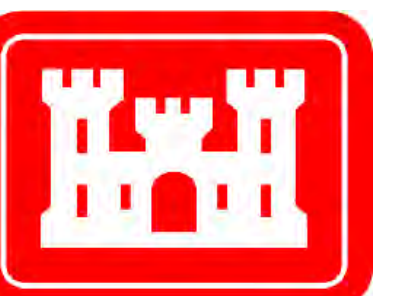
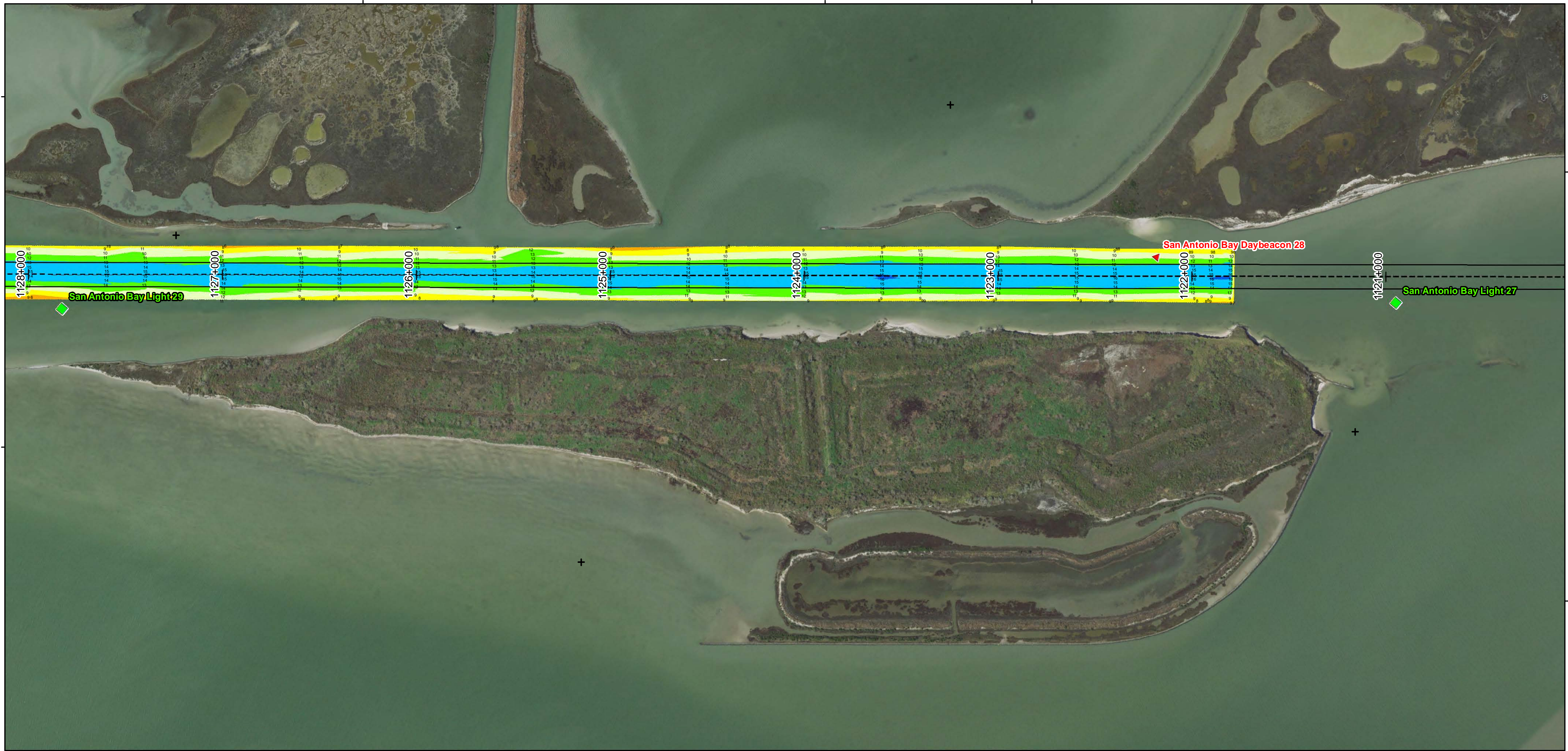
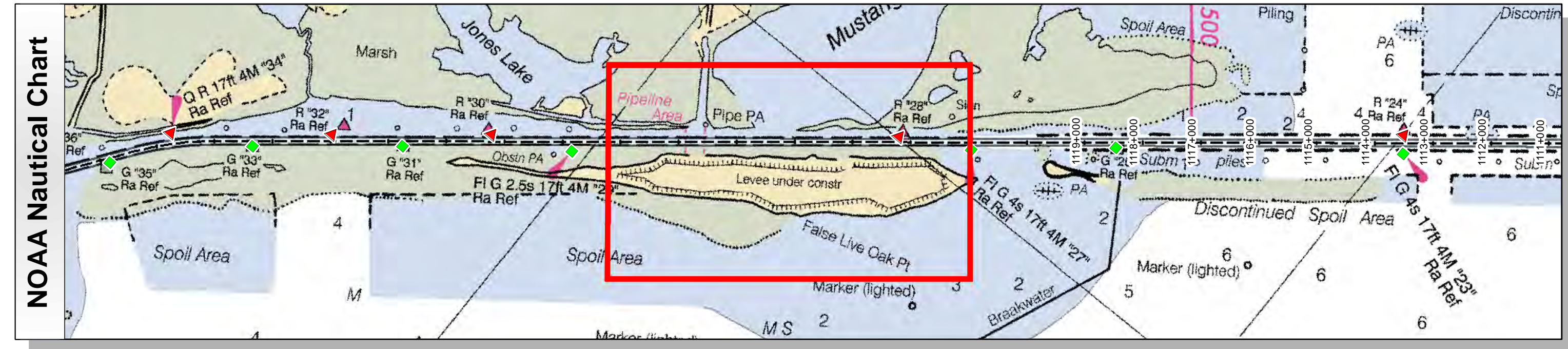
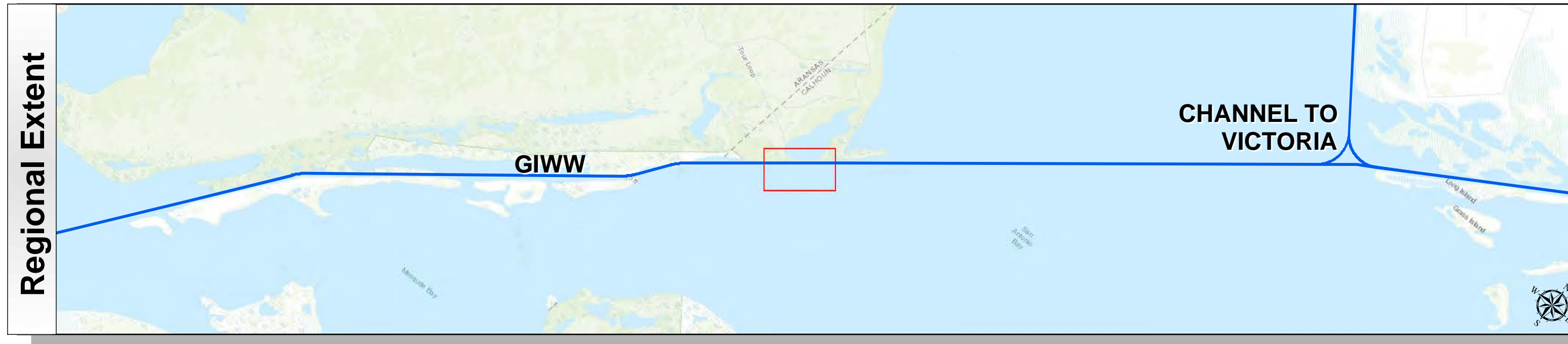


# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District



Channel Features	Aids to Navigation	MLLW
Channel Toe	Lights	> 4
Channel Center Line	Red Side Aids	4 - 6
Channel Station Lines	Green Side Aids	6 - 8
Channel Dimensions	Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 - 10
		10 - 15
		15 - 20
		20 - 25
		25 - 30
		30 - 50

NOTES:  
 1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.  
 2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM.  
 3. THIS PROJECT WAS DESIGNED BY THE GALVESTON DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1.8152.

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 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: [HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHIC-SURVEYS/](http://www.swg.usace.army.mil/missions/navigation/hydrographic-surveys/)  
 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION. NOAA NAUTICAL CHARTS PROVIDED VIA RNC MAP SERVICE

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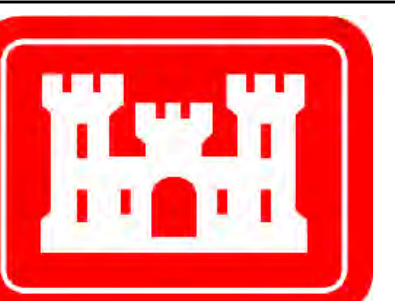
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NOAA Nautical Chart Extent	0 0.325 0.65 1.3 Miles
Hydrographic Survey Extent	0 250 500 1,000 Feet

Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 160 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:3,000	Print Date: 10/19/2018
Mapped by: MSAOX PAC	
Additional Info:	

