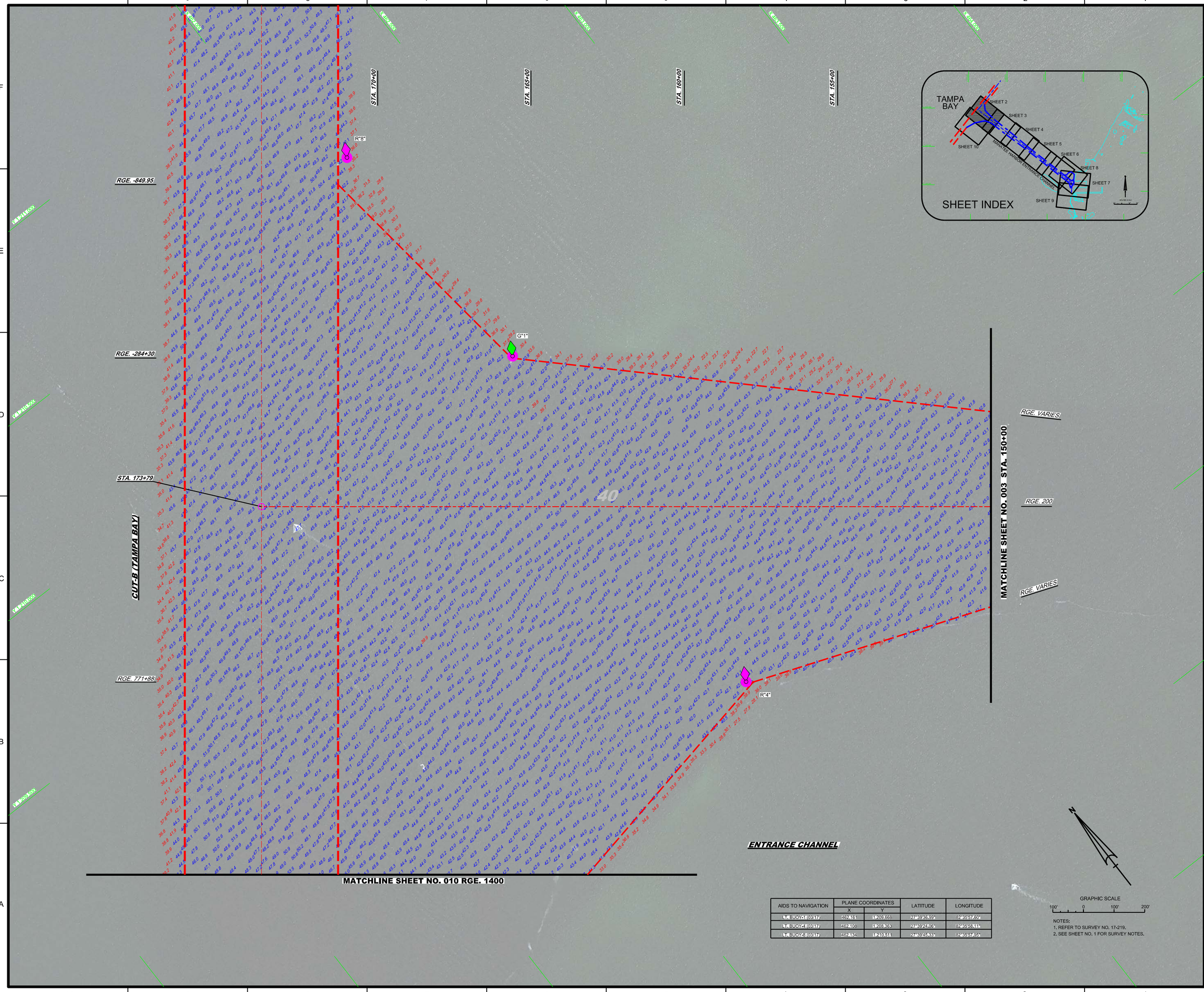


AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
L.T. BUOY-1 (03/17)	462,161	1,209,568	27°39'28.99"	82°35'57.60"
L.T. BUOY-2 (03/17)	462,108	1,208,383	27°39'24.06"	82°35'58.11"
L.T. BUOY-3 (03/17)	462,184	1,210,511	27°39'45.33"	82°35'57.35"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
N		A-N	ABCD

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

Designed by: D.M.W.
Drawn by: WRM
Checked by: GMR
Proj. No.: - - -
Date: SEP 2017

17-219-C-B-S-R02.DGN
MANATEE-HARBOR-C-NCMCF.DGN
TAMPA HARBOR-C-NCMCF.DGN
17-219-A-SQUA_EC.DGN
17-219-A-SQUA_CD.DGN
17-219-A-INDEX.DGN

Reference files:

