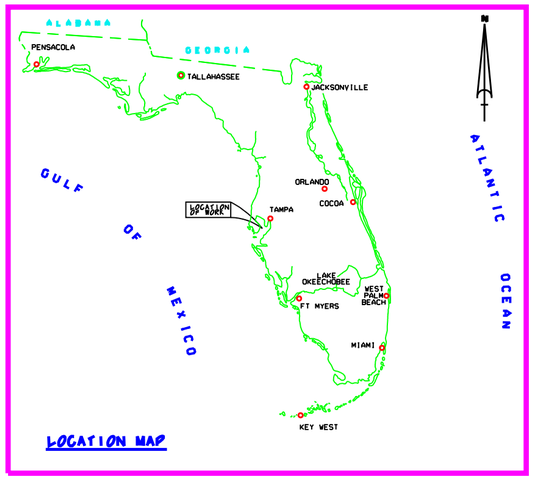
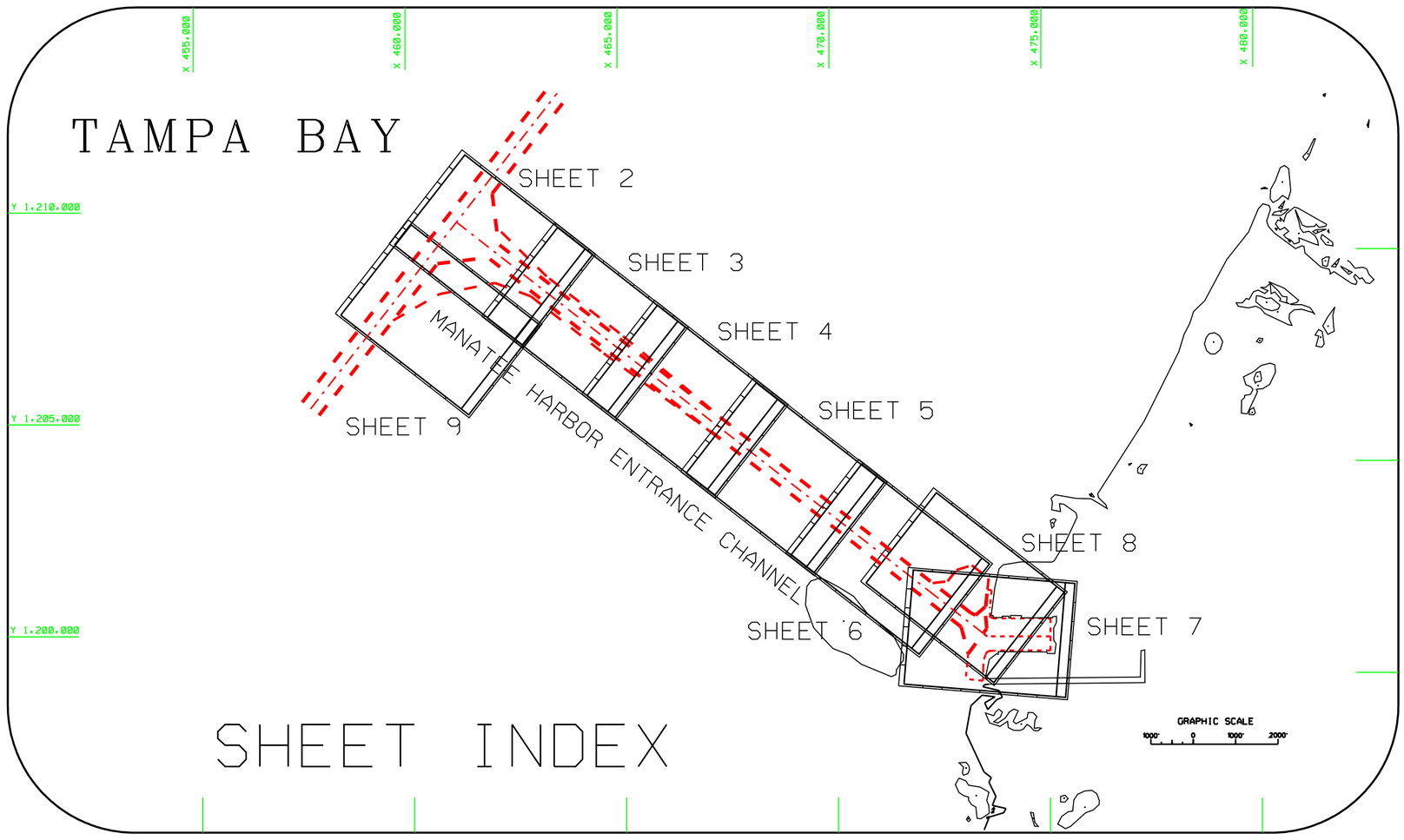
MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
(HIGH FREQUENCY)



LOCATION MAP



SHEET INDEX

SURVEY NOTES:

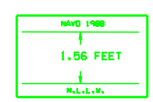
1. REFER TO SURVEY NO. 07-059.
2. ELEVATIONS ARE IN FEET AND TENTHS AND REFER TO MEAN LOWER LOW WATER (MLLW) WHICH IS 1.56 FEET BELOW NAVD 1988.
3. ALL ELEVATIONS ARE BELOW THE CHART DATUM UNLESS PRECEDED BY A (-) SIGN.
4. TIDAL REDUCTIONS WERE MADE FROM A STAFF SET ON A MEASURE DOWN POINT IN THE VICINITY OF, AND REFERENCED FROM BENCHMARK '6384L'.
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 AZIMUTHS ARE GRID; RECKONED CLOCKWISE FROM SOUTH.
7. ALL STATIONING REFERS TO THE CENTERLINE OF THE CHANNEL.
8. SURVEY WAS PERFORMED USING DIFFERENTIAL GPS FOR POSITIONING AND UTILIZING THE USCG NAVBEACON SYSTEM AS THE REFERENCE SITE. VERTICAL MEASUREMENTS WERE MADE USING A ROSS SMART SOUNDER DEPTH RECORDER WITH A 200KHZ (HIGH FREQUENCY) TRANSDUCER.