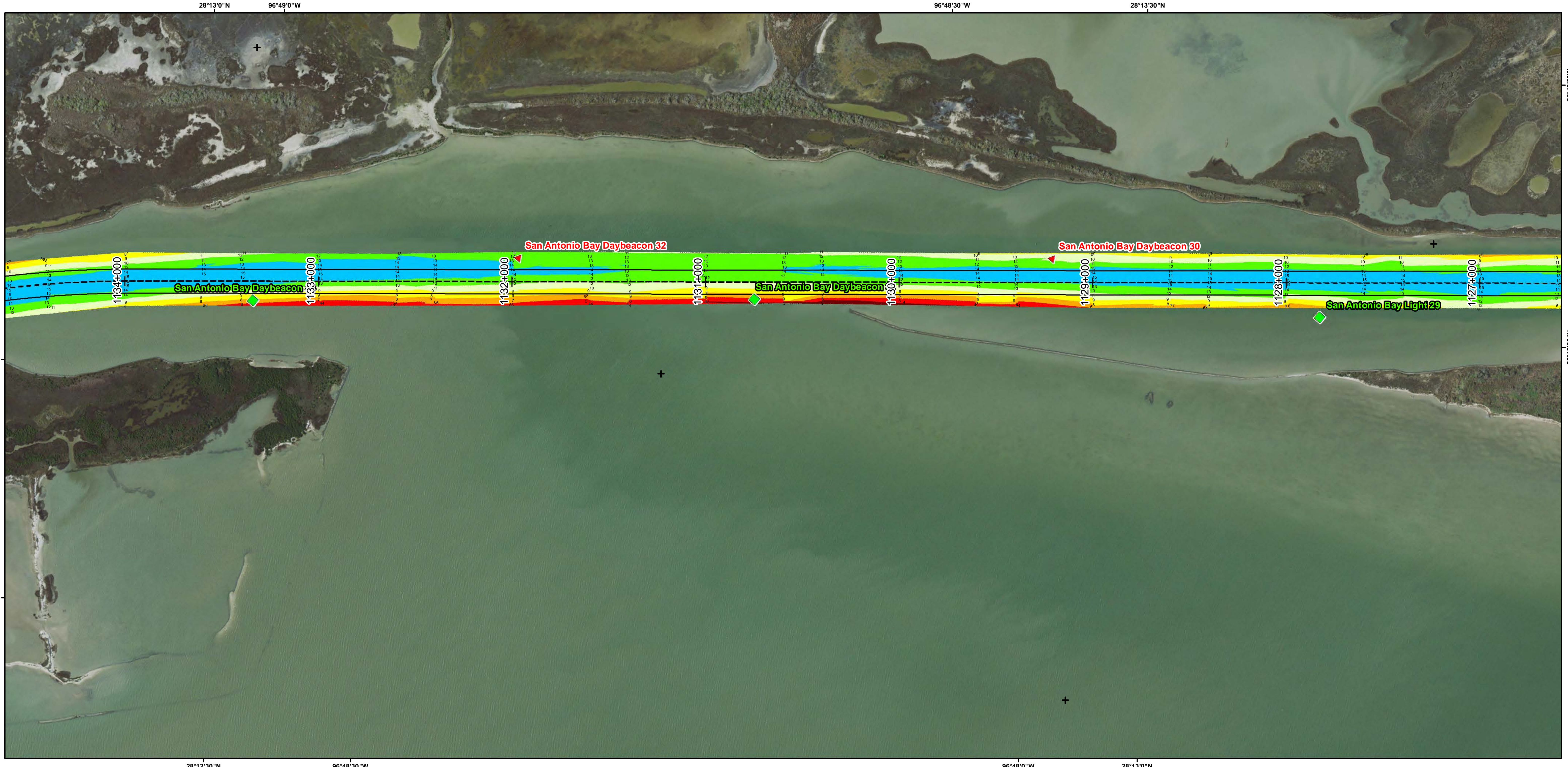
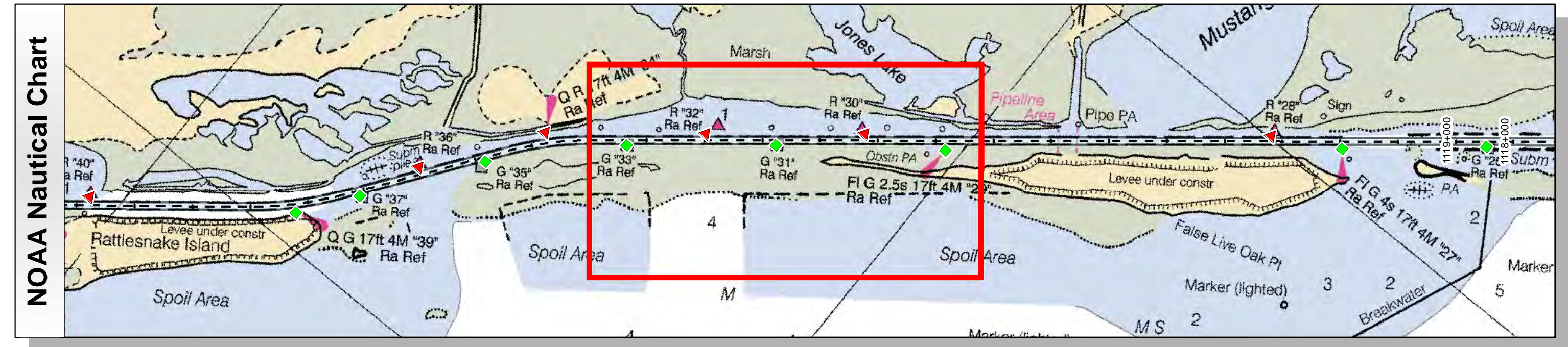
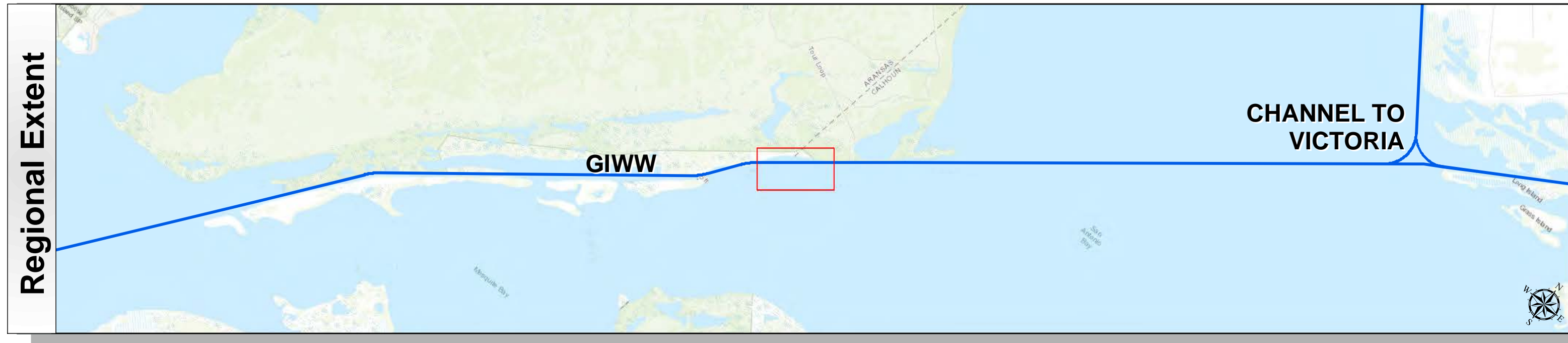
**HYDROGRAPHIC SURVEY**  
 U.S. ARMY ENGINEER DISTRICT  
 CORPS OF ENGINEERS  
 GALVESTON, TEXAS

**Station: 1121+000 to 1178+000**  
 GIWW  
 TEXAS

# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District



Channel Features	Aids to Navigation	MLLW
Channel Toe	★ Lights	> 4
Channel Center Line	▲ Red Side Aids	4 - 6
Channel Station Lines	■ Green Side Aids	6 - 8
Channel Dimensions	◆ Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 - 10
		10 - 15
		15 - 20
		20 - 25
		25 - 30
		30 - 50

NOTES:

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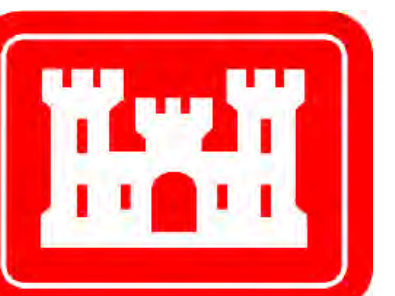
Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983		
NOAA Nautical Chart Extent	0	0.325
	0.65	1.3
	Miles	
Hydrographic Survey Extent	0	250
	500	1,000
	Feet	

Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 161 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:3,000	Print Date: 10/19/2018
Mapped by: MSAOX PAC	Additional Info:

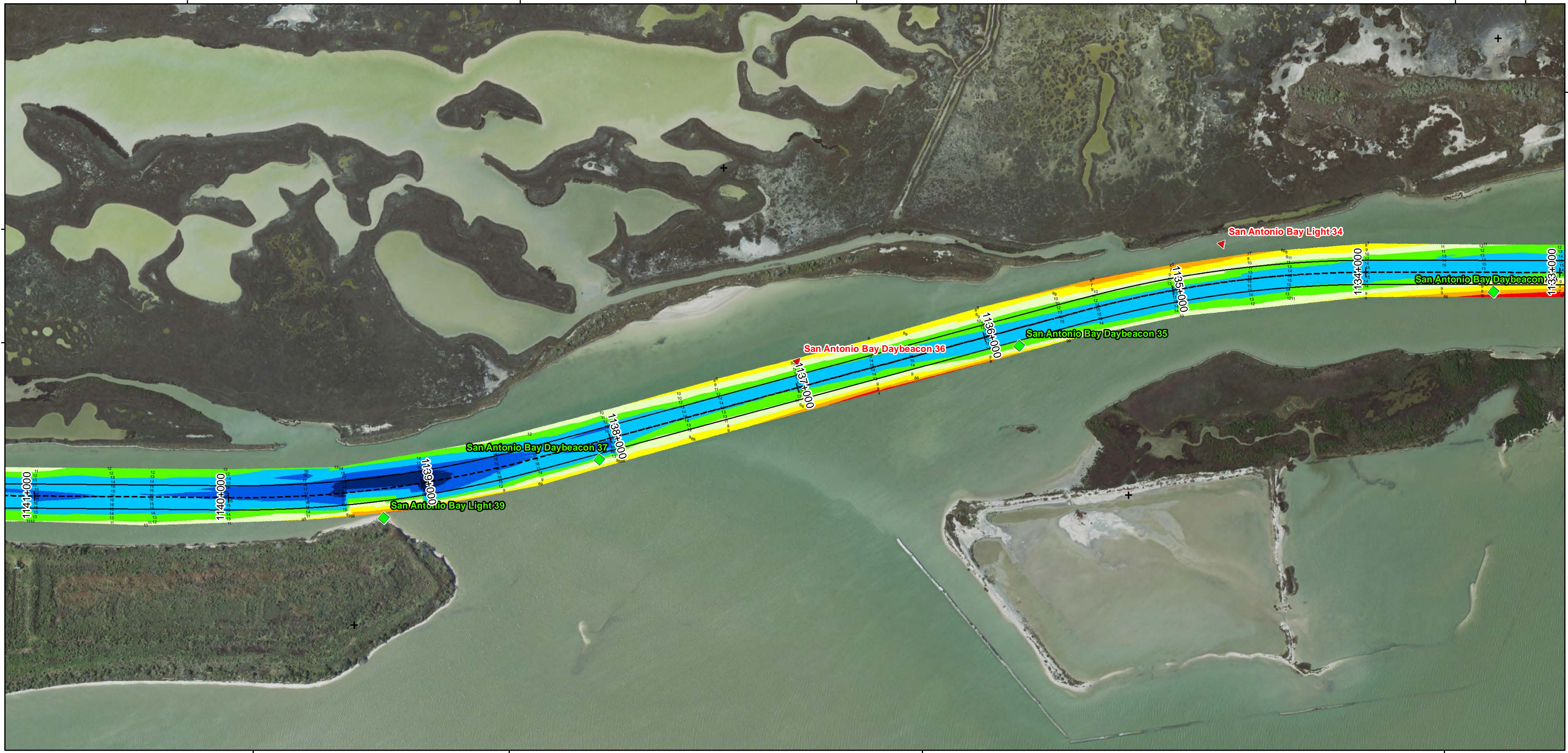
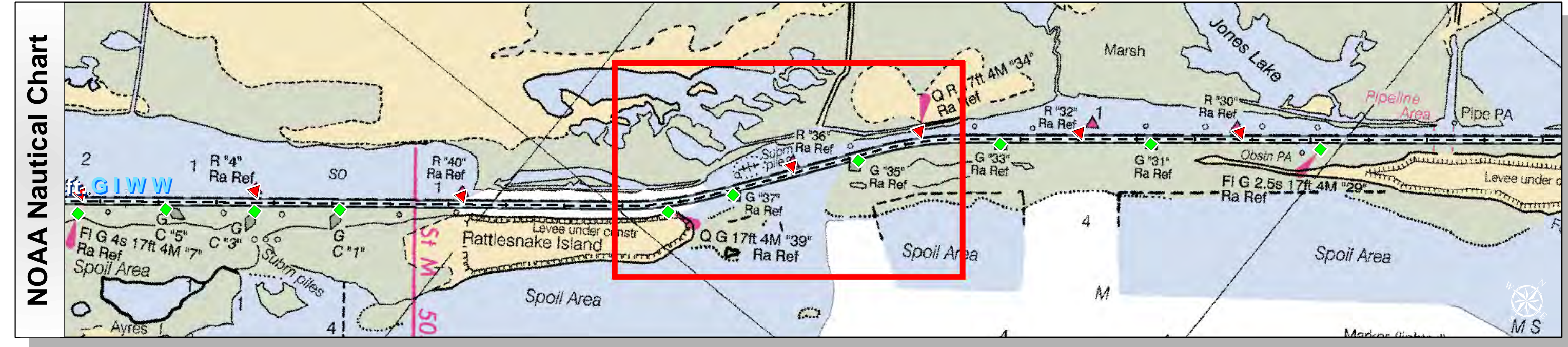
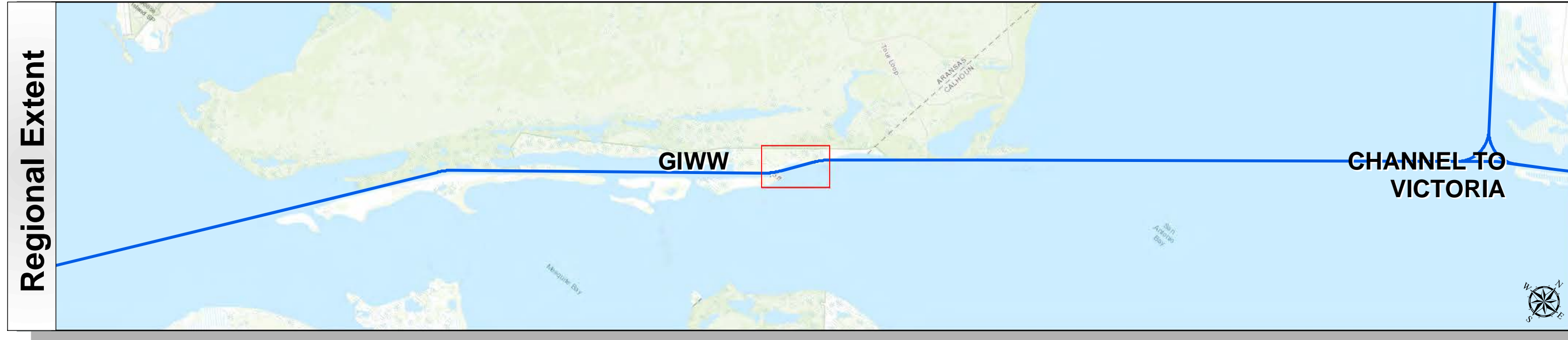
**HYDROGRAPHIC SURVEY**  
 U.S. ARMY ENGINEER DISTRICT  
 CORPS OF ENGINEERS  
 GALVESTON, TEXAS

**Station: 1121+000 to 1178+000**  
 GIWW  
 TEXAS

# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District



Survey Date(s): 16 October 2018	Authorized Depth: -14ft.
Page: 162 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:3,000	Print Date: 10/19/2018
Mapped by: MSAOX PAC	
Additional Info:	

Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	> 4
- - - Channel Center Line	▲ Red Side Aids	4 - 6
— Channel Station Lines	■ Green Side Aids	6 - 8
↔ Channel Dimensions	◆ Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 - 10
		10 - 15
		15 - 20
		20 - 25
		25 - 30
		30 - 50

**NOTES:**

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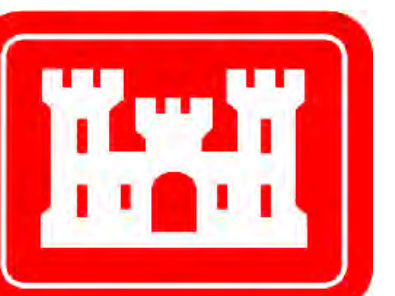


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	Miles			
Hydrographic Survey Extent	0	250	500	1,000
	Feet			