17-219-VH-R02.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT

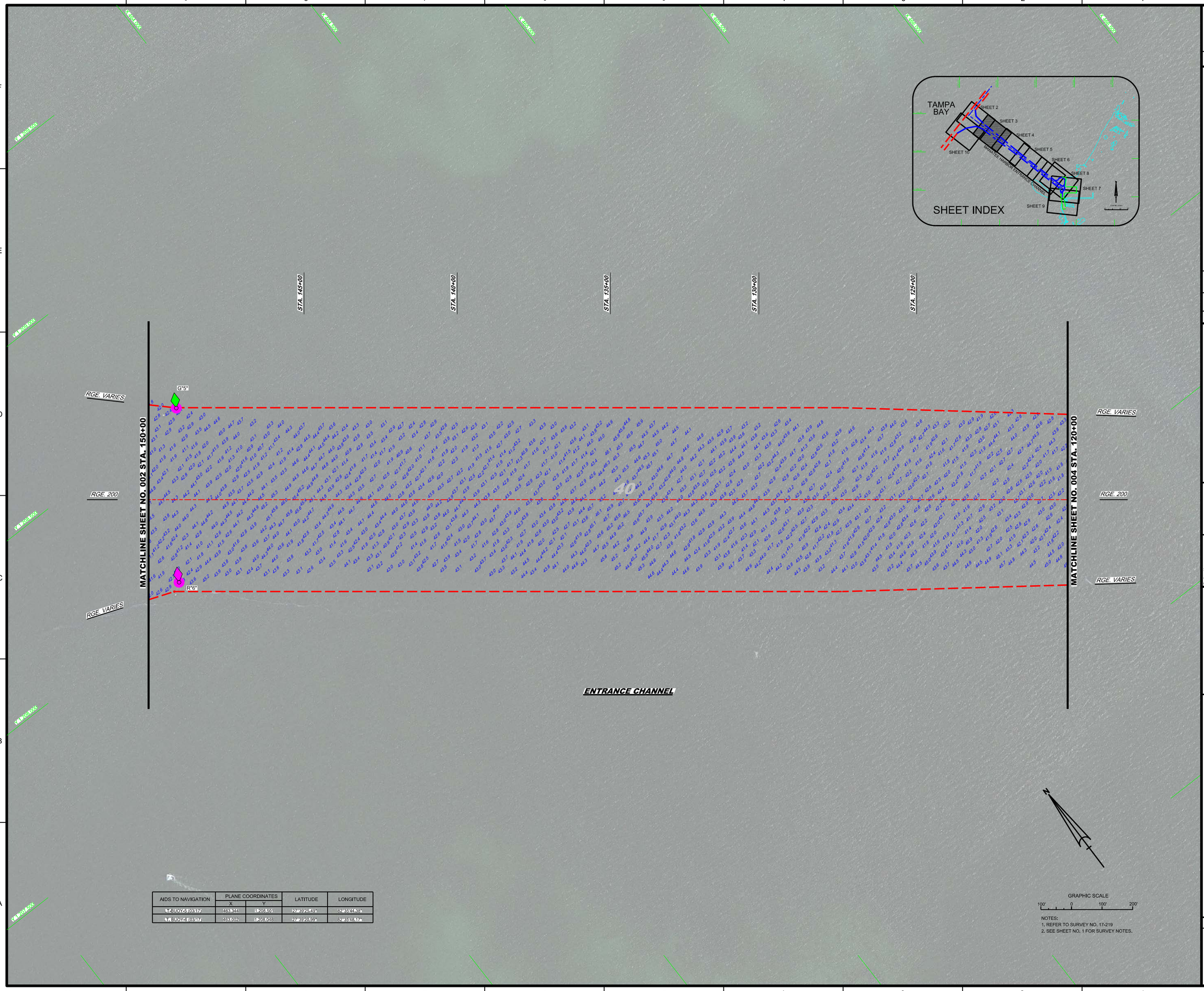
STA. 150+00 THRU STA. 173+79 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

2

SHEET 2 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
⊥ BUOY-5 (03/17)	463,344	1,208,501	27°39'25.49"	82°35'44.38"
⊥ BUOY-6 (03/17)	463,002	1,208,048	27°39'20.59"	82°35'48.17"

NOTES:
1. REFER TO SURVEY NO. 17-219
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	Description
N		A-N	ABCD

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

Designed by: D.M.W.
DWN by: WRM
Ckd by: GMR
Proj. No.: - - -
Date: SEP 2017

17-219-C-R-PROF.DGN
MANATEE-HARBOR-CH.DGN
17-219-V-SOUN_EC.DGN
17-219-V-INDEX.DGN
17-219-V-NAV.DGN

Reference files:
17-219-VH-003.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT

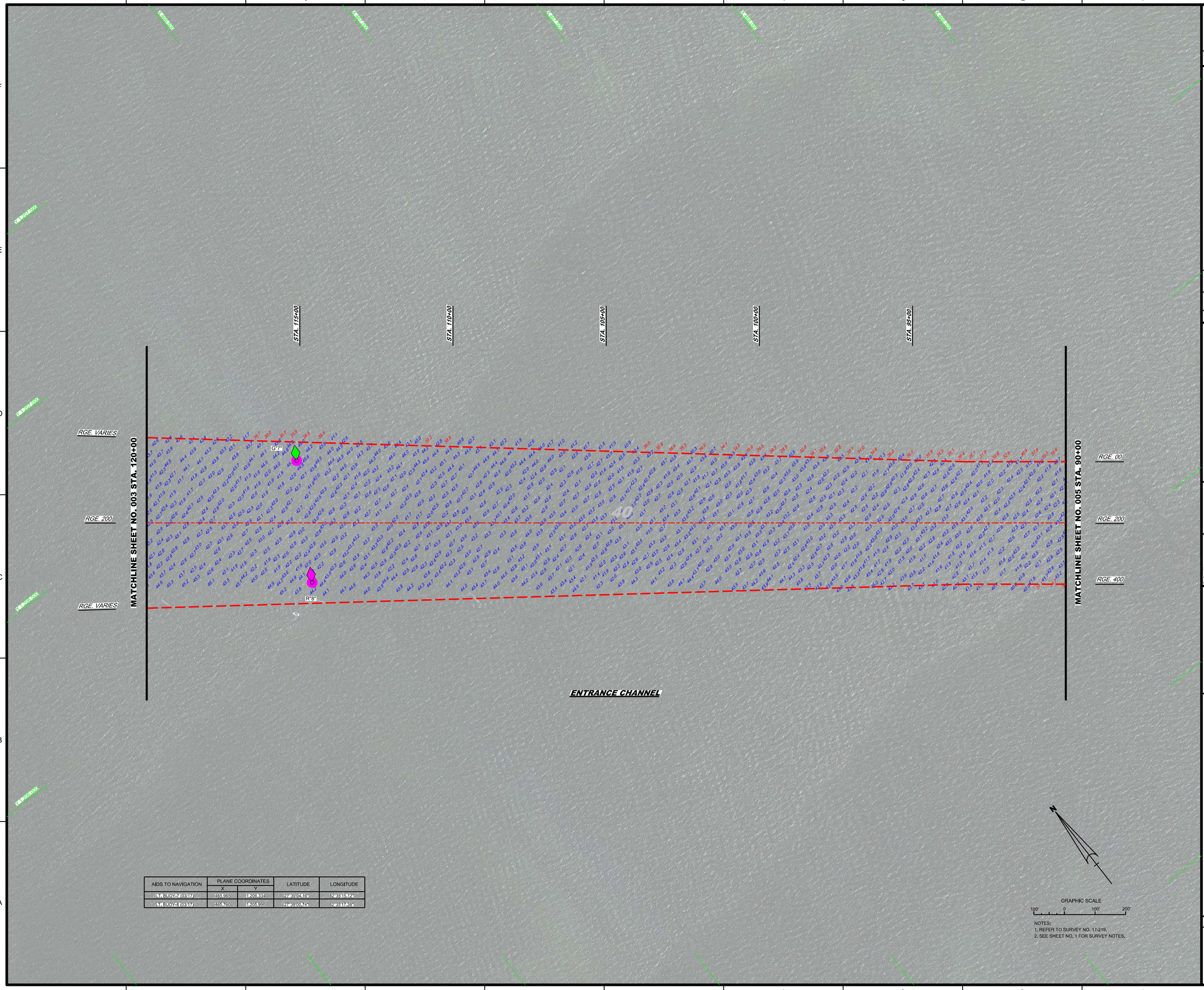
STA. 120+00 THRU STA. 150+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

3

SHEET 3 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
Lt. BUOY-7 (03/17)	465,955	1,206,334	27°39'04.16"	82°35'15.12"
Lt. BUOY-8 (03/17)	465,760	1,205,990	27°39'00.74"	82°35'17.38"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
N		A-N	ABCD

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

Designed by: D.M.M.
Drawn by: WRM
Checked by: GMR
Rev. No. - - -
Date: SEP 2017

17-219-S-BI-INDEX.DGN
MANATEE HARBOR-CONSMCCF.DGN
17-219-V-SOUN_EC.DGN
17-219-V-INDEX.DGN
17-110-V-NAV.DGN

Reference files:

17-219-VH-004.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT

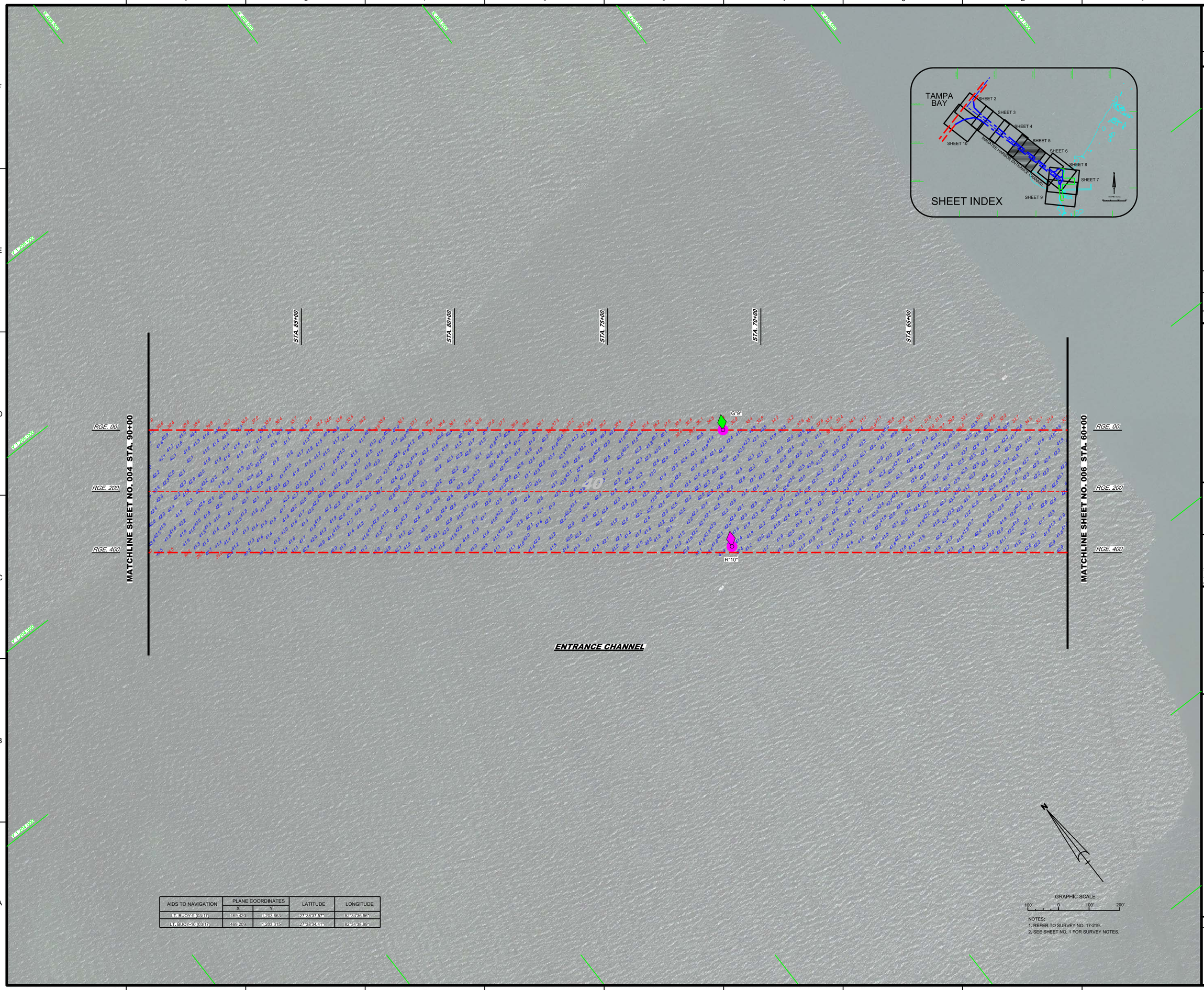
STA. 90+00 THRU STA. 120+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