VESSEL	DATE OF SURVEY	CUT
WB-34	18-19 APR 2007	ENT. CHANNEL, TURNING BASIN

9. AIDS TO NAVIGATION WERE COLLECTED FOR THIS SURVEY.
10. 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.
11. SURVEY ACCURACY PERFORMANCE STANDARDS, QUALITY CONTROL, AND QUALITY ASURANCE REQUIREMENTS WERE FOLLOWED DURING THIS SURVEY IN ACCORDANCE WITH USACE EM 1110-2-1003, HYDROGRAPHIC SURVEYING, 1 JAN 02.

BENCHMARK	NGVD ELEV. (FT)
6384L	8.47

LEGEND	
•BM	BENCHMARK
	LIGHTED BEACON
	RED LIGHTED BUOY
	GREEN LIGHTED BUOY
	TIDE STAFF



RELATIONSHIP BETWEEN NAVD 1988 AND NOAA MEAN LOWER LOW WATER TIDAL DATUM (1983-2001 EPOCH)

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Zone	Description	Approved

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

Inv. No. 07-059 Date: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XXXX

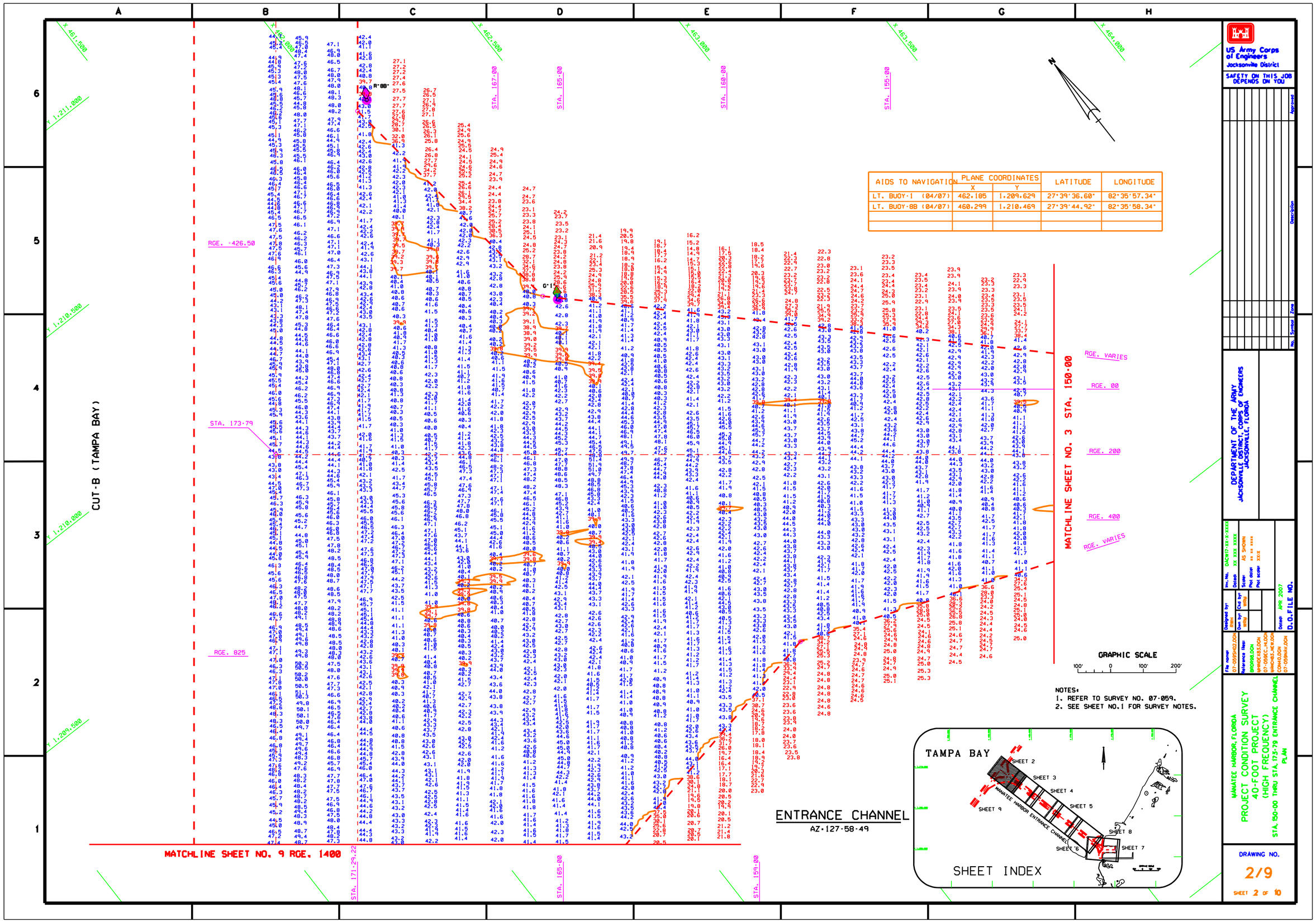
Designed by: TMH
Dwn by: DMW
Ckd by: TMH
Date: APR 2007
D.O.FILE NO.

File name: 07-059SHEET.DGN
Reference files: BSCHRS.DGN, NCWFLMAP.DGN, MANHQX183.DGN

MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
ENTRANCE CHANNEL & TURNING BASIN
COVER SHEET

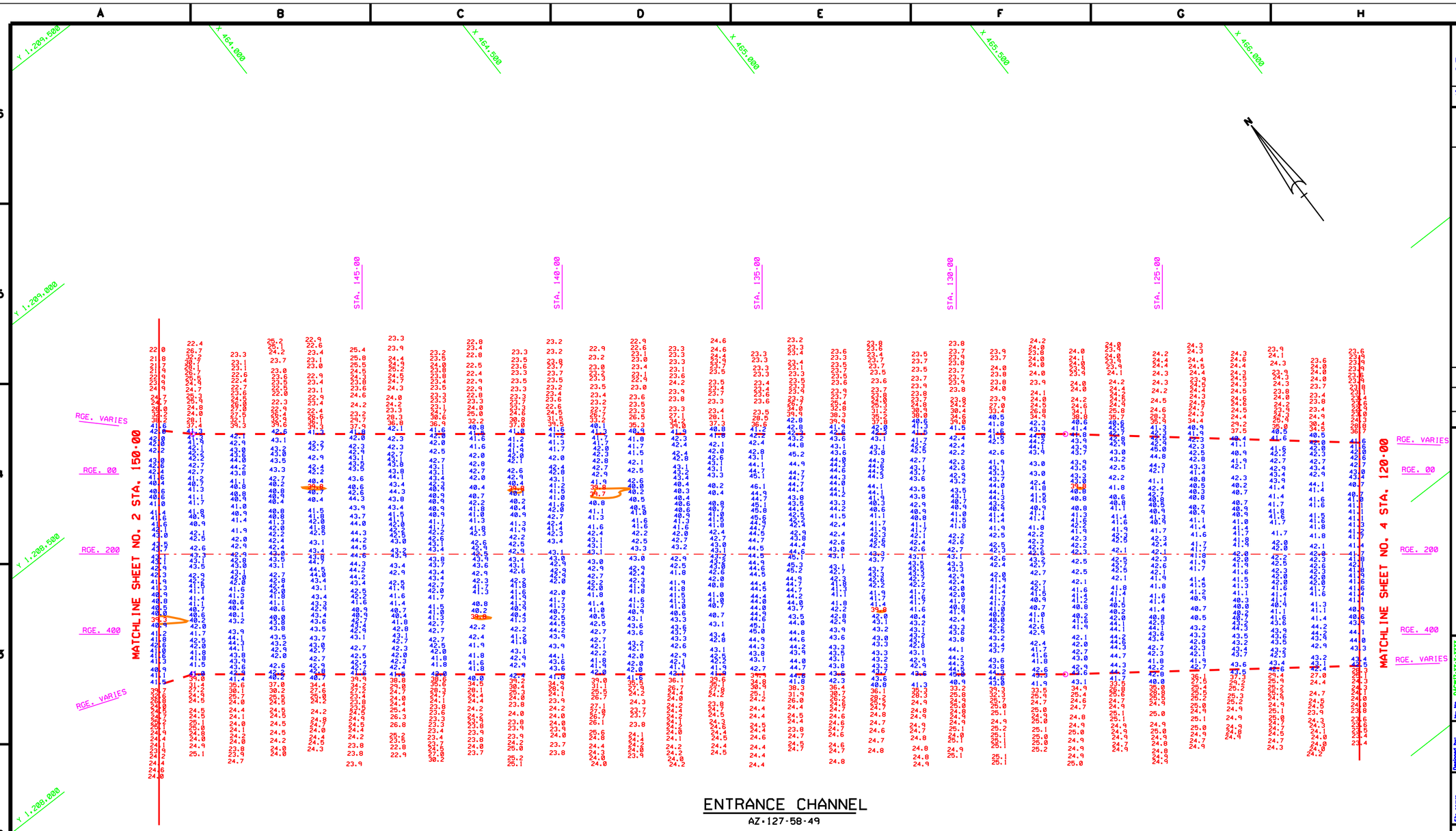
DRAWING NO.
1/9

SHEET 1 OF 10



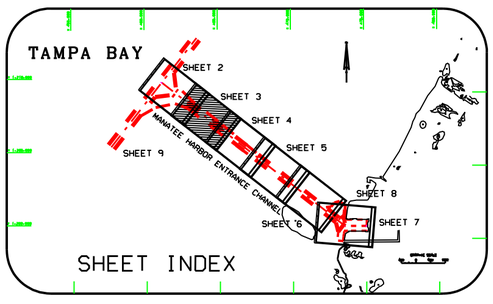
AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
LT. BUOY-I (04/07)	462.185	1,209.629	27°39'36.60"	82°35'57.34"
LT. BUOY-8B (04/07)	460.299	1,210.469	27°39'44.92"	82°35'58.34"

NOTES:
1. REFER TO SURVEY NO. 07-059.
2. SEE SHEET NO.1 FOR SURVEY NOTES.



ENTRANCE CHANNEL

AZ-127-58-49



GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 07-059.
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	Approved

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

Inv. No. DACW17-XX-X-XXXX
Datum: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XXXX

Designed by: RWH
Dwn by: RWH
Ckd by: RWH

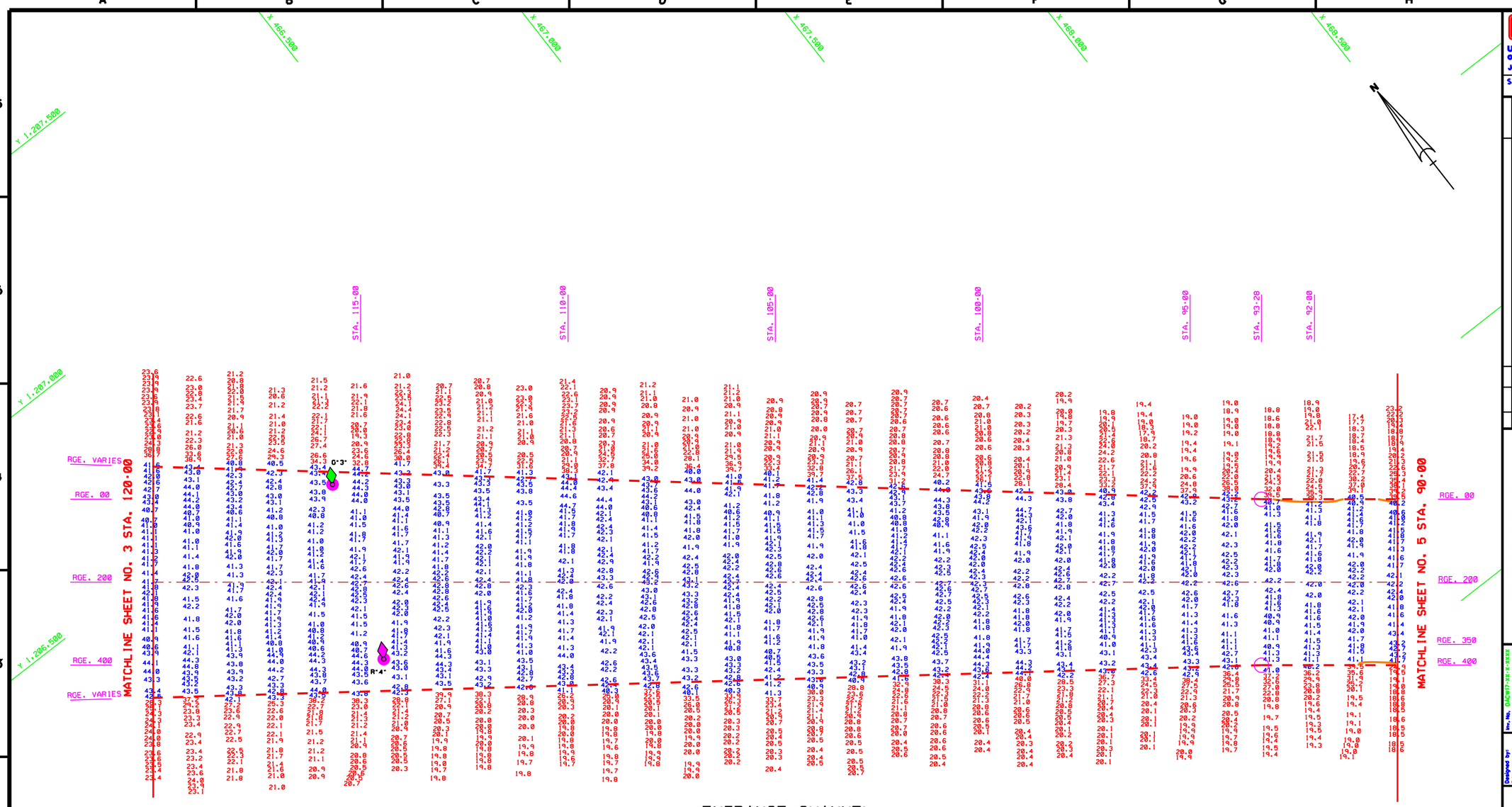
Date: APR 2007
D.O.F.FILE NO.

