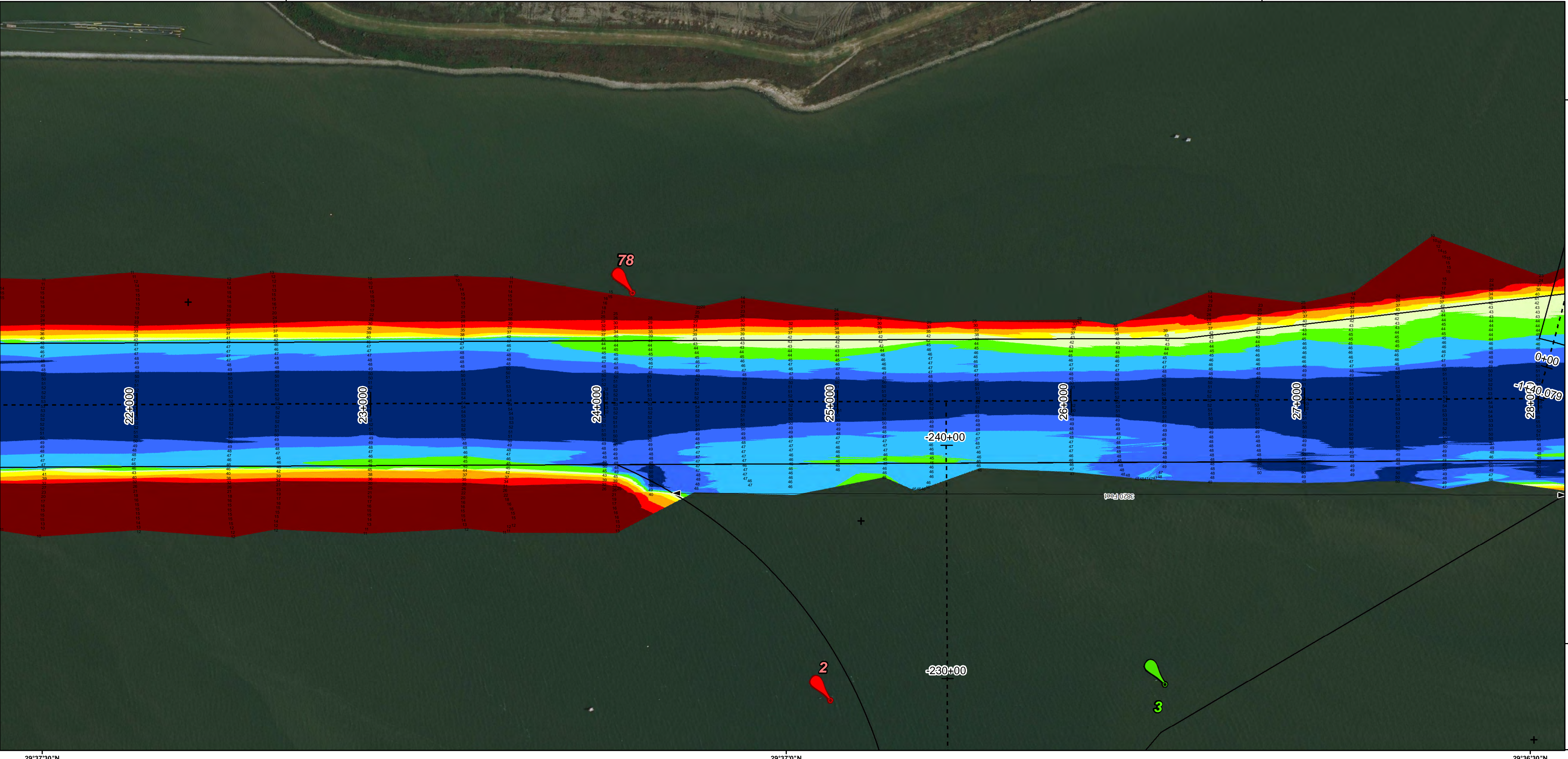
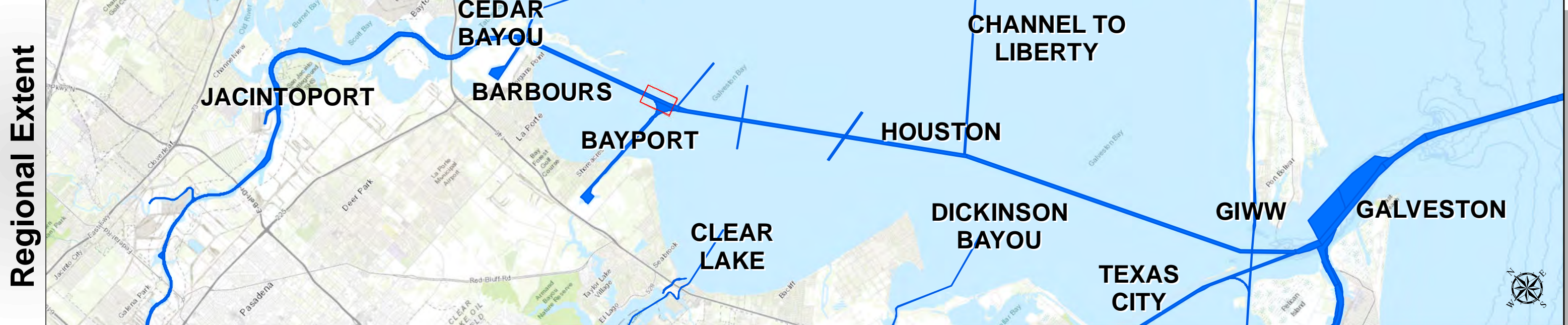