4

SHEET 4 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-9 (03/17)	468,420	1,203,663	27°38'37.57"	82°34'36.56"
LT. BUOY-10 (03/17)	469,209	1,203,315	27°38'34.41"	82°34'38.89"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
		A-N	ABCD

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

Designed by: D.M.W.
Dwn by: WRM
Ckd by: GMR
Proj. No.: - - -
Date: SEP 2017

17-219-D-SUR-REV2.DGN
MANATEE-HARBOR-PLAN.DGN
17-219-V-SOUN_EC.DGN
17-219-V-INDEX.DGN
17-119-V-MAV.DGN
Reference files

17-219-VH-005.DGN
File name

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT

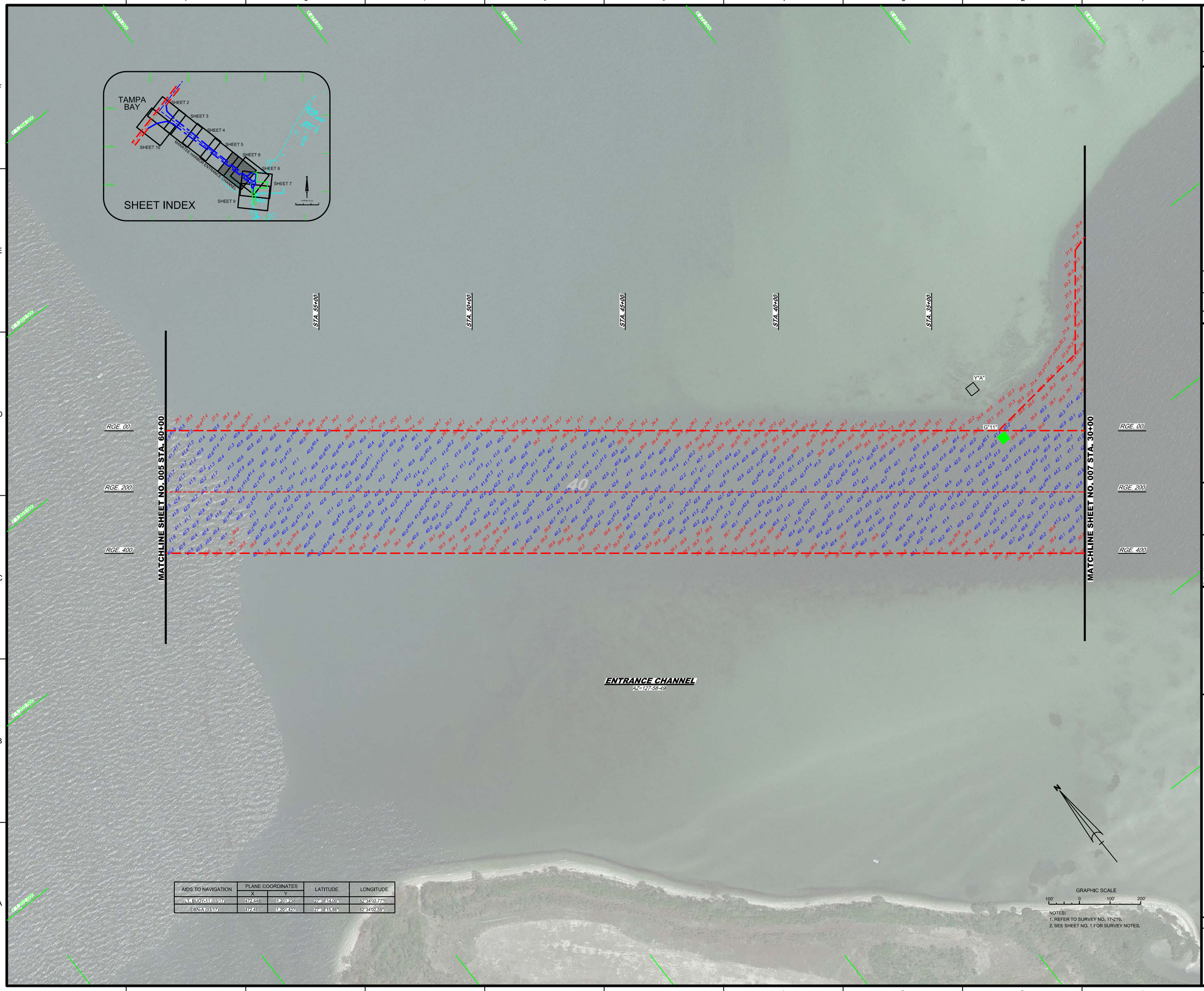
STA. 60+00 THRU STA. 90+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