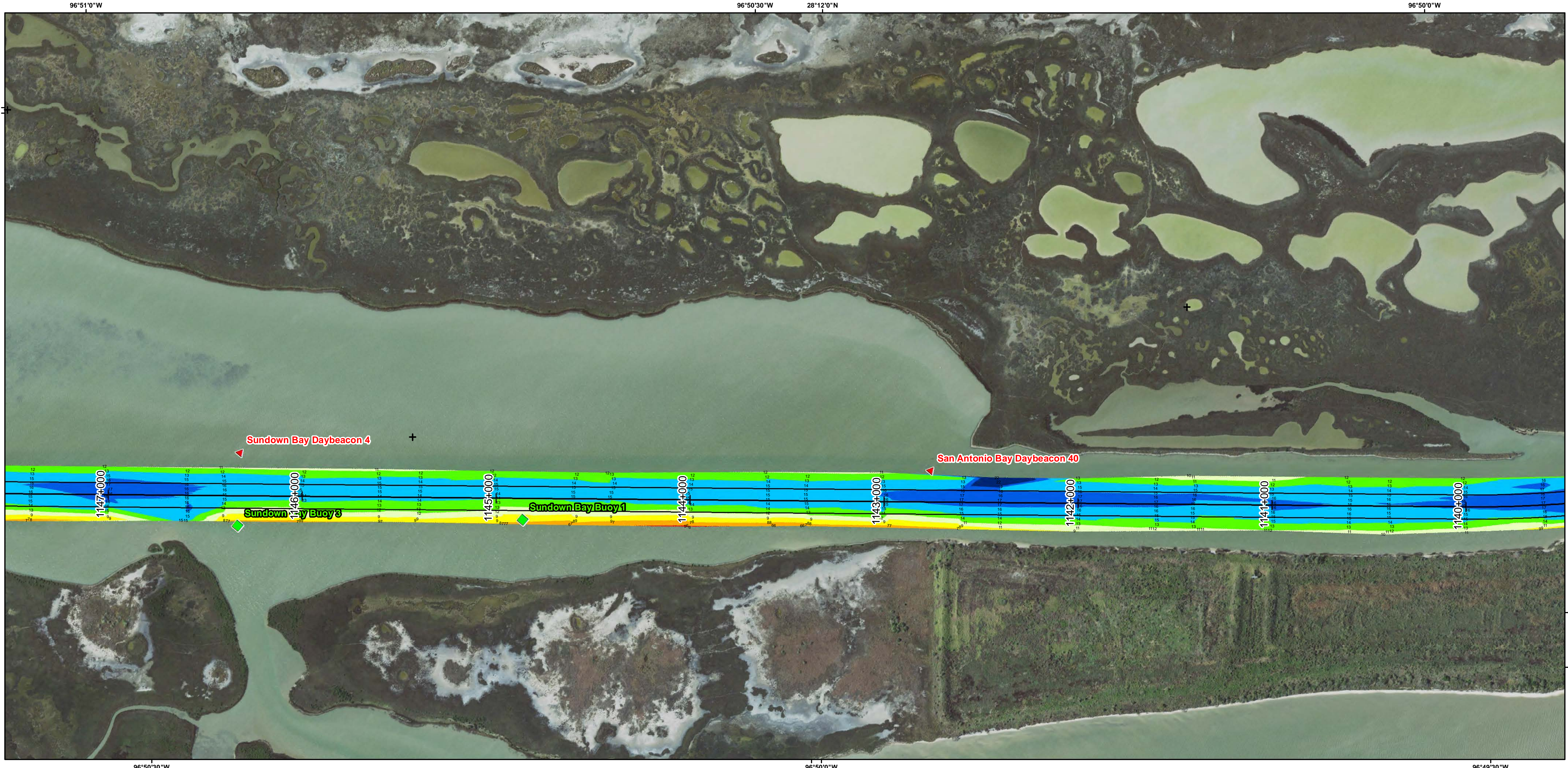
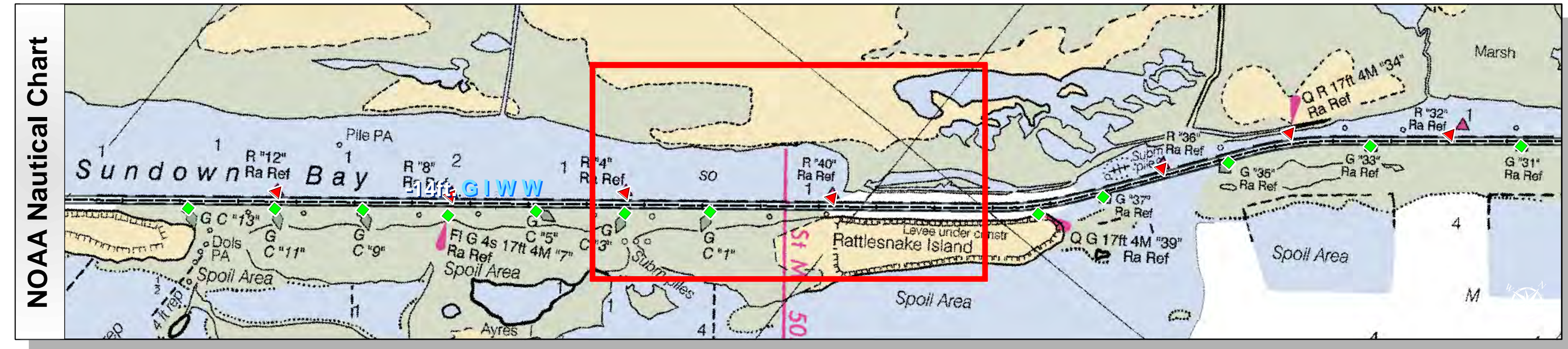
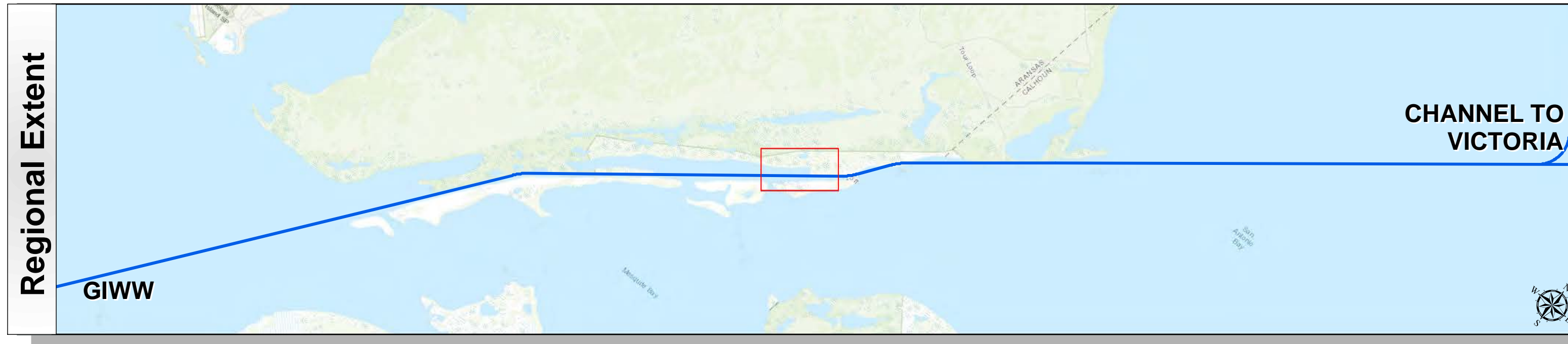
**HYDROGRAPHIC SURVEY**  
U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
GALVESTON, TEXAS

**Station: 1121+000 to 1178+000**  
GIWW  
, TEXAS

# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District



Channel Features	Aids to Navigation	MLLW
Channel Toe	★ Lights	> 4
Channel Center Line	▲ Red Side Aids	4 - 6
Channel Station Lines	■ Green Side Aids	6 - 8
Channel Dimensions	◆ Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50

NOTES:

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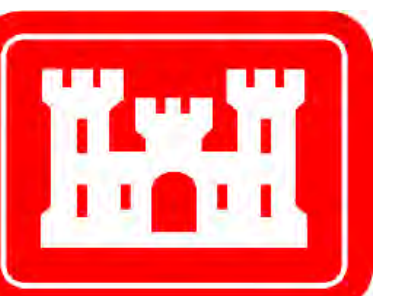
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	Miles	
Hydrographic Survey Extent	0	250 500 1,000
	Feet	

Survey Date(s): 16 October 2018	Authorized Depth: -14ft.
Page: 163 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:3,000	Print Date: 10/19/2018
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Additional Info:	

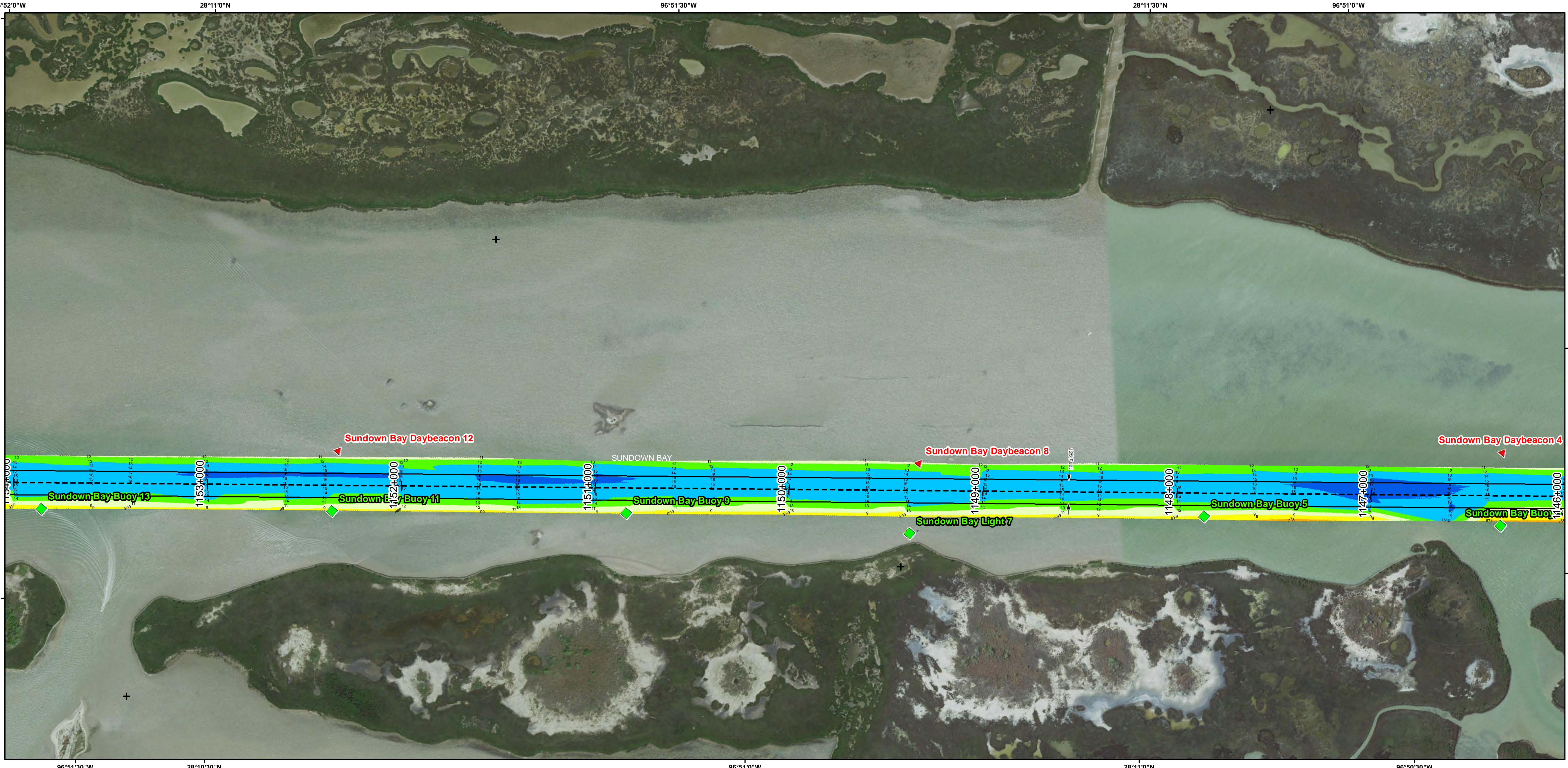
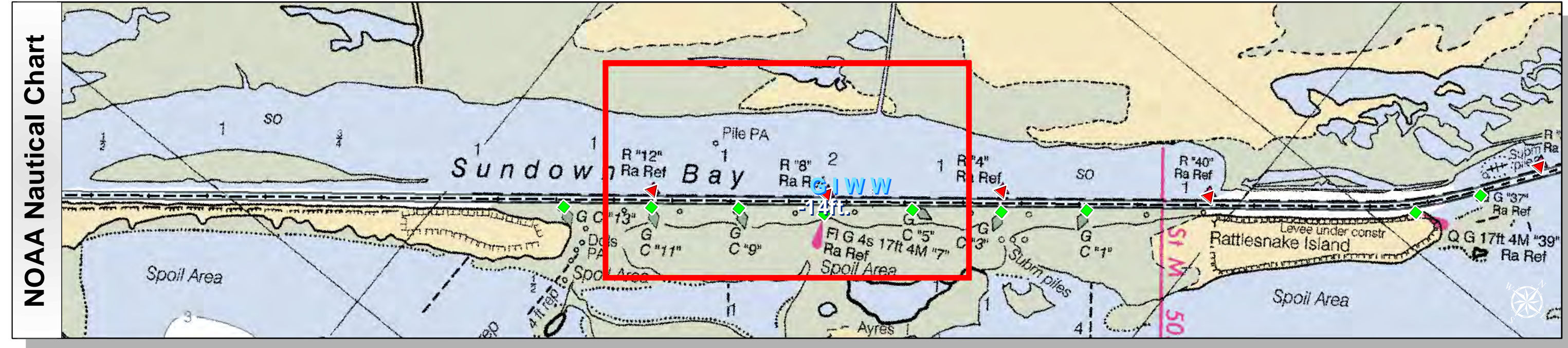
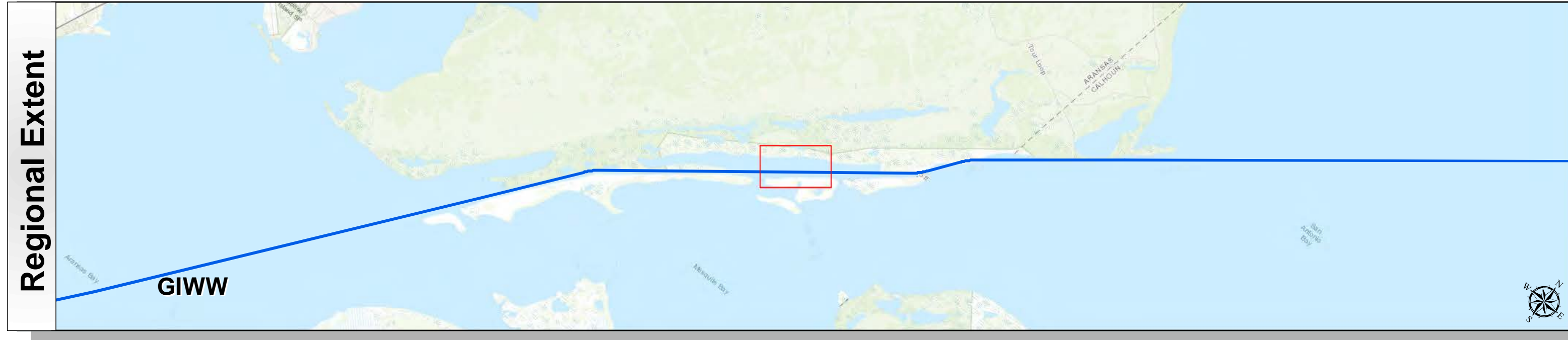
**HYDROGRAPHIC SURVEY**  
U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
GALVESTON, TEXAS

