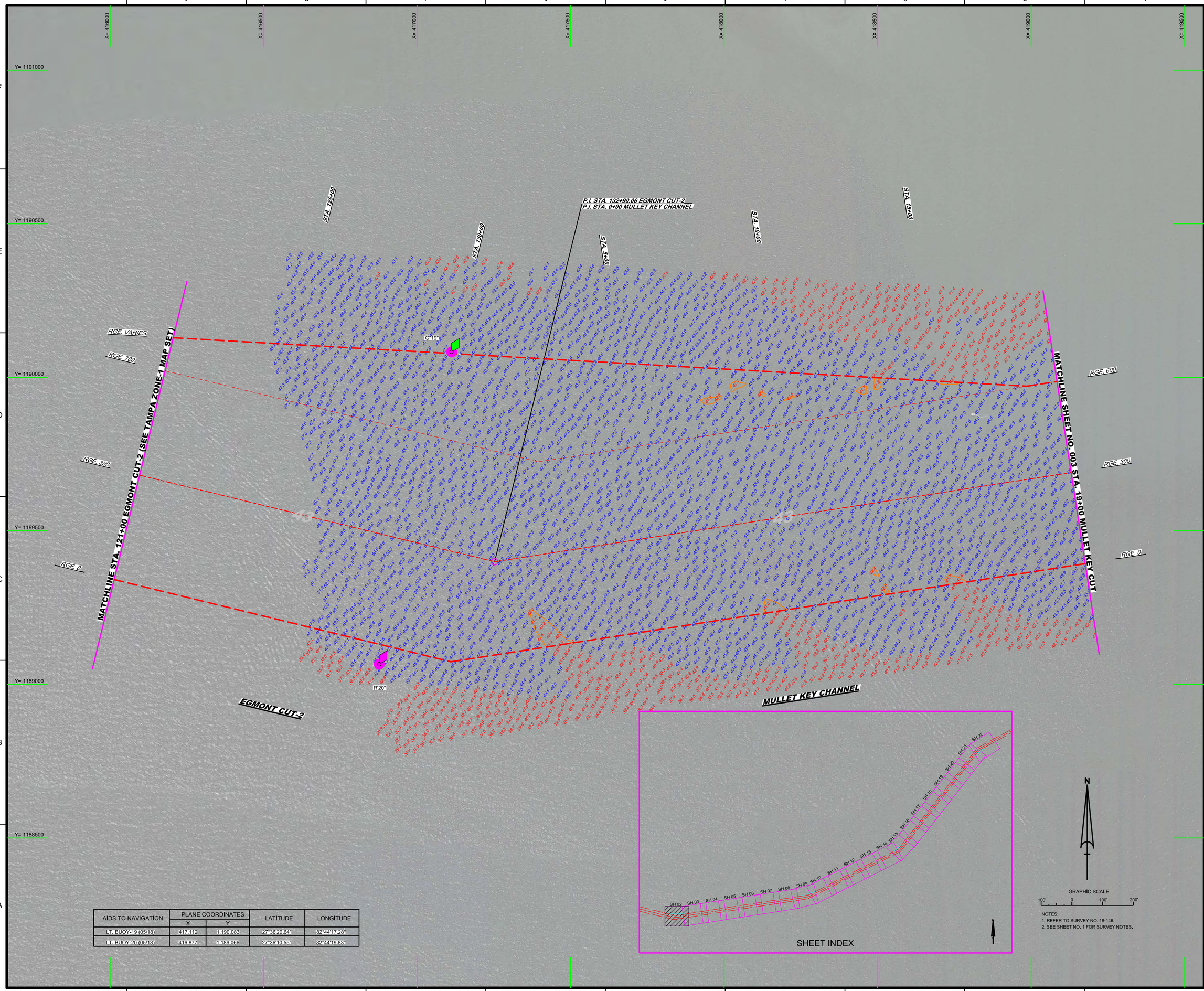
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
18-146A-IND2_ZONE2.DGN
TAMPA HARBOR-CANGMCDF.DGN
18-146-CBS-SRGR.DGN
Reference files
18-146-VH-001_ZZ.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA
HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT
INDEX, LOCATION AND VICINITY
MAP

Scale: AS SHOWN

Drawing no.
1 / 10

SHEET 01 OF 22



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-19 (05/18)	417,112	1,190,083	27° 36'20.64"	82° 44'17.28"
LT. BUOY-20 (05/18)	416,877	1,189,066	27° 36'10.55"	82° 44'19.83"

NOTES:
1. REFER TO SURVEY NO. 18-146.
2. SEE SHEET NO. 1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

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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.
Date: MAY 2018

XXXXXXXXXX-XXXXXX.DGN
XXXXXXXXXX-XXXXXX.DGN
XXXXXXXXXX-XXXXXX.DGN
18-146-N-NAV.DGN
18-146-N-TOPO.DGN
18-146-N-SOUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-SS-BKDR.DGN
Reference files:
18-146-VH-002_22.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 121+00 EGMONT CUT-2 THRU STA. 19+00 MULLET KEY CHANNEL