5

SHEET 5 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-11 (03/17)	472,448	1,201,238	27°38'14.00"	82°34'02.77"
DBN-A (03/17)	472,465	1,201,427	27°38'15.86"	82°34'02.59"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
		A-N	ABCD

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

Designed by: D.M.M.
Drawn by: WRM
Checked by: GMR
Rev. No. --
Date: SEP 2017

17-219-S-HR-ENTR.DGN
MANATEE-HARBOR-CONSMCCF.DGN
17-219-V-SOUN_EC.DGN
17-219-V-INDEX.DGN
17-110-A-NAV.DGN

Reference files:

File name: 17-219-VH-006.DGN

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT

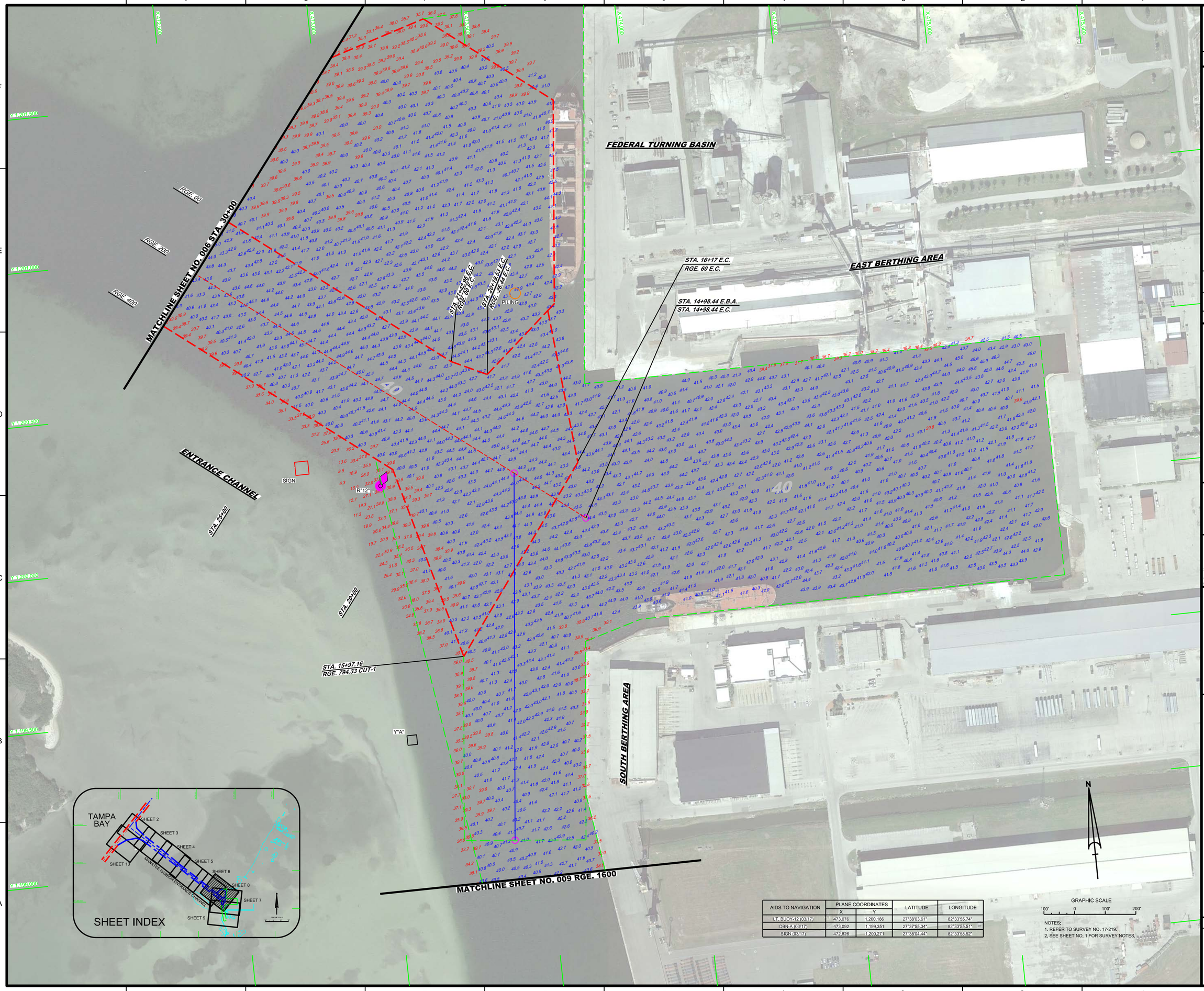
STA. 30+00 THRU STA. 60+00 ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