File name: 07-059SHS3.DGN
Reference files: BSCP59.DGN, 07-059EC_14.DGN, MANCHS3_NEW.DGN, MANDIC1B3.DGN, CONA01.DGN

MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
STA 120+00 THRU STA 150+00 ENTRANCE CHANNEL
PLAN

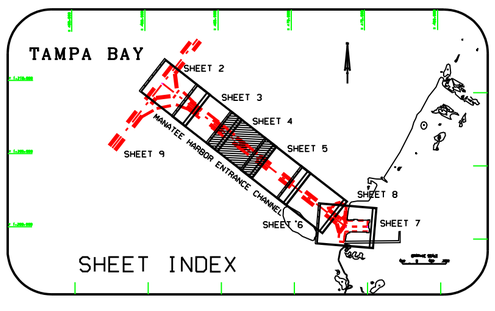
DRAWING NO.
3/9

SHEET 3 OF 10



ENTRANCE CHANNEL

AZ-127-58-49



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-3 (04/07)	465,938	1,206,395	27°39'04.76"	82°35'15.43"
LT. BUOY-4 (04/07)	465,777	1,205,987	27°39'00.71"	82°35'17.20"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 07-059.
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	Approved

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

Rev. No. 04C5917-XX-X-XXXX
Design XX XXX XXXX
Scale AS SHOWN
Plot date XX XX XXXX
Plot scale XXXX

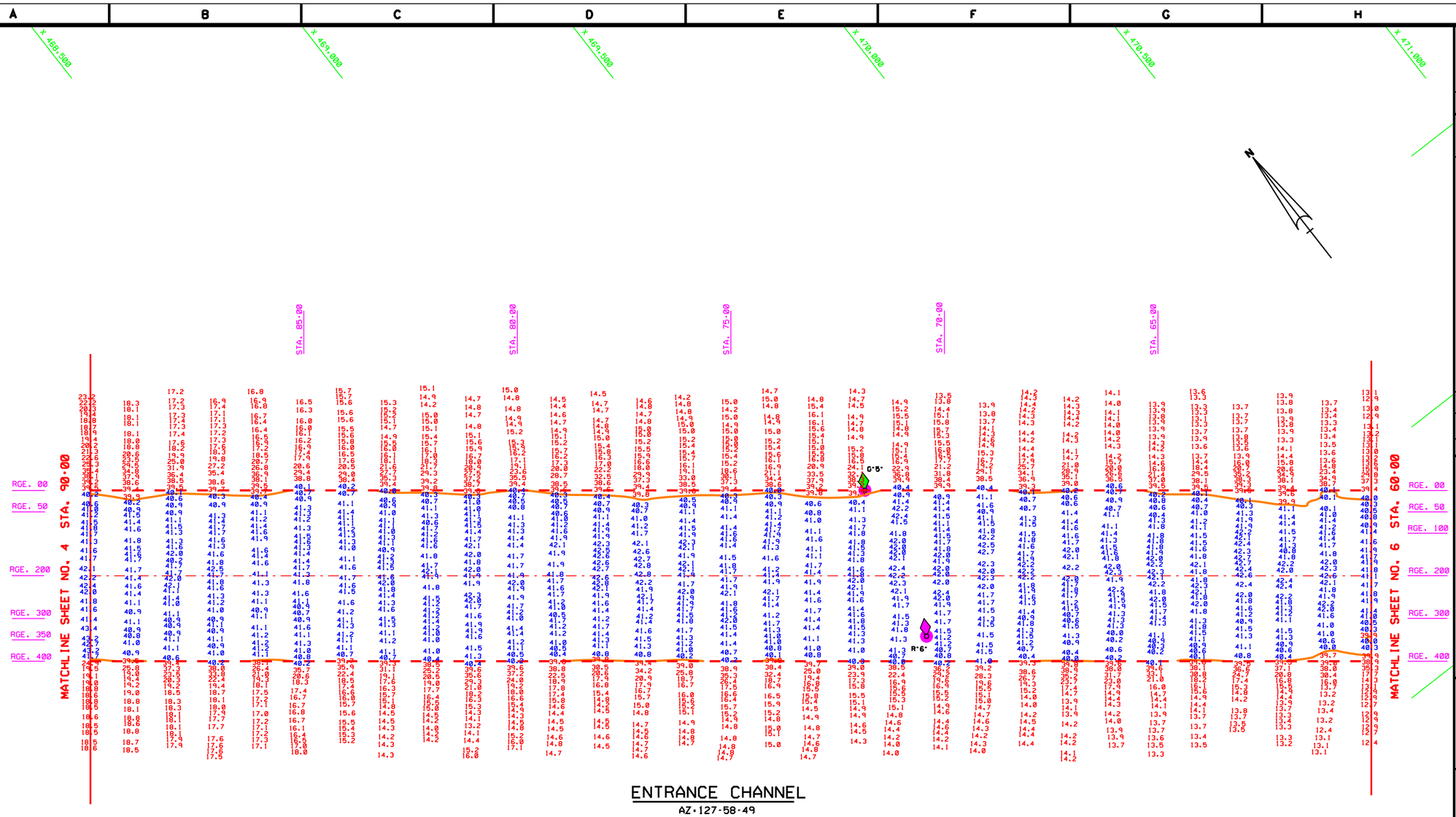
Designed by Phil
Dwn by Chd by Phil
Date APR 2007
D.O.FILE NO.