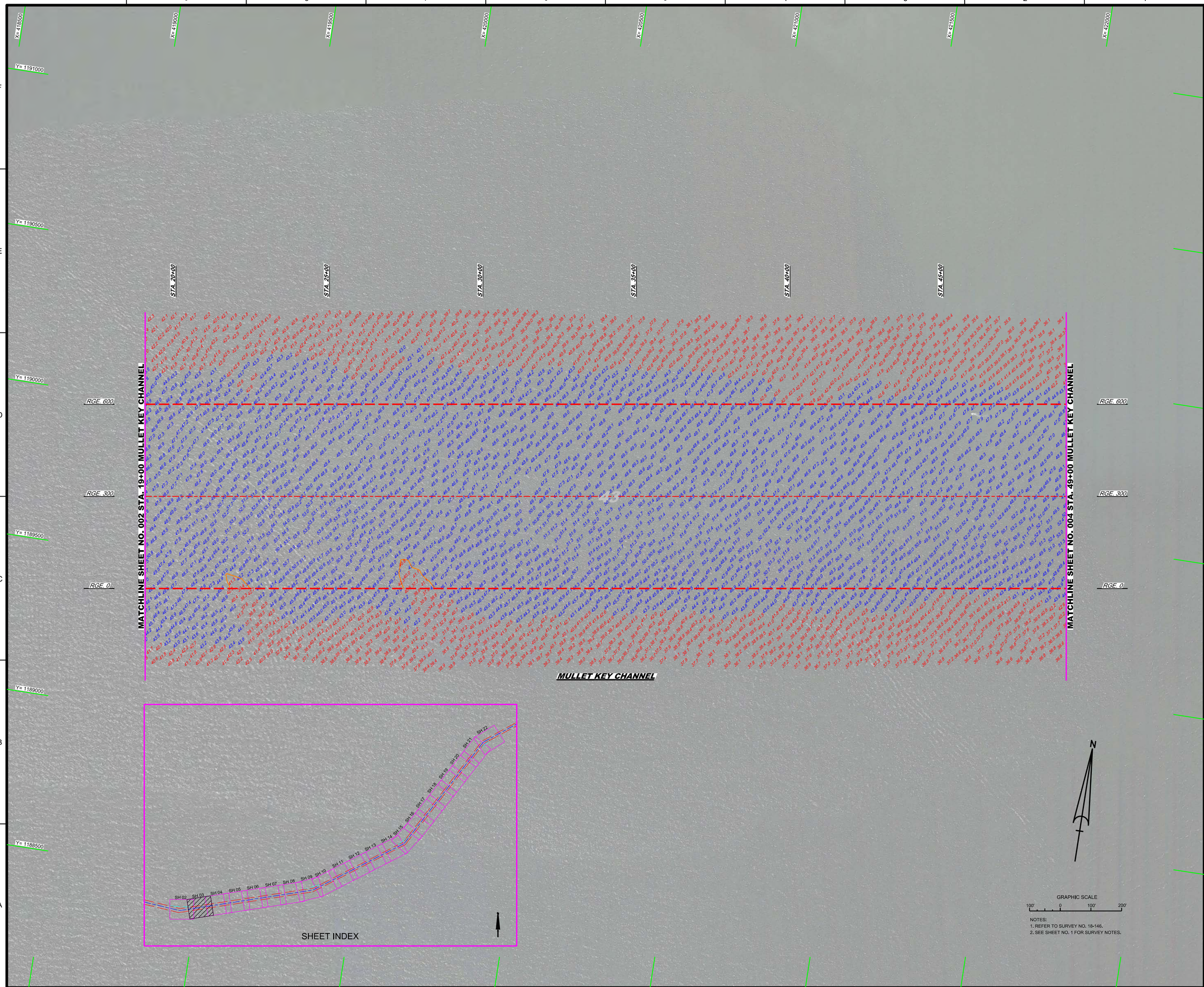
PLAN

Scale: AS SHOWN

Drawing no.

2 / 10

SHEET 02 OF 22



NOTES:
1. REFER TO SURVEY NO. 18-146.
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.
Date: MAY 2018

Reference files:
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
18-146-VSUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-BS-BRDR.DGN
18-146-VH003_22.DGN

File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 19+00 THRU STA. 49+00 MULLET KEY CHANNEL