**Station: 1121+000 to 1178+000**  
GIWW  
, TEXAS

# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District



Channel Features	Aids to Navigation	MLLW
Channel Toe	Lights	> 4
Channel Center Line	Red Side Aids	4 - 6
Channel Station Lines	Green Side Aids	6 - 8
Channel Dimensions	Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		0 - 10
		10 - 15
		15 - 20
		20 - 25
		25 - 30
		30 - 50

NOTES:  
 1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.  
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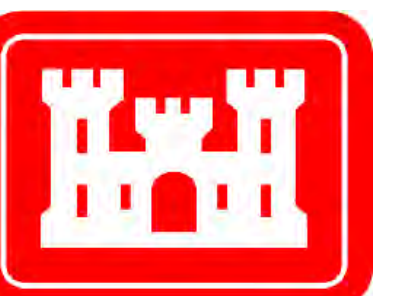
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	Miles			
Hydrographic Survey Extent	0	250	500	1,000
	Feet			

Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 164 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:3,000	Print Date: 10/19/2018
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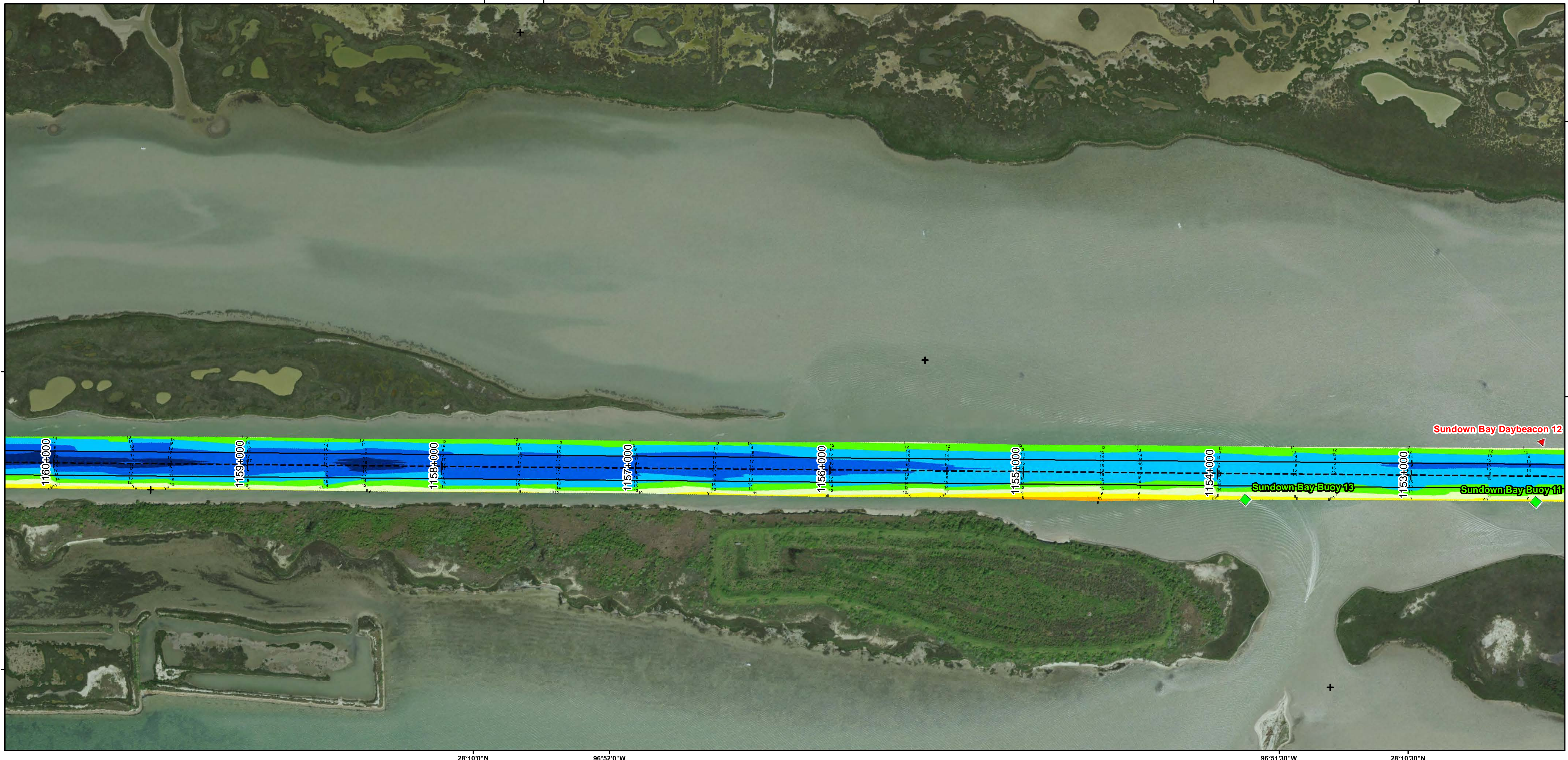
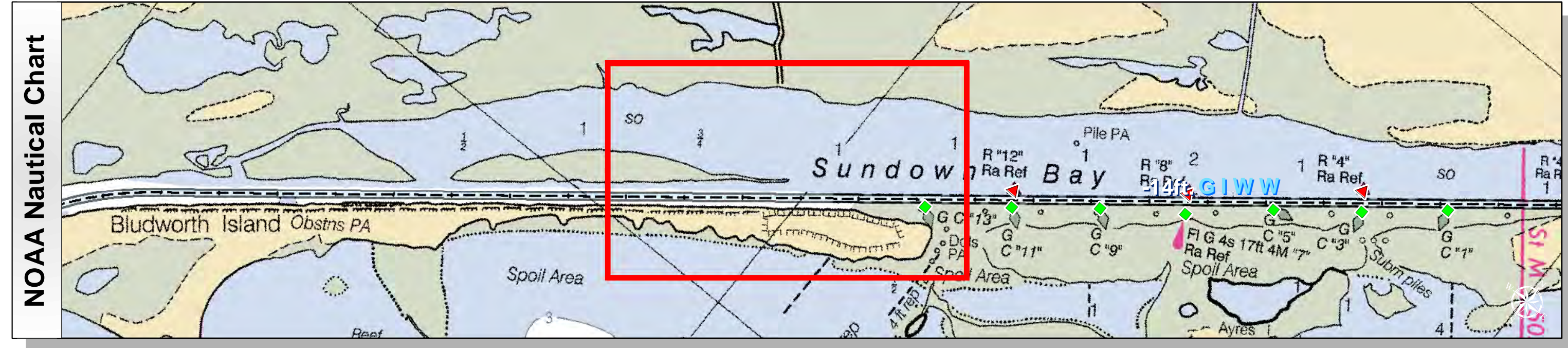
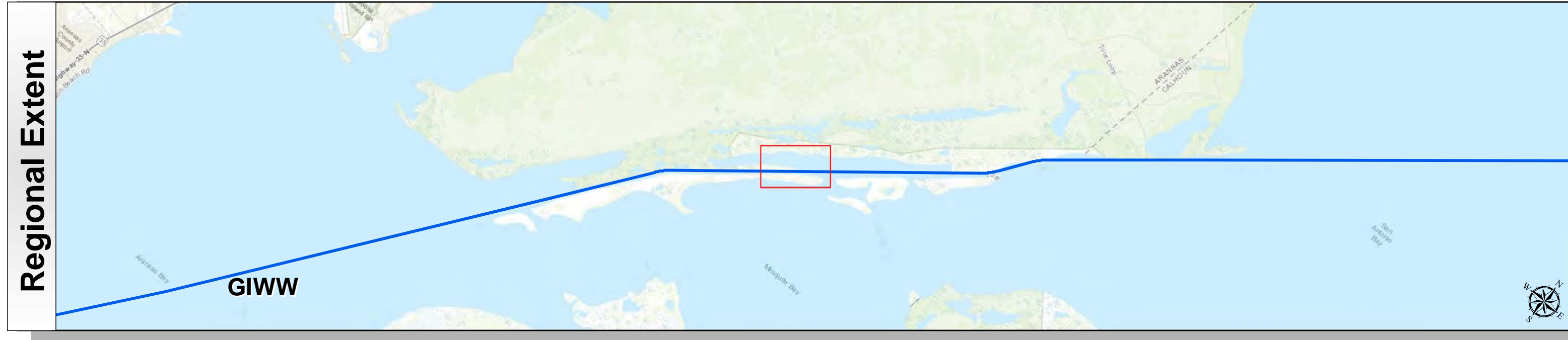
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 U.S. ARMY ENGINEER DISTRICT  
 CORPS OF ENGINEERS  
 GALVESTON, TEXAS