File name 07-0059SH04.DGN
Reference files 9800968.DGN WRNCH83_MHL.DGN WMNCH83_MHL.DGN 07-059EC_MHL.DGN COM-0.DGN 07-059MAP.DGN

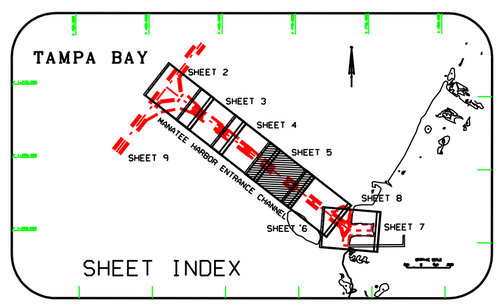
MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
STA. 90+00 THRU STA. 120+00 ENTRANCE CHANNEL
PLAN

DRAWING NO.
4/9

SHEET 4 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY·5 (04/07)	469.370	1.203.671	27°38'37.94"	82°34'37.12"
LT. BUOY·6 (04/07)	469.274	1.203.313	27°38'34.39"	82°34'38.18"



GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 07-059.
2. SEE SHEET NO.1 FOR SURVEY NOTES.

US Army Corps of Engineers
Jacksonville District

SAFETY ON THIS JOB DEPENDS ON YOU

No.	Symbol	Date	Description	Approved

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

Inv. No. DACW17-98-C-0035
Dates: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XX:X

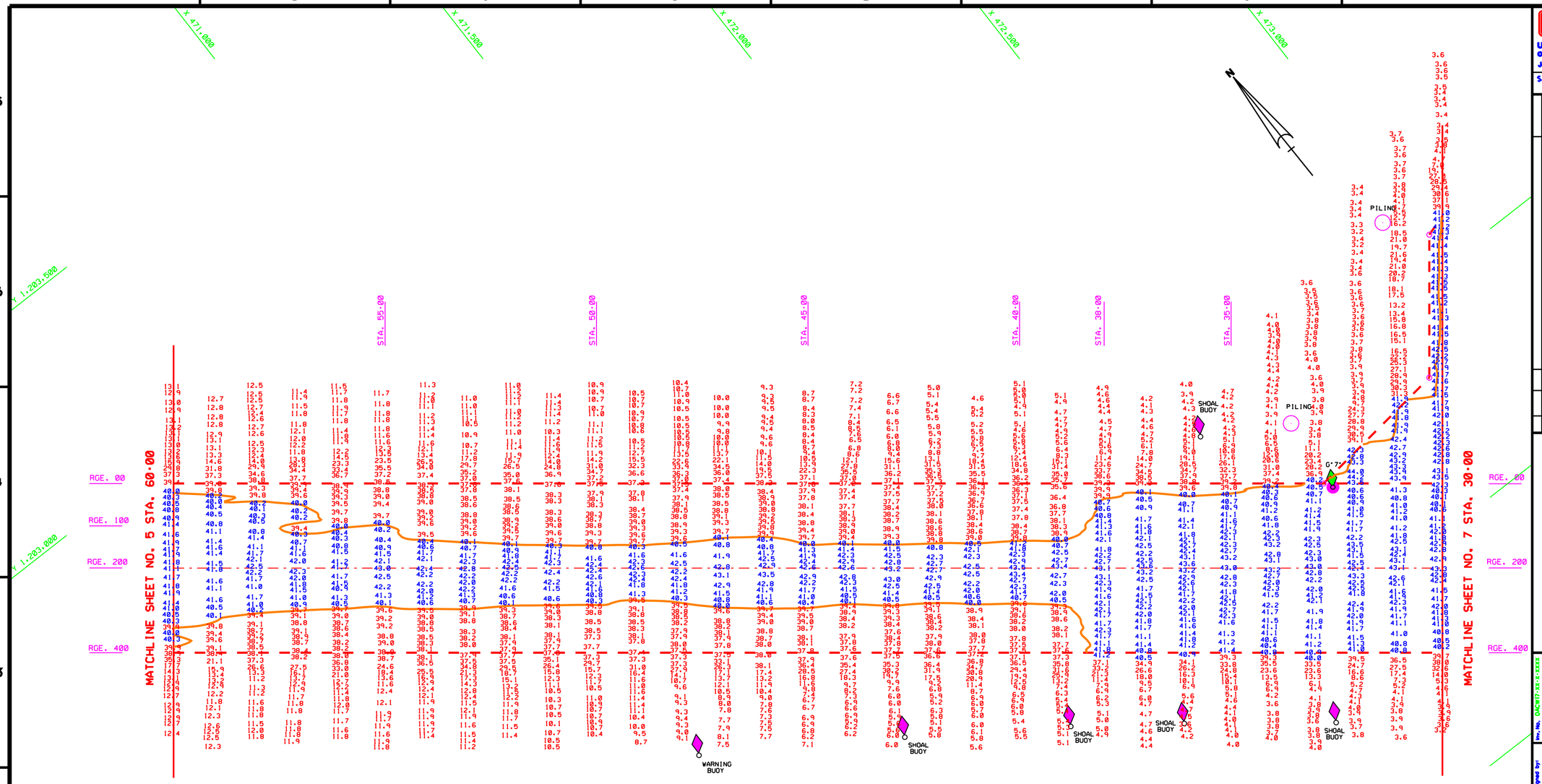
Designed by: DRH
Dwn by: DRH
Ckd by: DRH
Date: APR 2007
D.O.F.ILE NO.