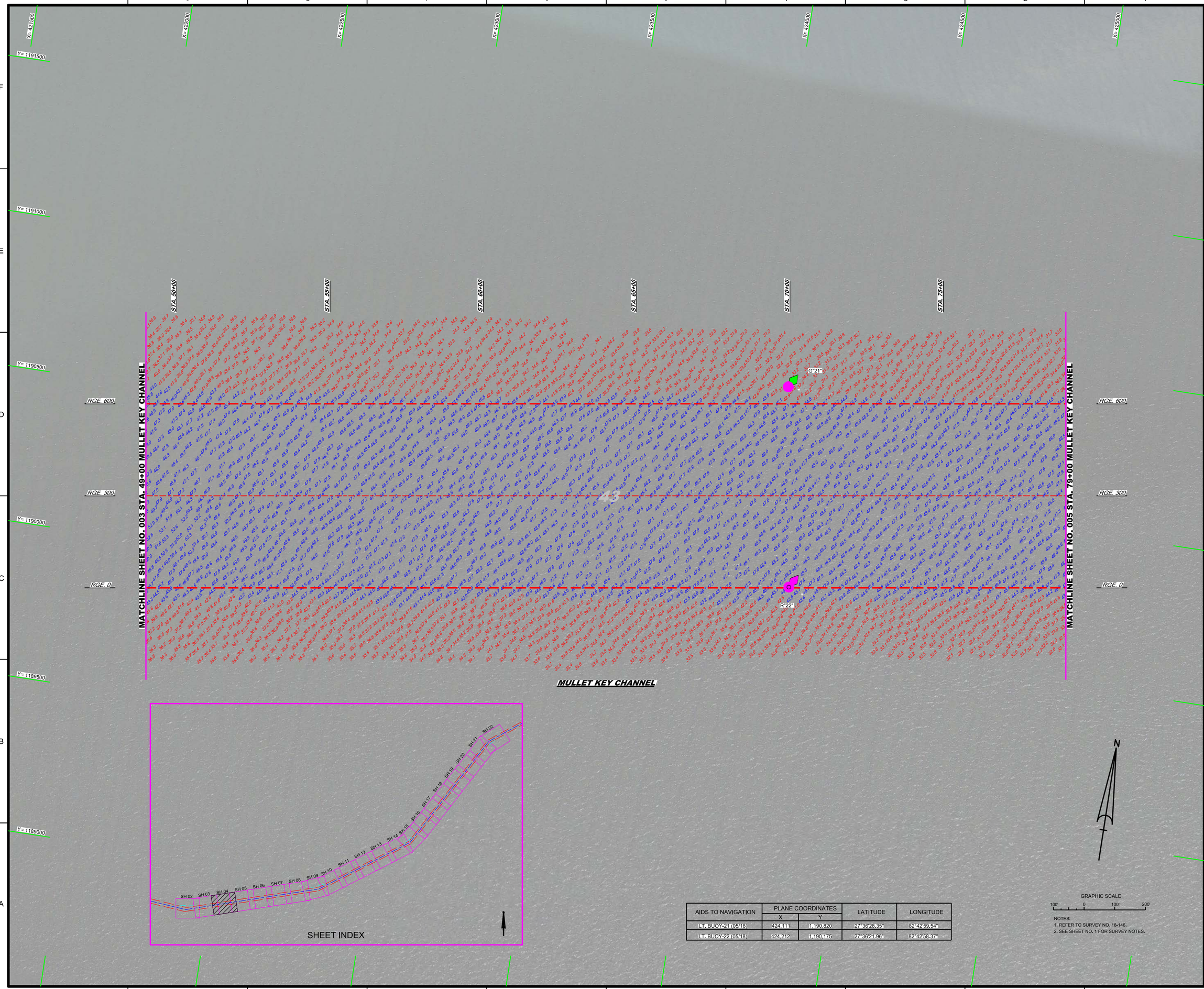
PLAN

Scale: AS SHOWN

Drawing no.

3 / 10

SHEET 03 OF 22



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-21 (05/18)	424,111	1,190,820	27° 36' 28.35"	82° 42' 59.54"
LT. BUOY-22 (05/18)	424,212	1,190,175	27° 36' 21.96"	82° 42' 58.37"

NOTES:
1. REFER TO SURVEY NO. 18-146.
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US Army Corps of Engineers
Jacksonville District

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

Designed by: VIRM
DWN by: VIRM
Chd by: CMR
Rev. No.
Date: MAY 2018

XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXX.DGN
18-146-VSOUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-BS-BRDR.DGN
Reference files:
18-146-VHD04_22.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 49+00 THRU STA. 79+00 MULLET KEY CHANNEL