6

SHEET 6 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-12 (03/17)	473,076	1,200,186	27°38'03.61"	82°33'55.74"
DBN-A (03/17)	473,092	1,199,351	27°37'55.34"	82°33'55.51"
SIGN (03/17)	472,826	1,200,271	27°38'04.44"	82°33'58.52"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
N		A-N	ABCD

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

Designed by: D.M.W.
Drawn by: GMR
CWN by: WRM
Rev. No.: - - -
Date: SEP 2017

17-219-CS-SURVEY.DGN
MANATEE-HARBOR-CHGMCOF.DGN
BERTHING AREA CONTROL POINTS.DGN
17-219-A-SOUL_EC.DGN
17-219-A-WIZ.DGN
17-219-DAVIDV.DGN
Reference files:

17-219-VH-007.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

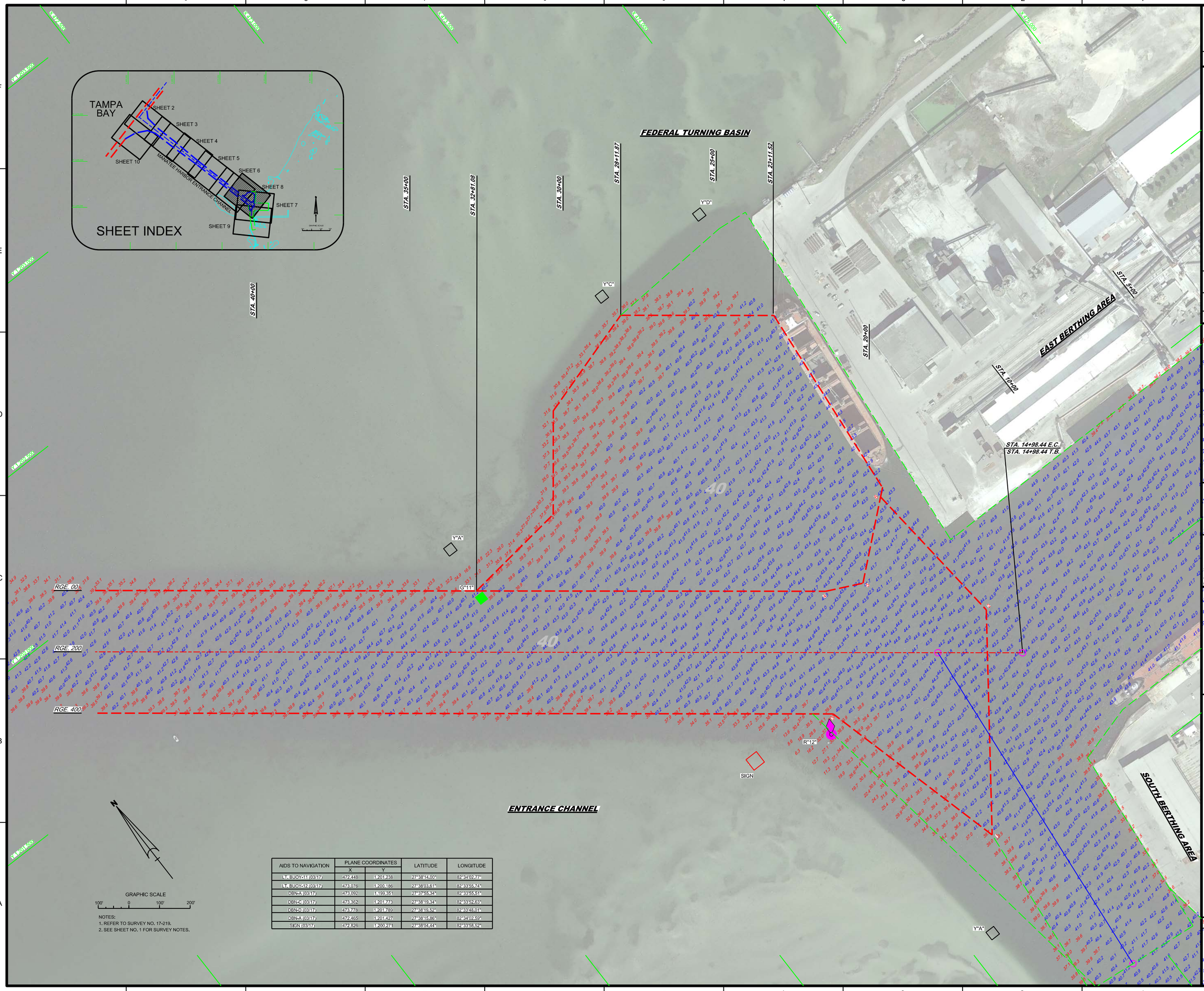
POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT
STA. 0+00 TURNING BASIN THRU
STA. 30+00 ENTRANCE CHANNEL
PLAN

Scale: AS SHOWN

Drawing no.