**Station: 1121+000 to 1178+000**  
 GIWW  
 TEXAS

# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District



Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	> 18
- - - Channel Center Line	▲ Red Side Aids	14 - 18
— Channel Station Lines	■ Green Side Aids	10 - 14
↔ Channel Dimensions	◆ Mooring Buoy	6 - 8
		4 - 6
		2 - 4
		0 - 2
		< 0

NOTES:  
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 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION. NOAA NAUTICAL CHARTS PROVIDED VIA RNC MAP SERVICE

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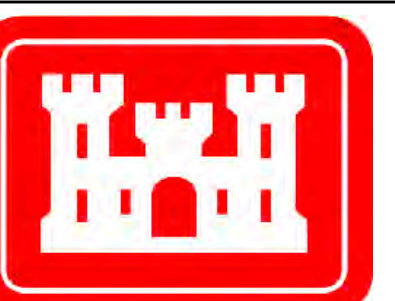
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NOAA Nautical Chart Extent	0	1.3
	0.325	0.65
		Miles
Hydrographic Survey Extent	0	1,000
	250	500
		Feet

Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 165 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:3,000	Print Date: 10/19/2018
Mapped by: MSAOX PAC	
Additional Info:	

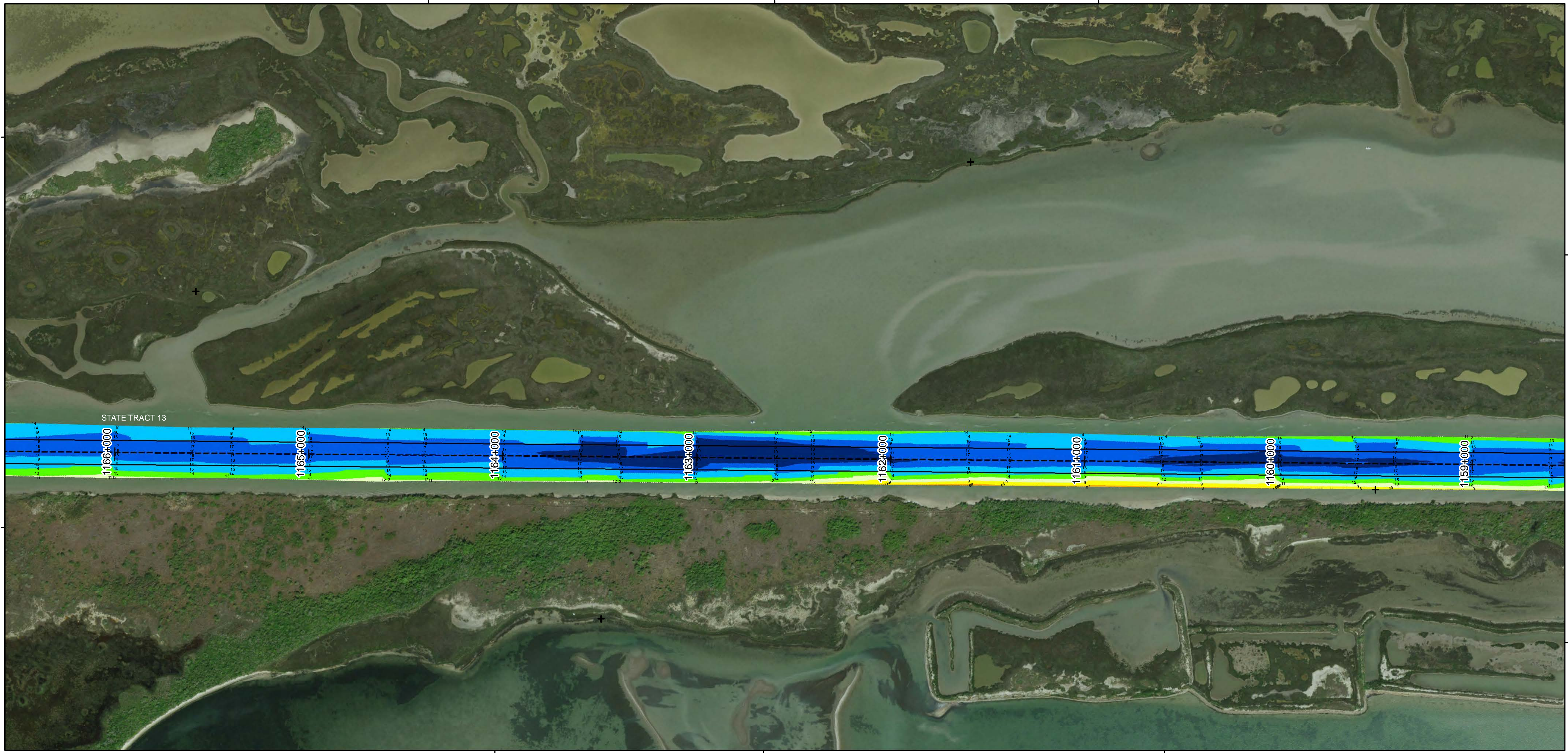
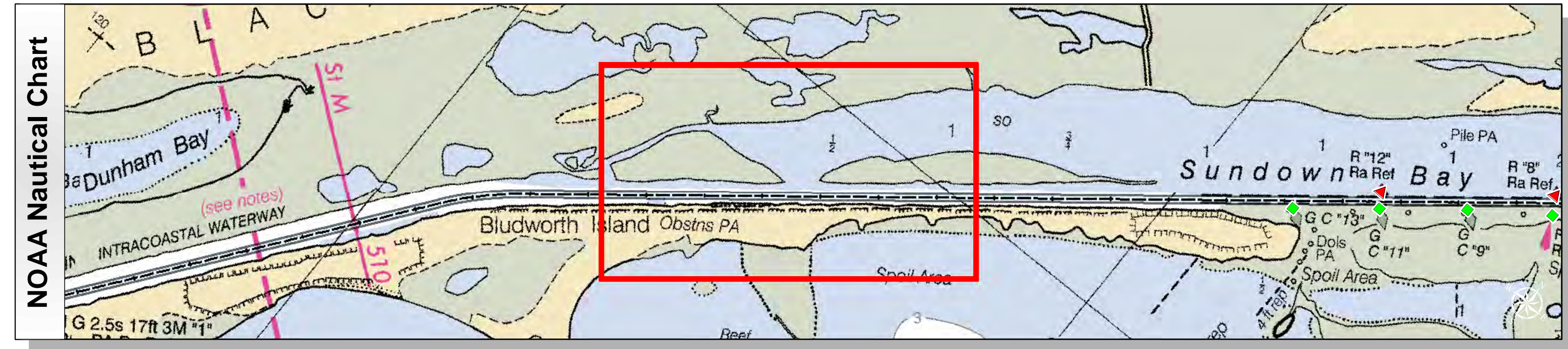
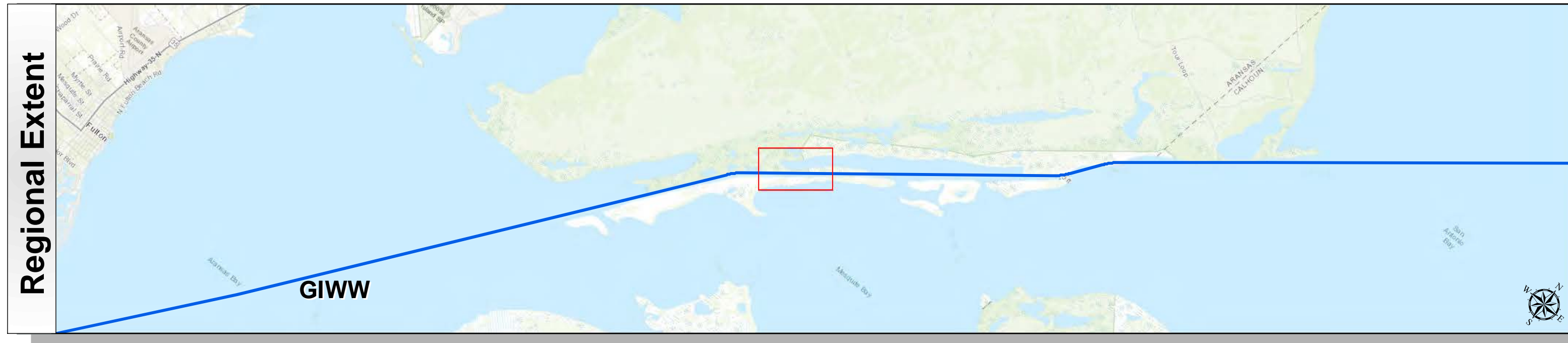
**HYDROGRAPHIC SURVEY**  
 U.S. ARMY ENGINEER DISTRICT  
 CORPS OF ENGINEERS  
 GALVESTON, TEXAS