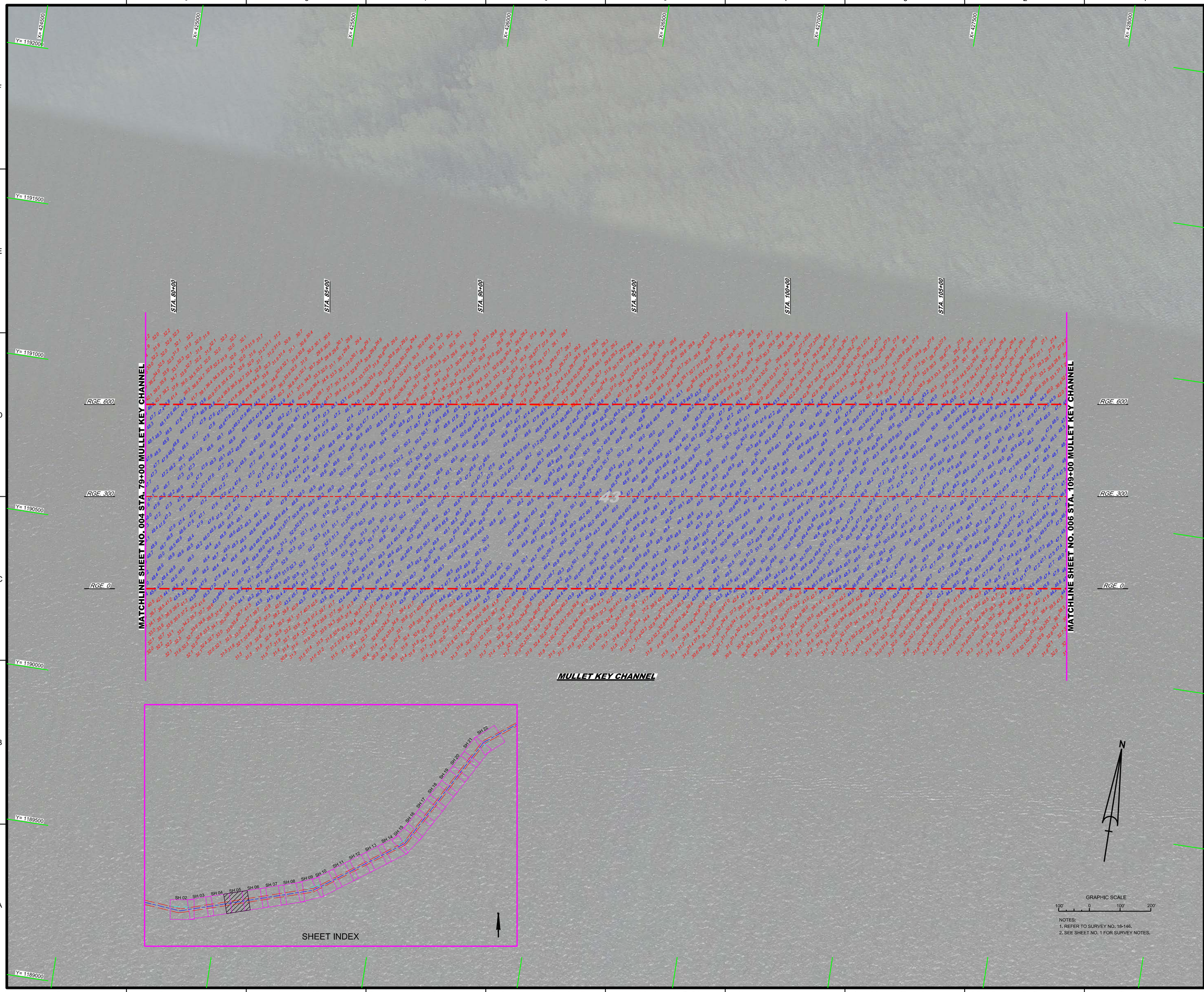
PLAN

Scale: AS SHOWN

Drawing no.

4 / 10

SHEET 04 OF 22



NOTES:
1. REFER TO SURVEY NO. 18-146.
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, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: VIRM
DWN by: VIRM
CHK by: CMR
Rev. No.
Date: MAY 2018

XXXXXXXXXXXXXXXX.DGN
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XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
18-146-VSUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-BS-BRDR.DGN
Reference files:
18-146-VH305_Z2.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 79+00 THRU STA. 109+00 MULLET KEY CHANNEL