File name: 07-059SHEET05.DGN
Reference files: BROPSB.DGN, MHNDZE85.DGN, MANCHB3_NEW.DGN, 07-059EC_14.DGN, COM40.DGN, 07-059MAP.DGN

MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
STA. 60+00 THRU STA. 90+00 ENTRANCE CHANNEL
PLAN

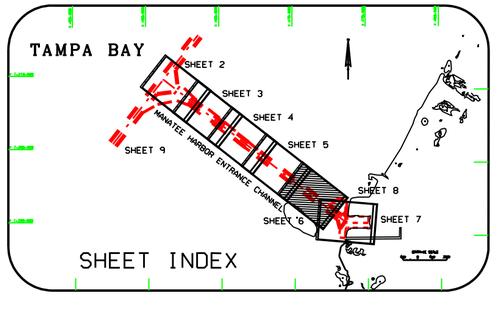
DRAWING NO.
5/9

SHEET 5 OF 10



ENTRANCE CHANNEL

AZ-127-58-49



AIDS TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
CAN BUOY-7 (04/07)	472.460	1,201.247	27°38'14.09"	82°34'02.64"
WARNING BUOY (04/07)	470.889	1,201.670	27°38'18.20"	82°34'20.13"
SHOAL BUOY (04/07)	472.287	1,201.534	27°38'16.92"	82°34'04.58"
SHOAL BUOY (04/07)	471.299	1,201.404	27°38'15.59"	82°34'15.56"
SHOAL BUOY (04/07)	471.624	1,201.183	27°38'13.41"	82°34'11.94"
SHOAL BUOY (04/07)	471.840	1,201.023	27°38'11.84"	82°34'09.53"
SHOAL BUOY (04/07)	472.124	1,200.804	27°38'09.68"	82°34'06.36"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 07-059.
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	Approved

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

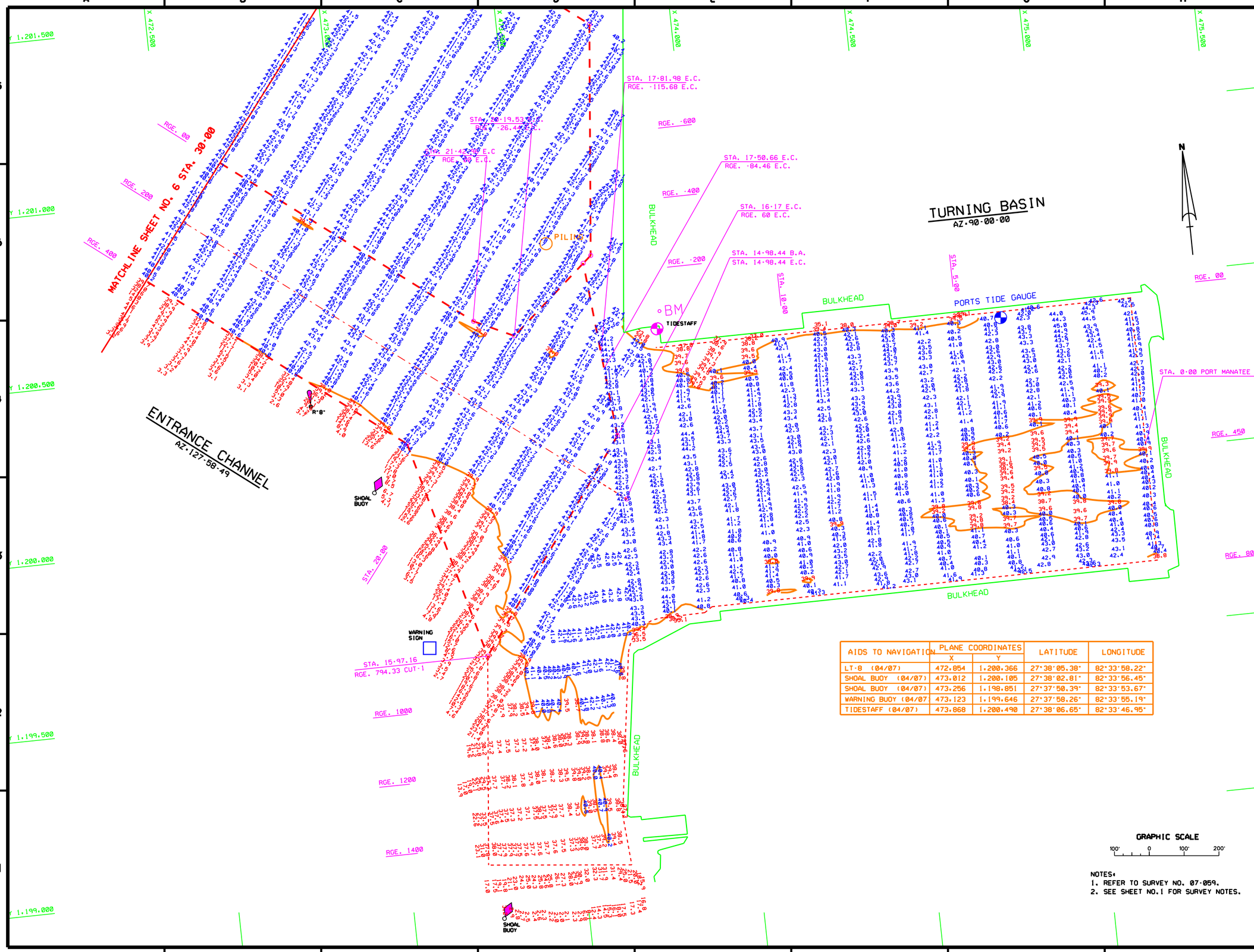
Inv. No. DACW17-XX-X-XXX
Design XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XXX
Designed by: RMH
Drawn by: RMH
Checked by: RMH
Date: APR 2007
D.O.F.FILE NO.