**Station: 1121+000 to 1178+000**  
 GIWW  
 TEXAS

# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District



Survey Date(s): 16 October 2018	Authorized Depth: -14ft.
Page: 166 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:3,000	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/19/2018
Additional Info:	

Channel Features	Aids to Navigation	MLLW
Channel Toe	★ Lights	> 14
Channel Center Line	▲ Red Side Aids	4 - 6
Channel Station Lines	■ Green Side Aids	6 - 8
Channel Dimensions	◆ Mooring Buoy	8 - 10
		10 - 12
		12 - 14
		14 - 16
		16 - 18
		< 18
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 - 10
		10 - 15
		15 - 20
		20 - 25
		25 - 30
		30 - 50

NOTES:

- HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.
- ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM.
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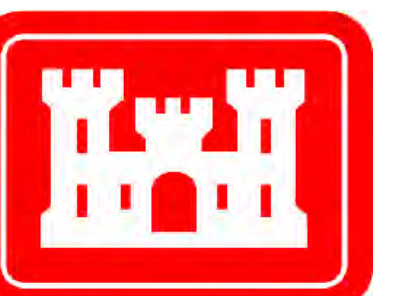


Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic / Datum: North American 1983				
NOAA Nautical Chart Extent	0	0.325	0.65	1.3
	Miles			
Hydrographic Survey Extent	0	250	500	1,000
	Feet			

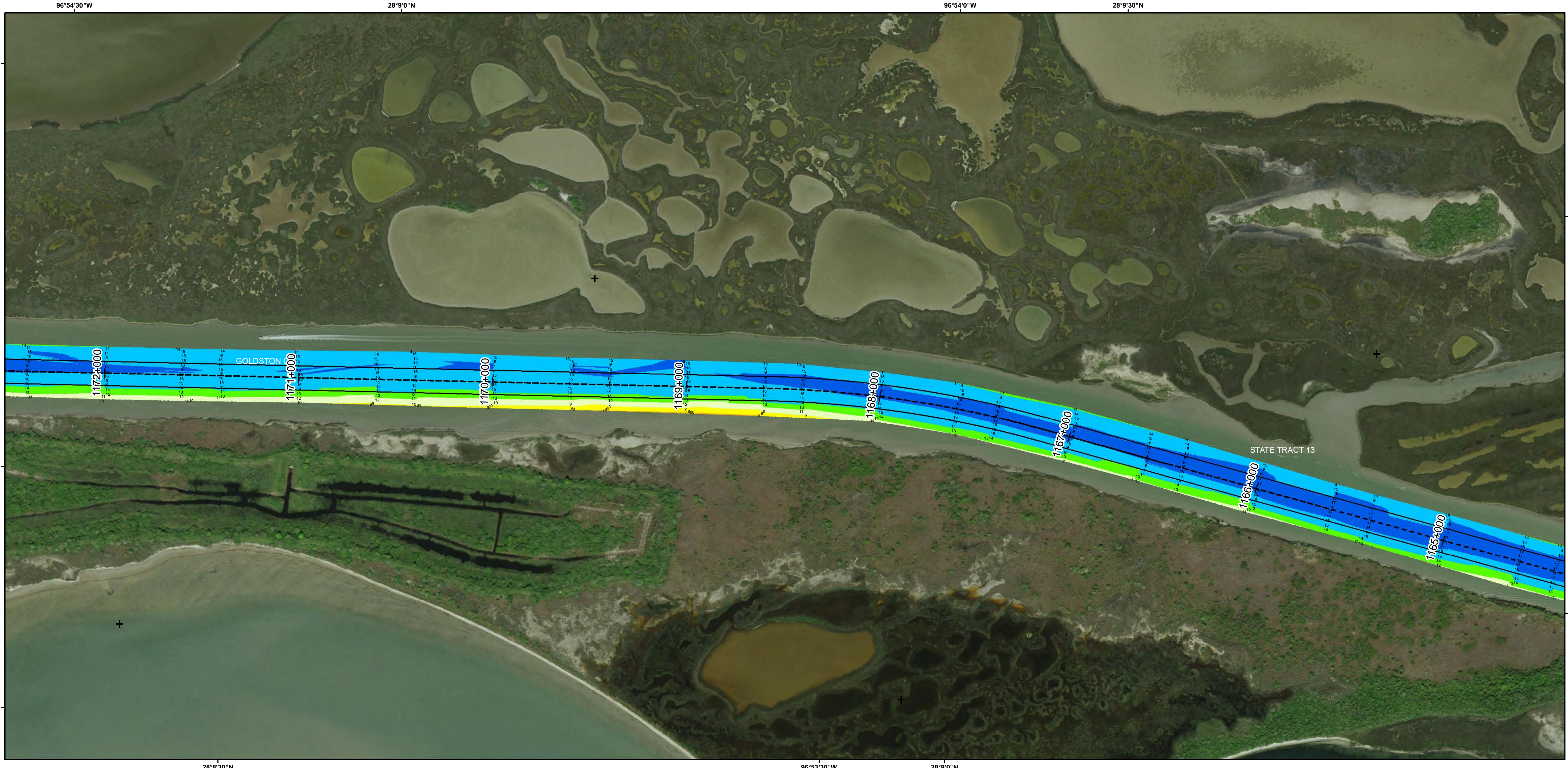
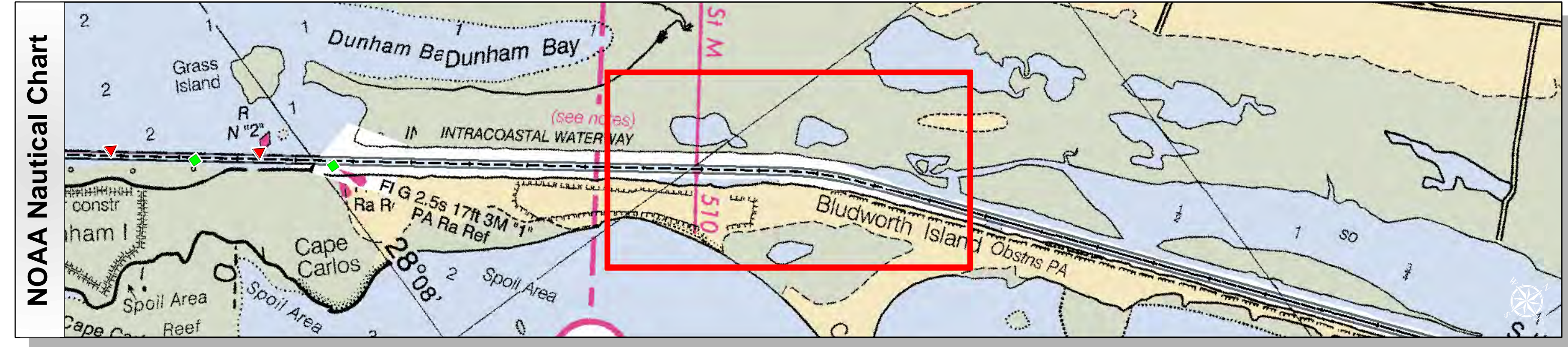
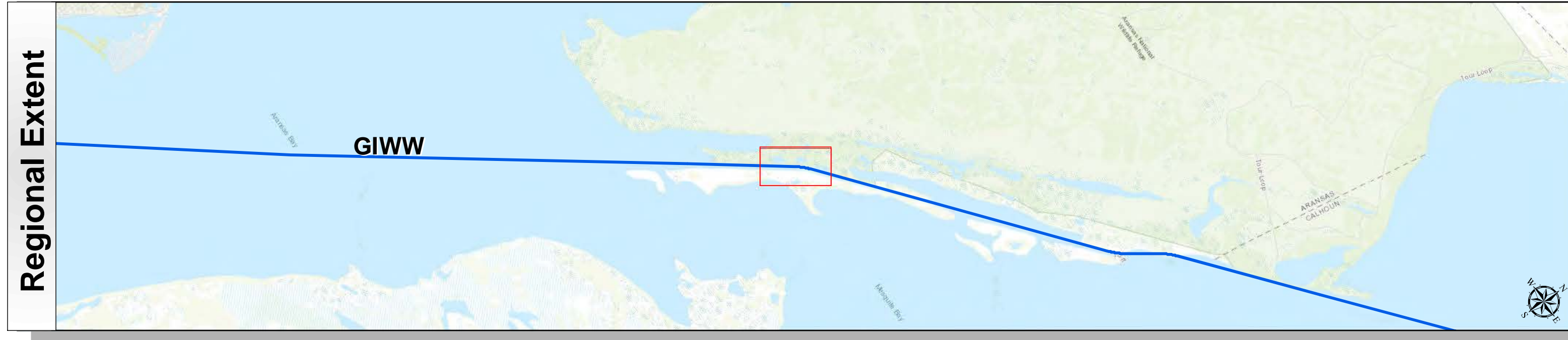
**HYDROGRAPHIC SURVEY**  
U.S. ARMY ENGINEER DISTRICT  
CORPS OF ENGINEERS  
GALVESTON, TEXAS

**Station: 1121+000 to 1178+000**  
GIWW  
, TEXAS

# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District

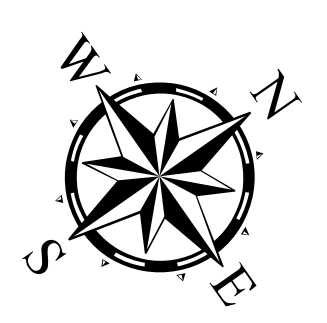


Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	Color scale for MLLW: > 4, 4-6, 6-8, 8-10, 10-12, 12-14, 14-16, 16-18, < 18
- - - Channel Center Line	▲ Red Side Aids	NOAA Bathymetry (DREDGING REACH EXTENT)
— Channel Station Lines	■ Green Side Aids	0 - 10, 10 - 15, 15 - 20, 20 - 25, 25 - 30, 30 - 50
↔ Channel Dimensions	◆ Mooring Buoy	