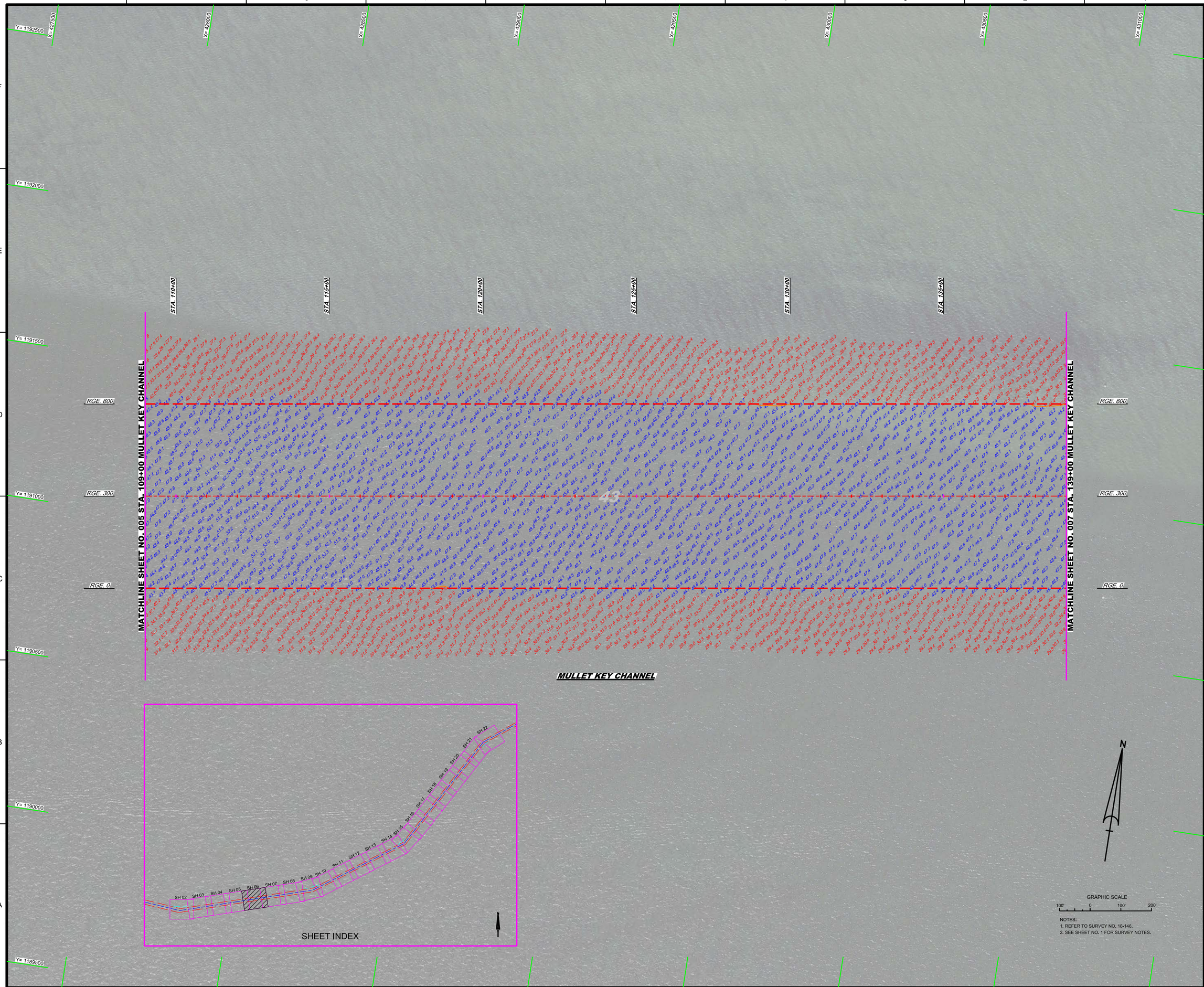
PLAN

Scale: AS SHOWN

Drawing no.

5 / 10

SHEET 05 OF 22



NOTES:
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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, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: VIRM
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Date: MAY 2018

XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
18-146-VUSUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-BS-BRDR.DGN
Reference files:
18-146-VHD86_Z2.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 109+00 THRU STA. 139+00 MULLET KEY CHANNEL

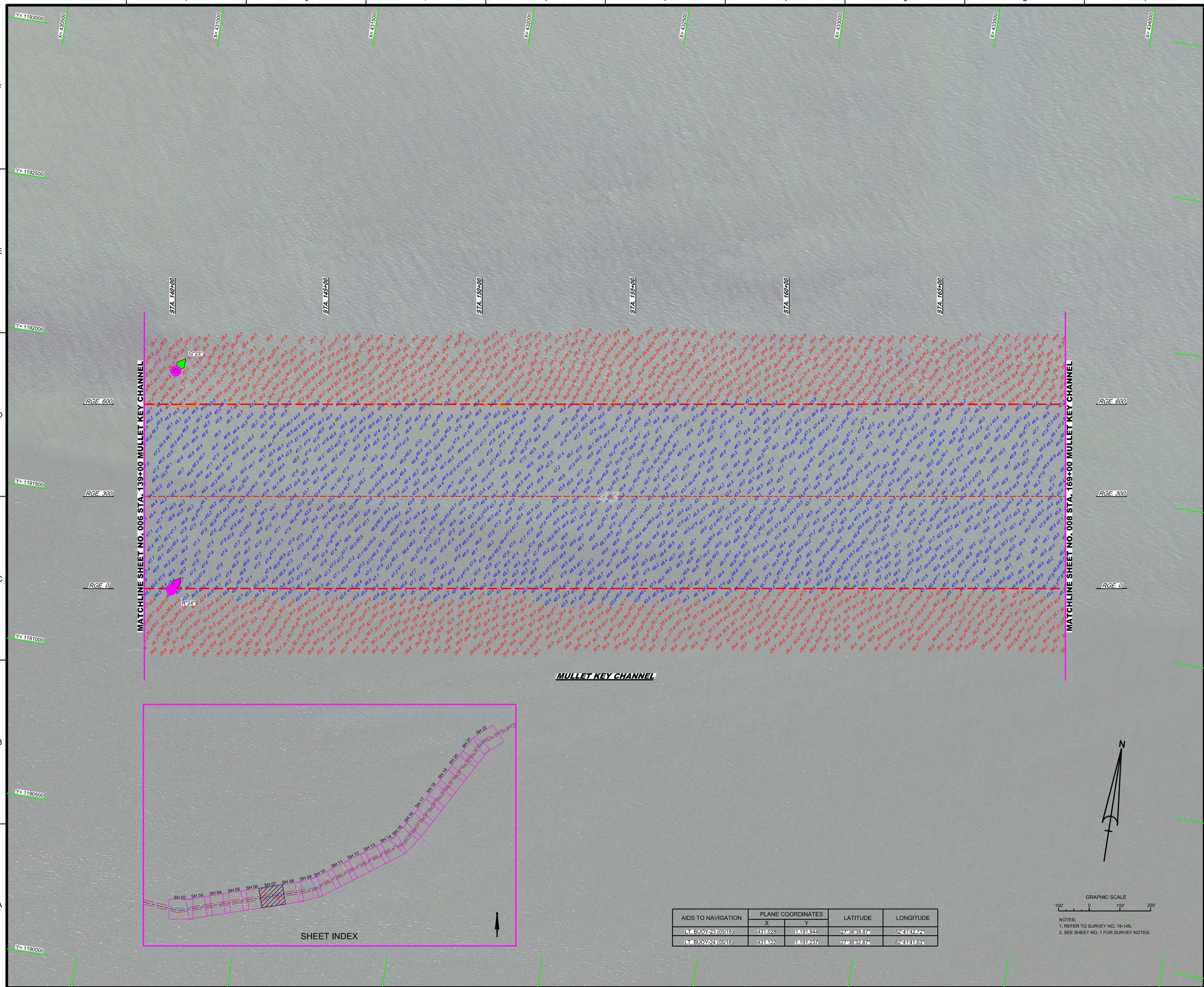
PLAN

Scale: AS SHOWN

Drawing no.