File name: 07-059SHOB.DGN
Reference files: BSORGB.DGN MANCHB3_NEW.DGN MAPNGC1B.DGN 07-059SHAV.DGN 07-059SHAV.DGN CONHLD.DGN

MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
STA. 30+00 THRU STA. 60+00 ENTRANCE CHANNEL
PLAN

DRAWING NO.
6/9

SHEET 6 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
LT-8 (04/07)	472.854	1.200.366	27°38'05.38"	82°33'58.22"
SHOAL BUOY (04/07)	473.012	1.200.105	27°38'02.81"	82°33'56.45"
SHOAL BUOY (04/07)	473.256	1.198.851	27°37'50.39"	82°33'53.67"
WARNING BUOY (04/07)	473.123	1.199.646	27°37'58.26"	82°33'55.19"
TIDESTAFF (04/07)	473.868	1.200.490	27°38'06.65"	82°33'46.95"

NOTES:
1. REFER TO SURVEY NO. 07-059.
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	Approved

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

Dwg. No. 04C917-XX-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XXXX

Designed by: TBW
Dwn by: TBW
Ckd by: TBW

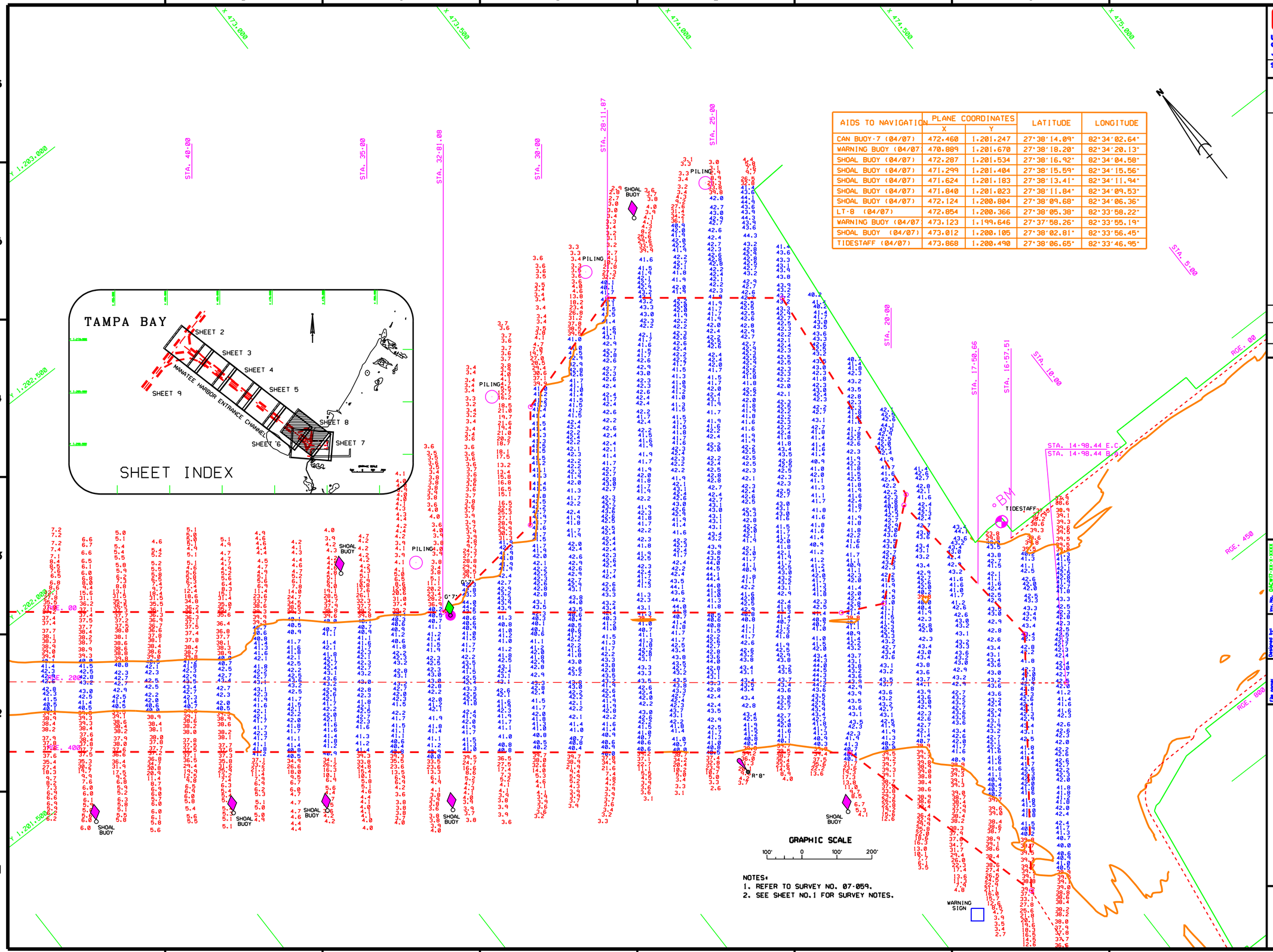
Date: APR 2007
D.O. FILE NO.

File name: 07-059SH07.DGN
Reference files: BM0998.DGN MANGR_SB3.DGN 07-059SH1_A.DGN 07-059SH2_A.DGN 07-059SH3_A.DGN 07-059SH4.DGN CSMAP.DGN

MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
STA. 0+00 TURNING BASIN THRU STA. 30+00
ENTRANCE CHANNEL
PLAN

DRAWING NO.
7/9

SHEET 7 OF 10



AIDS TO NAVIGATION	PLANE COORDINATES X	PLANE COORDINATES Y	LATITUDE	LONGITUDE
CAN BUOY-7 (04/07)	472.460	1.201.247	27°38'14.09"	82°34'02.64"
WARNING BUOY (04/07)	470.889	1.201.670	27°38'18.20"	82°34'20.13"
SHOAL BUOY (04/07)	472.287	1.201.534	27°38'16.92"	82°34'04.58"
SHOAL BUOY (04/07)	471.299	1.201.404	27°38'15.59"	82°34'15.56"
SHOAL BUOY (04/07)	471.624	1.201.183	27°38'13.41"	82°34'11.94"
SHOAL BUOY (04/07)	471.840	1.201.023	27°38'11.84"	82°34'09.53"
SHOAL BUOY (04/07)	472.124	1.200.804	27°38'09.68"	82°34'06.36"
LT-8 (04/07)	472.854	1.200.366	27°38'05.38"	82°33'58.22"
WARNING BUOY (04/07	473.123	1.199.646	27°37'58.26"	82°33'55.19"
SHOAL BUOY (04/07)	473.012	1.200.105	27°38'02.81"	82°33'56.45"
TIDESTAFF (04/07)	473.868	1.200.490	27°38'06.65"	82°33'46.95"