Houston Ship Channel: Beacon 76 to Lower End Morgans Point Cut



U.S. Army Corps of Engineers
Galveston District

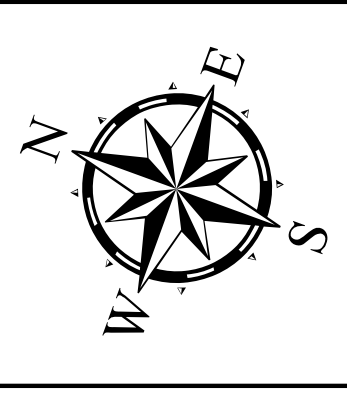


Channel Features	Aids to Navigation	MLLW
Channel Toe	Green Side Aids	0 - 30
Channel Center Line	Red Side Aids	30 - 35
Channel Station Lines	Lights	35 - 40
Channel Dimensions		40 - 42
		42 - 44
		44 - 46
		46 - 48
		48 - 50
		50+

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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 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.

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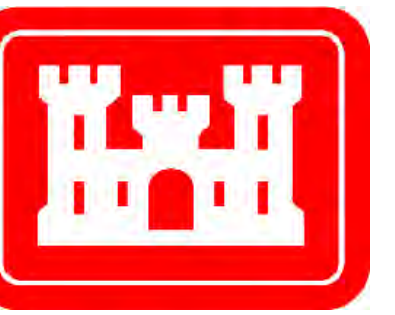


Coordinate System:	Dredging Reach Extent	Hydrographic Survey Extent
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983	0 0.25 0.5 1 Miles	0 215 430 860 Feet