7

SHEET 7 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-11 (03/17)	472,448	1,201,238	27°38'14.00"	82°34'02.77"
LT. BUOY-12 (03/17)	473,076	1,200,186	27°38'03.61"	82°33'55.74"
DBN-A (03/17)	473,092	1,199,351	27°37'55.34"	82°33'55.51"
DBN-C (03/17)	473,362	1,201,773	27°38'19.34"	82°33'52.63"
DBN-D (03/17)	473,778	1,201,789	27°38'19.52"	82°33'48.01"
DBN-A (03/17)	472,465	1,201,427	27°38'15.86"	82°34'02.59"
SIGN (03/17)	472,826	1,200,271	27°38'04.44"	82°33'58.52"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
N		A-N	ABCD

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

Designed by: D.M.W.
Drawn by: WRM
Checked by: GMR
Rev. No. - -
Date: SEP 2017

17-219-D-B-BRDG.DGN
MANATEE HARBOR CHANNEL/MCCF.DGN
BERTHING AREA CONTROL POINTS.DGN
17-219-VA-SOUN_EC.DGN
17-219-VA-SOUN_TB.DGN
17-219-VA-NAV.DGN

Reference files:
17-219-VH-008.DGN

File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

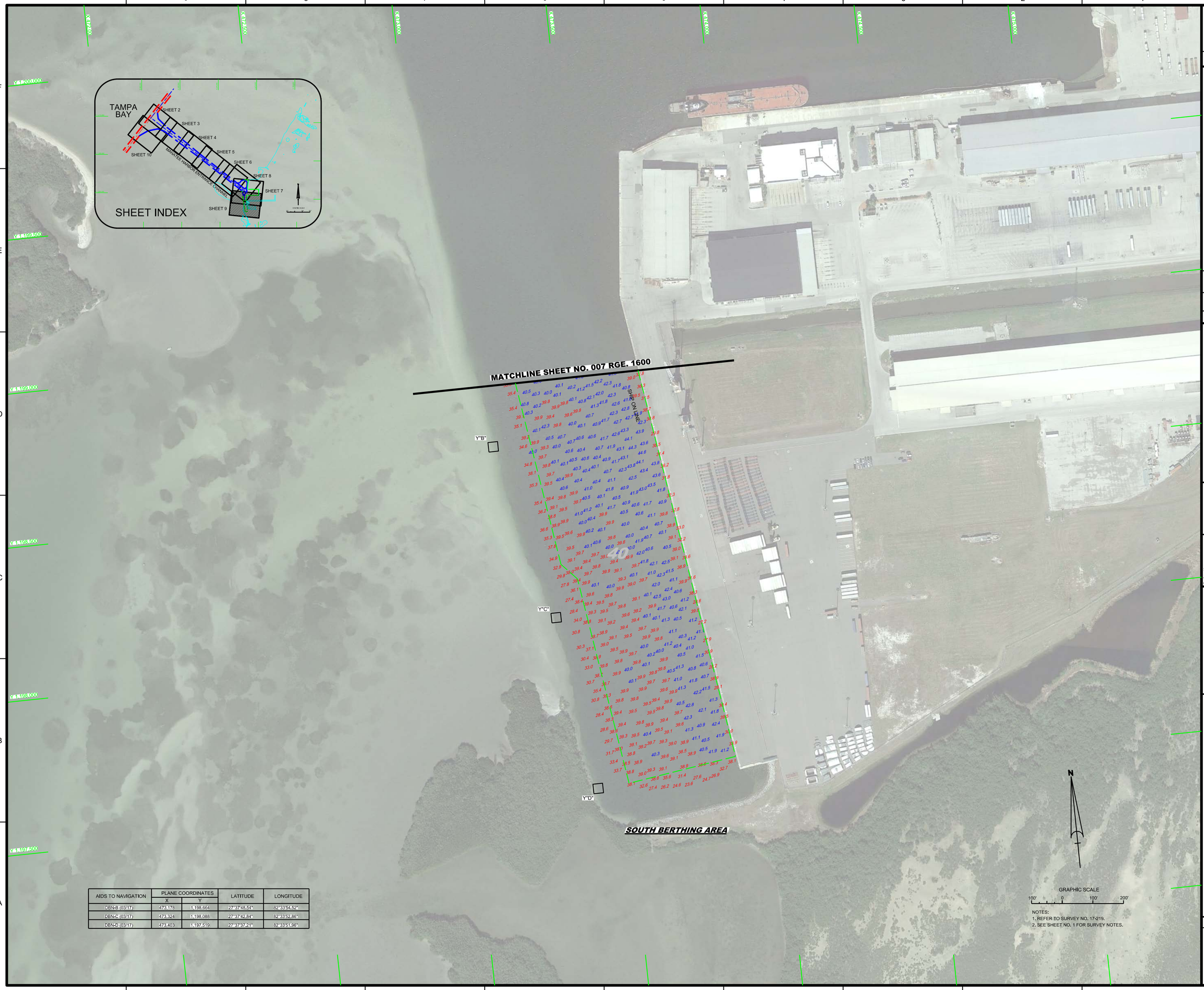
POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT
FEDERAL TURNING BASIN
PLAN

Scale: AS SHOWN

Drawing no.