6 / 10

SHEET 06 OF 22



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-23 (05/18)	431,025	1,191,844	27°36'39.87"	82°41'42.72"
LT. BUOY-24 (05/18)	431,122	1,191,237	27°36'32.87"	82°41'41.63"

NOTES:
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2. SEE SHEET NO. 1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

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DEPARTMENT OF THE ARMY
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JACKSONVILLE, FLORIDA

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Ckd by: CMR
Rev. No.
Date: MAY 2018

XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXX.DGN
18-146-V-C2N43.DGN
18-146-V-S2N43.DGN
18-146-V-SOUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-BS-BRDR.DGN
Reference files:
18-146-VH307_Z2.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 139+00 THRU STA. 169+00 MULLET KEY CHANNEL

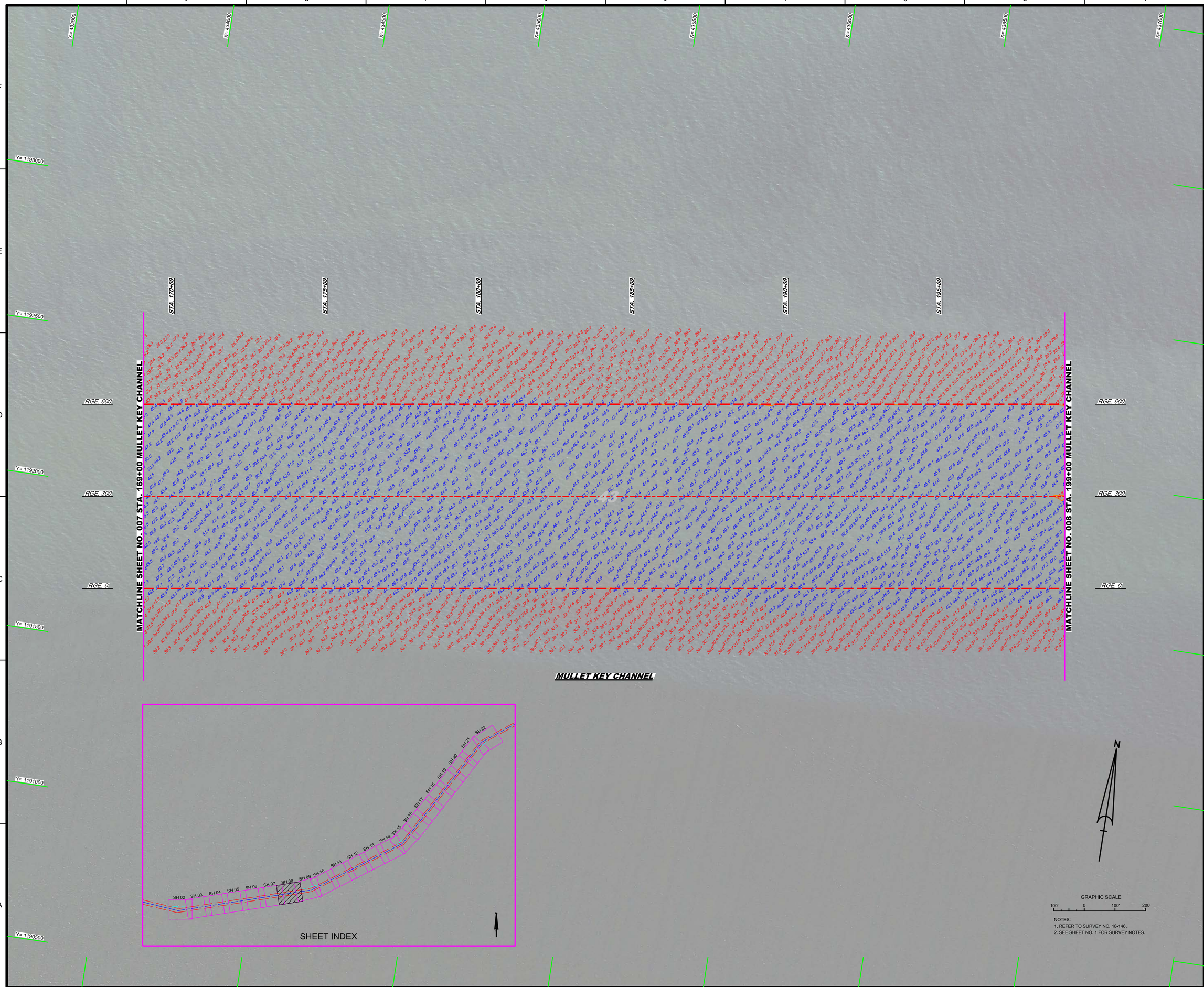
PLAN

Scale: AS SHOWN

Drawing no.