NOTES:
1. REFER TO SURVEY NO. 07-059.
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	Approved

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

Rev. No. DACW17-XX-X-XXXX
Datum: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XXXX

Designed by: (PM)
Dwn by: (CAD)
Ckd by: (PM)

Date: APR 2007

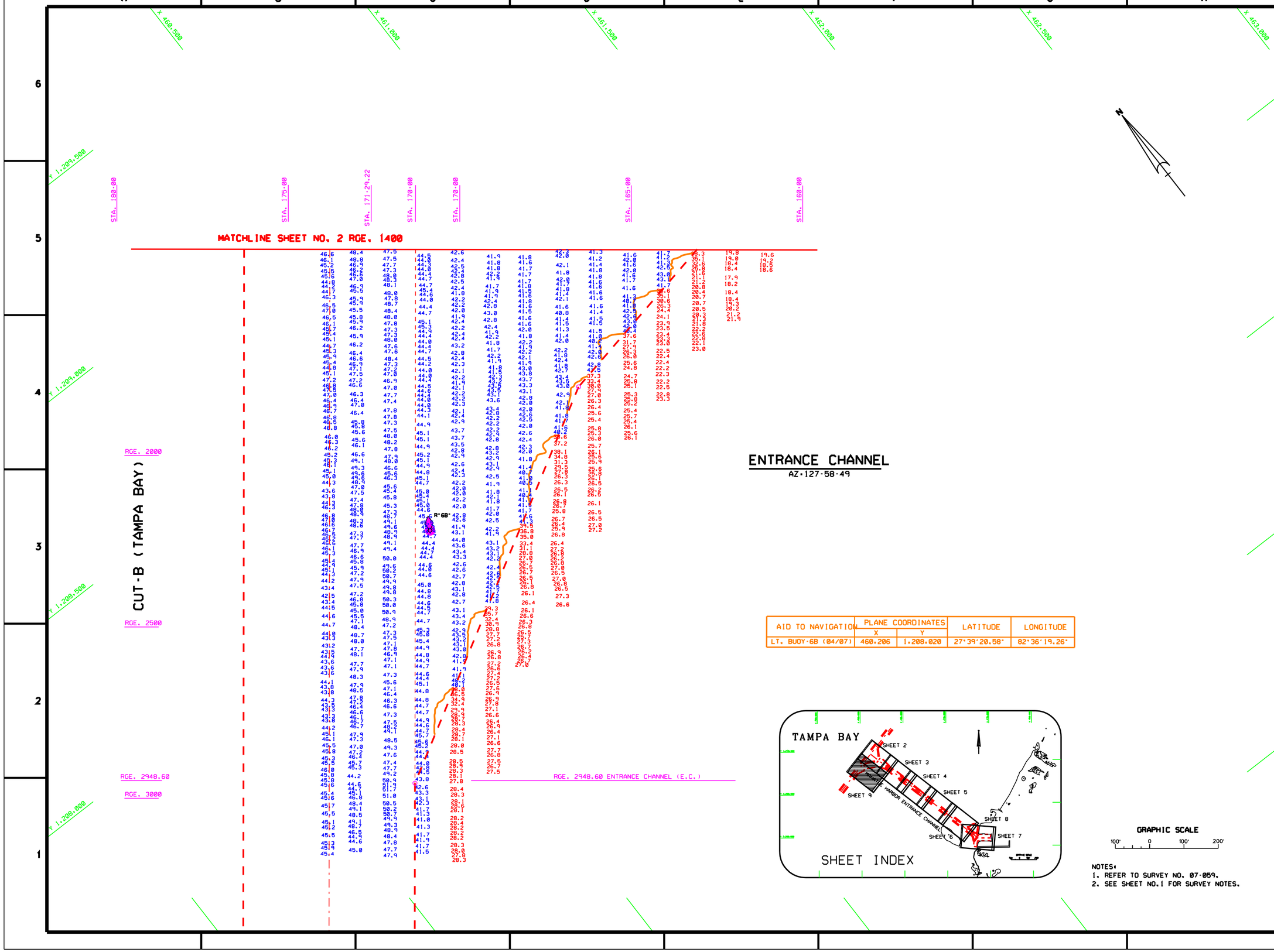
D.O.FILE NO. XXX-XX.XXX

File name:
07-059SHB.DGN
BG059.DGN
WMHC83_NCE.DGN
07-059EC_H.DGN
07-059WAV.DGN
WMHCE183.DGN
CONN.DGN

MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
PROPOSED TURNING BASIN
PLAN

DRAWING NO.
8/9

SHEET 8 OF 10



AID TO NAVIGATION	PLANE COORDINATES		LATITUDE	LONGITUDE
	X	Y		
LT. BUOY-6B (04/07)	460.206	1.208.020	27°39'20.58"	82°36'19.26"

GRAPHIC SCALE

100' 0 100' 200'

NOTES:
1. REFER TO SURVEY NO. 07-059.
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	Approved

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

Inv. No. DACW17-X2-X-XXXX
Dated: XX XXX XXXX
Scale: AS SHOWN
Plot date: XX XX XXXX
Plot scale: XXX

Designed by: WMJ
Dwn by: WMJ
Ckd by: WMJ

Date: APR 2007
D.O.FILE NO. XXX-XX-XXXX

File name: 07-059SHO9.DGN
Reference files: 080088.DGN, 9PRIDE183.DGN, VANCHES_NEW.DGN, 07-059EC_HLD.DGN, CONHO.DGN, 07-059NAV.DGN

MANATEE HARBOR, FLORIDA
PROJECT CONDITION SURVEY
40-FOOT PROJECT
(HIGH FREQUENCY)
ENTRANCE CHANNEL
PLAN

DRAWING NO.
9/9

SHEET 9 OF 10