8

SHEET 8 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
DBN-B (03/17)	473,178	1,198,664	27°37'48.54"	82°33'54.52"
DBN-C (03/17)	473,324	1,198,088	27°37'42.84"	82°33'52.86"
DBN-D (03/17)	473,403	1,197,519	27°37'37.21"	82°33'51.96"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
N		A-N	ABCD

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

Designed by: D.M.W.
Dwn by: WRM
Ckd by: GMR
Date: SEP 2017

17-219-C-B-REV2.DGN
MANATEE-HARBOR-CHANNEL-GMCOF.DGN
BERTHING AREA CONTROL POINTS.DGN
17-219-A-SOUL_EC.DGN
17-219-A-MAP_EC.DGN
17-219-AVAIAV.DGN

Reference files:

17-219-VH-009.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

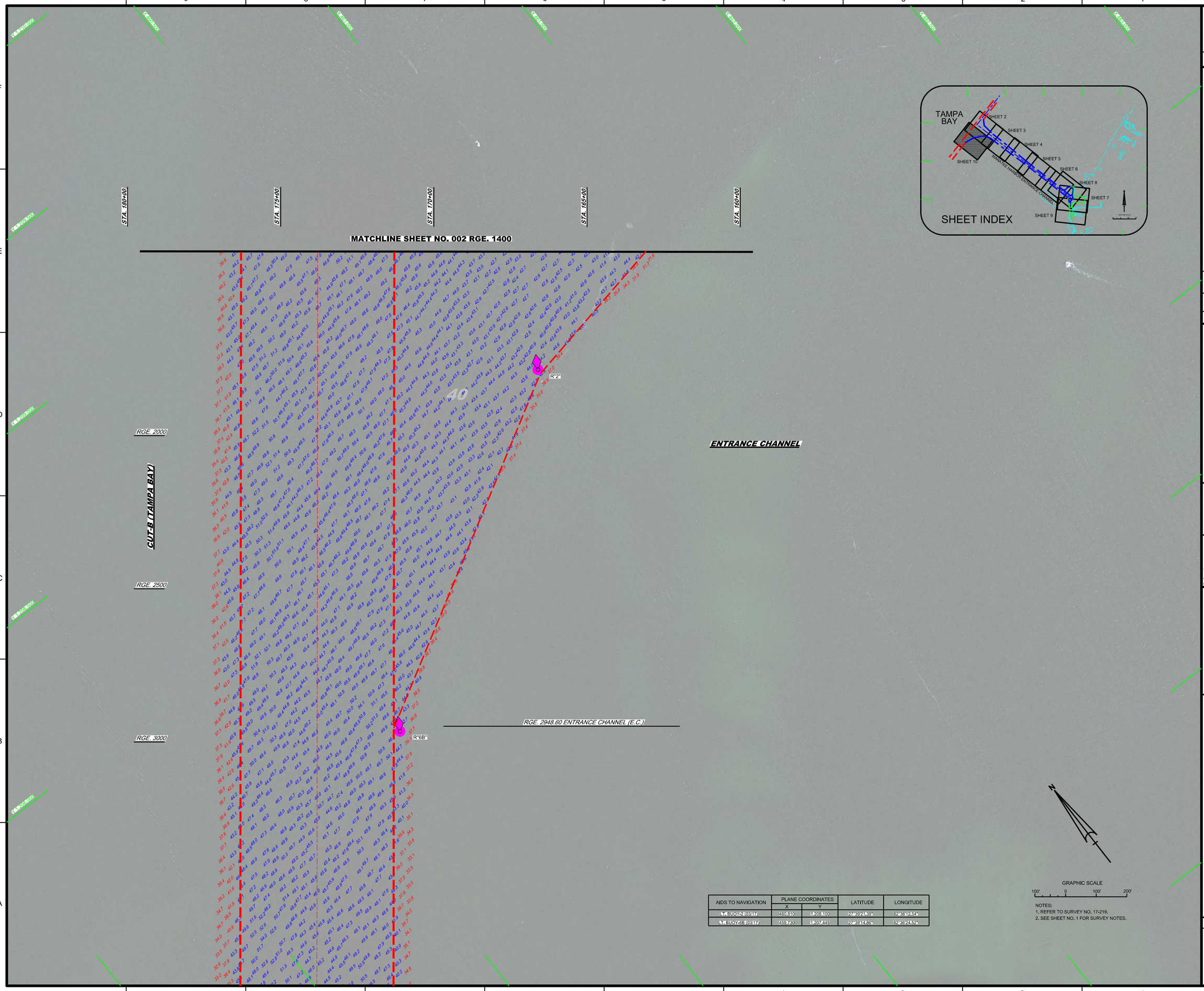
POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT
SOUTH BERTHING AREA
PLAN

Scale: AS SHOWN

Drawing no.

9

SHEET 9 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-2 (03/17)	460,810	1,208,100	27°39'21.39"	82°36'12.54"
LT. BUOY-6B (03/17)	459,730	1,207,445	27°39'14.86"	82°36'24.52"

NOTES:
1. REFER TO SURVEY NO. 17-219.
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	Description
		A-N	ABCD

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

Designed by: D.M.M.
Drawn by: WRM
Checked by: GMR
Rev. No. --
Date: SEP 2017

17-219-S-BASE.DGN
MANATEE HARBOR-CNGMCCF.DGN
TAMPA HARBOR-CNGMCCF.DGN
17-219-V-SOUN_EC.DGN
17-219-V-MAP_EC.DGN
17-219-V-NAV.DGN
Reference files:
17-219-VH-010.DGN
File name:

MANATEE HARBOR
MANATEE COUNTY, FLORIDA

POST-HURRICANE IRMA EXAM SURVEY FY17
40-FOOT PROJECT

ENTRANCE CHANNEL PLAN

Scale: AS SHOWN

Drawing no.

10

SHEET 10 OF 10