7 / 10

SHEET 07 OF 22



NOTES:
1. REFER TO SURVEY NO. 18-146.
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, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: VIRM
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Rev. No.
Date: MAY 2018

XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
XXXXXXXXXXXXXXXXXX.DGN
18-146-01-CONTROL.DGN
18-146-N-SOUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-ESB-BDR.DGN
Reference files:
18-146-VH-036_22.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 169+00 THRU STA. 199+00 MULLET KEY CHANNEL

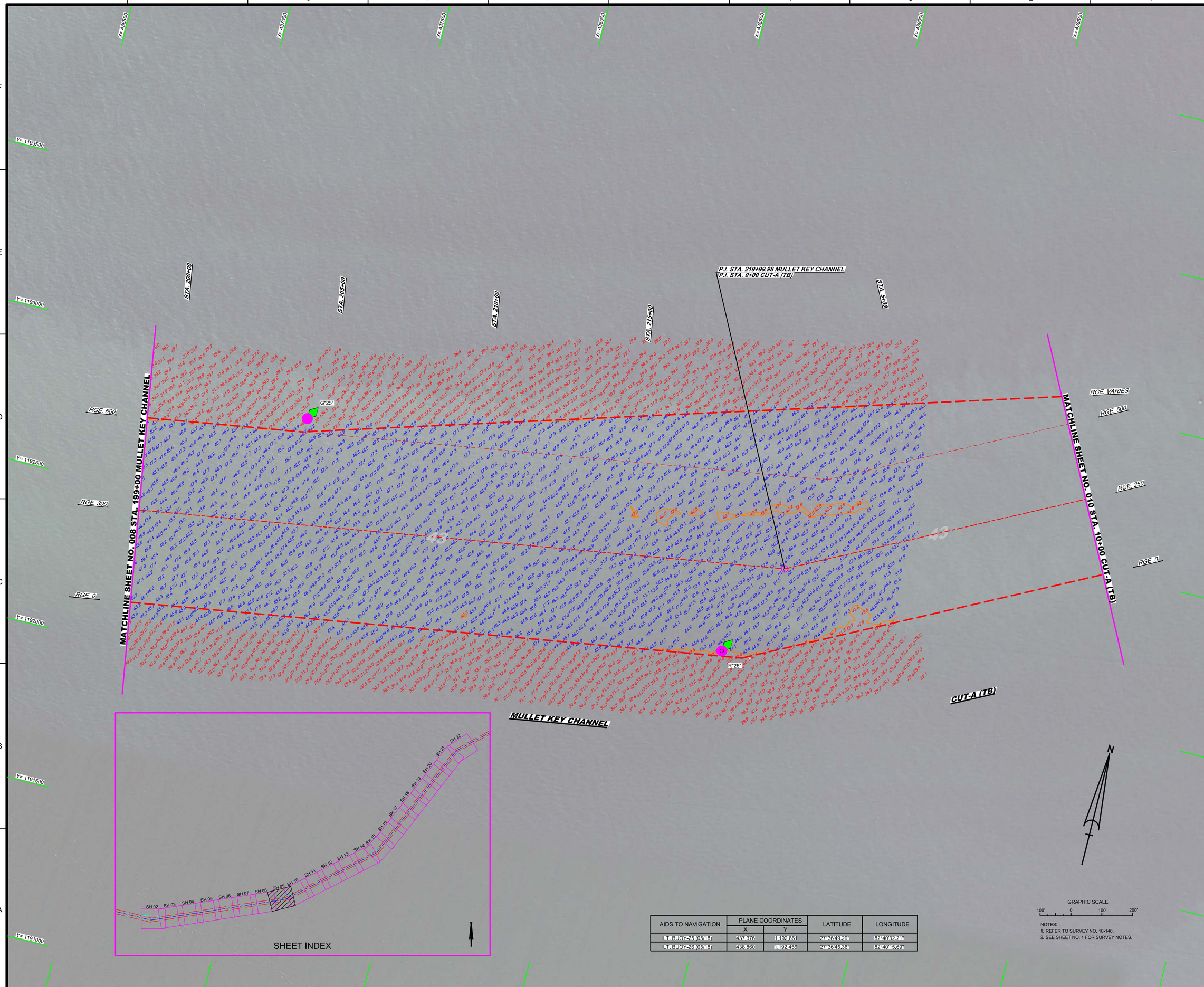
PLAN

Scale: AS SHOWN

Drawing no.

8 / 10

SHEET 08 OF 22



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-25 (05/18)	437,376	1,192,861	27°36'49.29"	82°40'32.21"
LT. BUOY-26 (05/18)	438,860	1,192,456	27°36'45.36"	82°40'15.69"

NOTES:
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US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

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

Designed by: VIRM
DWN by: VIRM
Ckd by: CMR
Date: MAY 2018
Rev. No.