NOTES:  
 1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.  
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Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic; Datum: North American 1983				
NOAA Nautical Chart Extent	0	0.325	0.65	1.3
Miles				
Hydrographic Survey Extent	0	250	500	1,000
Feet				

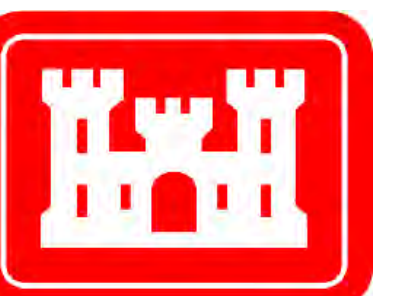
Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 167 of 190	Side Slope Ratio: (Rise : Run)
Map:	Additional Imagery: © DigitalGlobe Inc.
Scale: 1:3,000	Print Date: 10/19/2018
Mapped by: MSAOXFAC	Additional Info:

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 CORPS OF ENGINEERS  
 GALVESTON, TEXAS

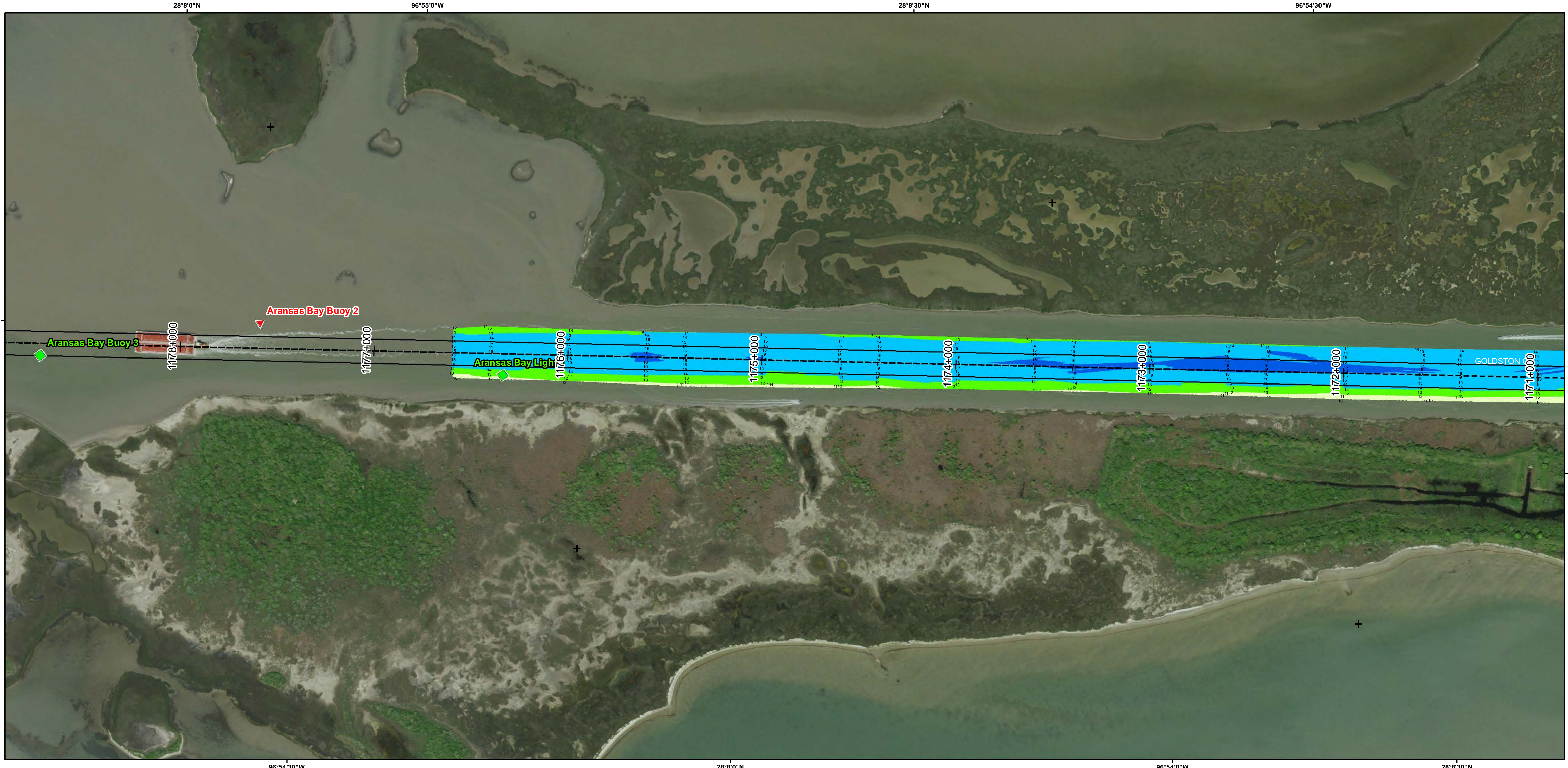
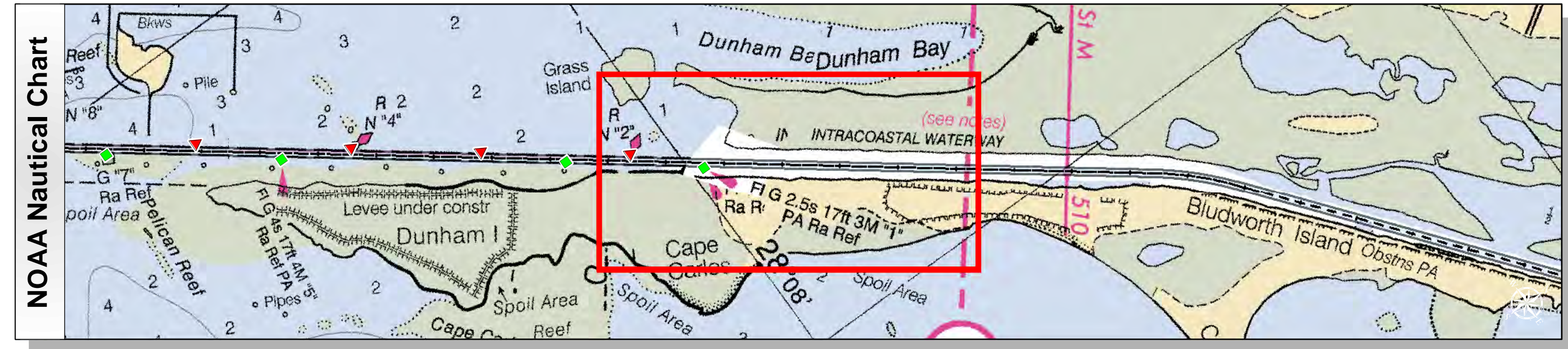
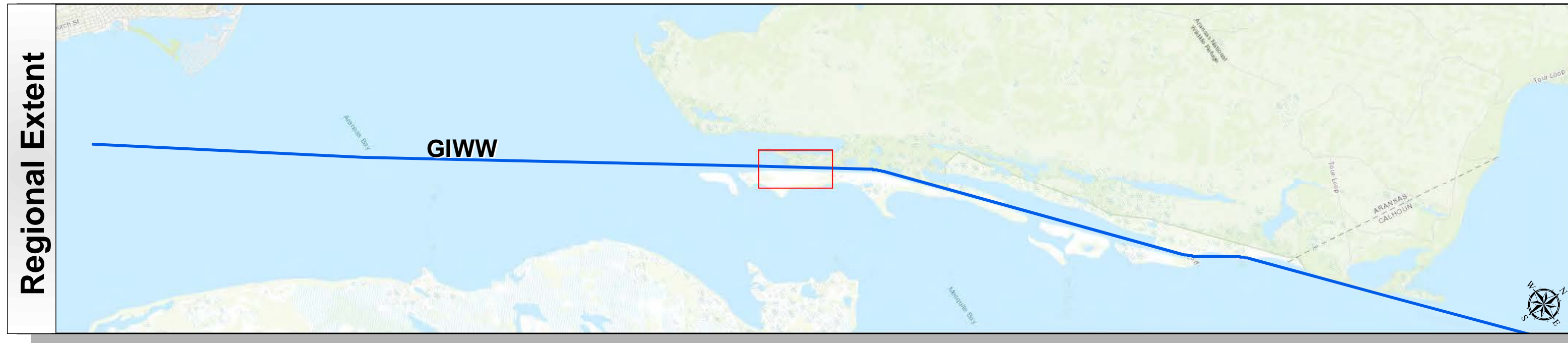
**Station: 1121+000 to 1178+000**  
 GIWW  
 TEXAS



# Gulf Intracoastal Waterway: San Antonio Bay to Aransas Bay (Light 1)



U.S. Army Corps of Engineers  
Galveston District

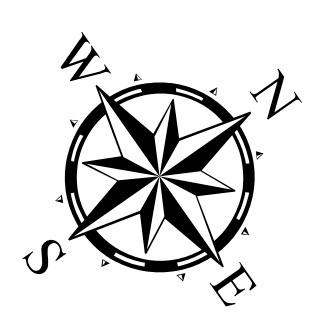


Channel Features	Aids to Navigation	MLLW
— Channel Toe	★ Lights	Color scale from > 4 to < 18
- - - Channel Center Line	▲ Red Side Aids	NOAA Bathymetry (DREDGING REACH EXTENT)
— Channel Station Lines	■ Green Side Aids	0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50
↔ Channel Dimensions	◆ Mooring Buoy	

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Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983	
NOAA Nautical Chart Extent	0 0.325 0.65 1.3 Miles
Hydrographic Survey Extent	0 250 500 1,000 Feet

Survey Date(s): 16 October 2018	Authorized Depth: -1.4ft.
Page: 168 of 190	Side Slope Ratio: (Rise : Run)
Scale: 1:3,000	Additional Imagery: © DigitalGlobe Inc.
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