XXXXXXXXX-X-XXXXXX.DGN
XXXXXXXXX-X-XXXXXX.DGN
18-146-VC-CONTS.DGN
18-146-VC-SOUND.DGN
18-146-VC-SOUN_MKC.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-SS-BKDR.DGN
18-146-VH-009_22.DGN
Reference files:
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

STA. 199+00 MULLET KEY CHANNEL THRU STA. 10+00 CUT-A (TB)

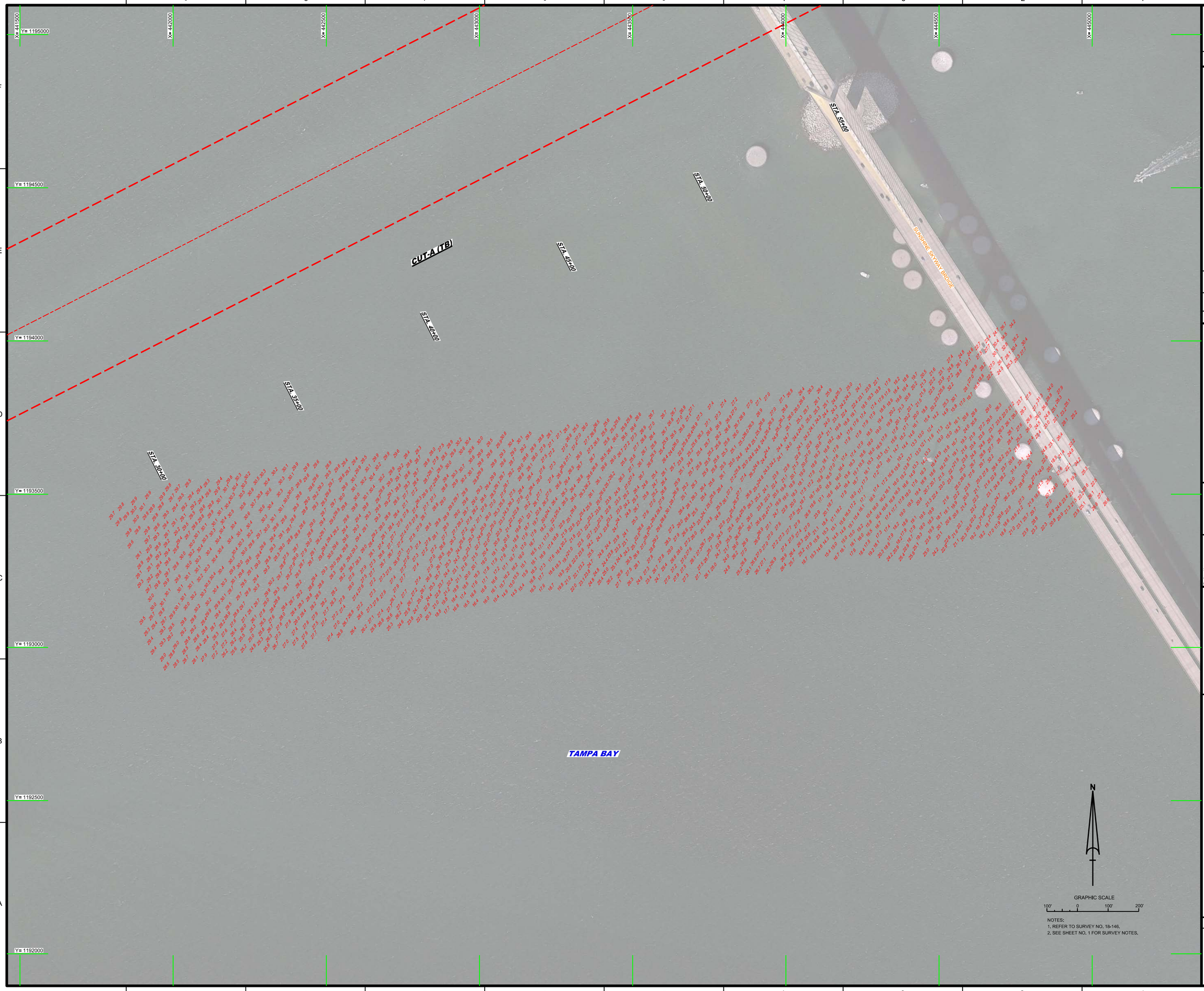
PLAN

Scale: AS SHOWN

Drawing no.

9 / 10

SHEET 09 OF 22



NOTES:
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US Army Corps of Engineers
Jacksonville District

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JACKSONVILLE DISTRICT, CORPS OF ENGINEERS
JACKSONVILLE, FLORIDA

Designed by: VIRM
DWN by: VIRM
Chd by: CMR
Rev. No.
Date: MAY 2018

I:\XXXXXXXX-A-XXXXXX.DGN
XXXXXXXX-A-XXXXXX.DGN
XXXXXXXX-A-XXXXXX.DGN
XXXXXXXX-A-XXXXXX.DGN
XXXXXXXX-A-XXXXXX.DGN
XXXXXXXX-A-XXXXXX.DGN
TAMPA HARBOR-C-NGMCF.DGN
18-146-C-ES-BRDR.DGN
Reference files:

18-146-VH-001_SKYWAYBRIDGE.DGN
File name:

TAMPA HARBOR
HILLSBOROUGH COUNTY, FLORIDA

HYDROGRAPHIC EXAM SURVEY FY18
43-FOOT PROJECT

VICINITY OF SKYWAY BRIDGE

PLAN

Scale: AS SHOWN

Drawing no.

10 / 10

SHEET 01 OF 01