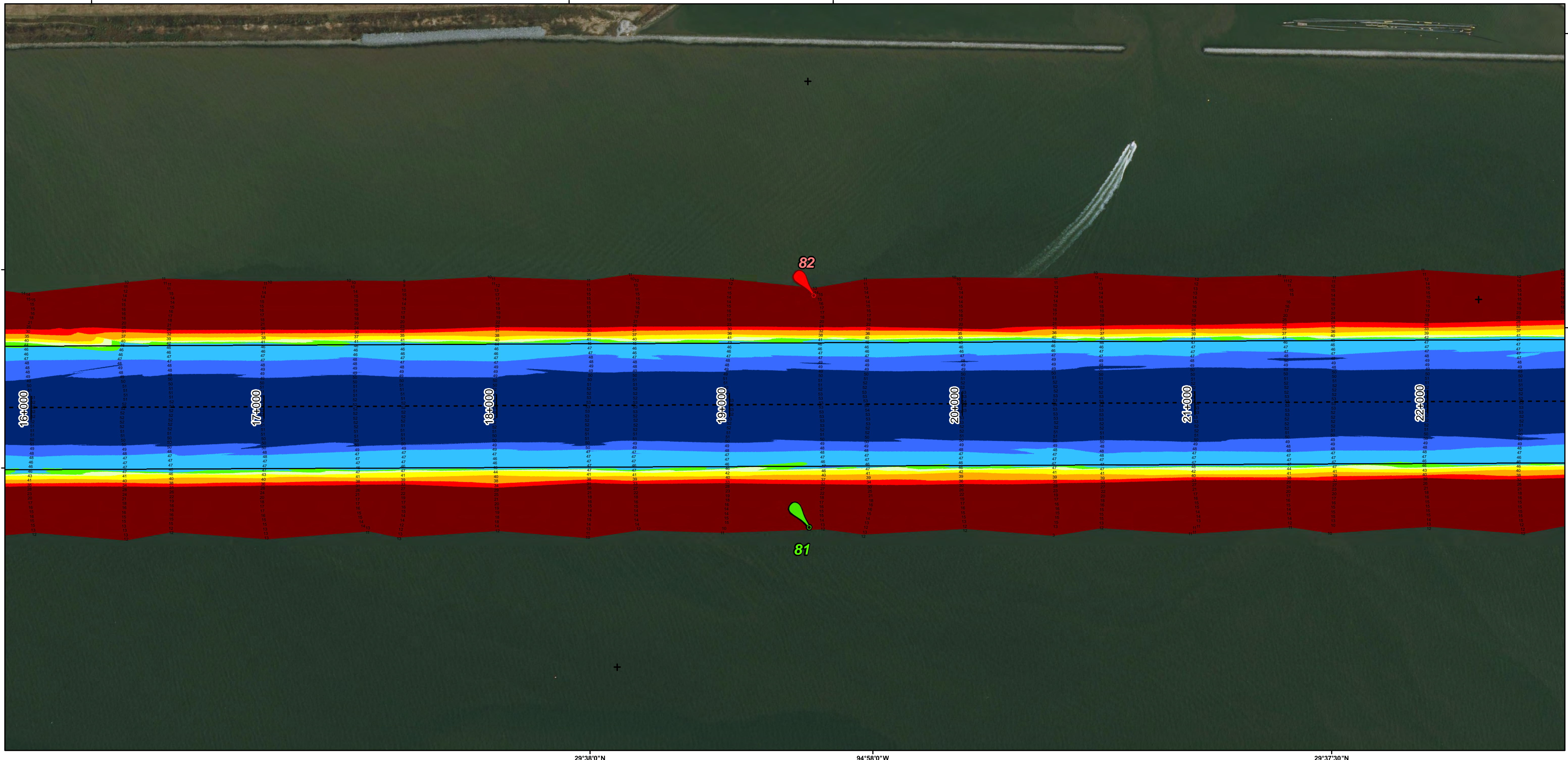
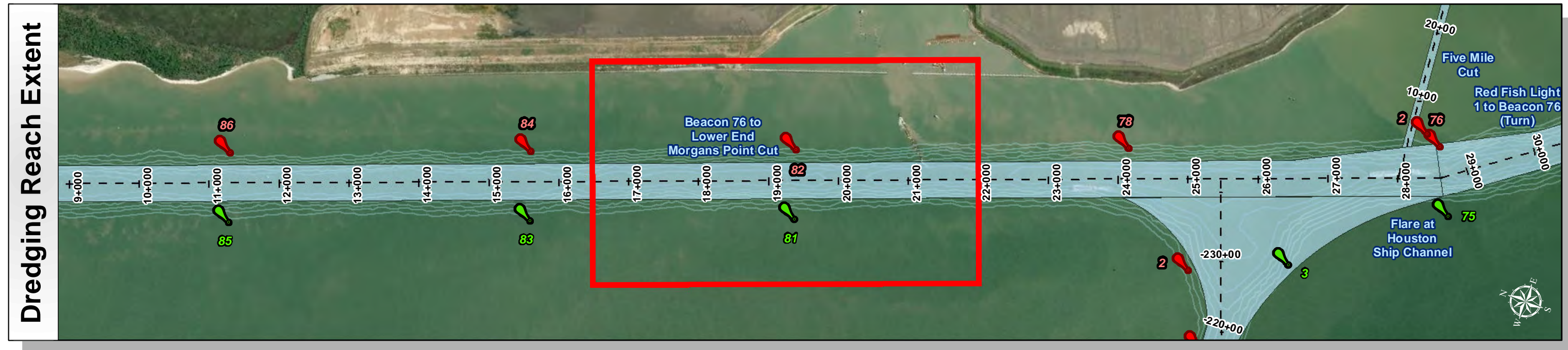
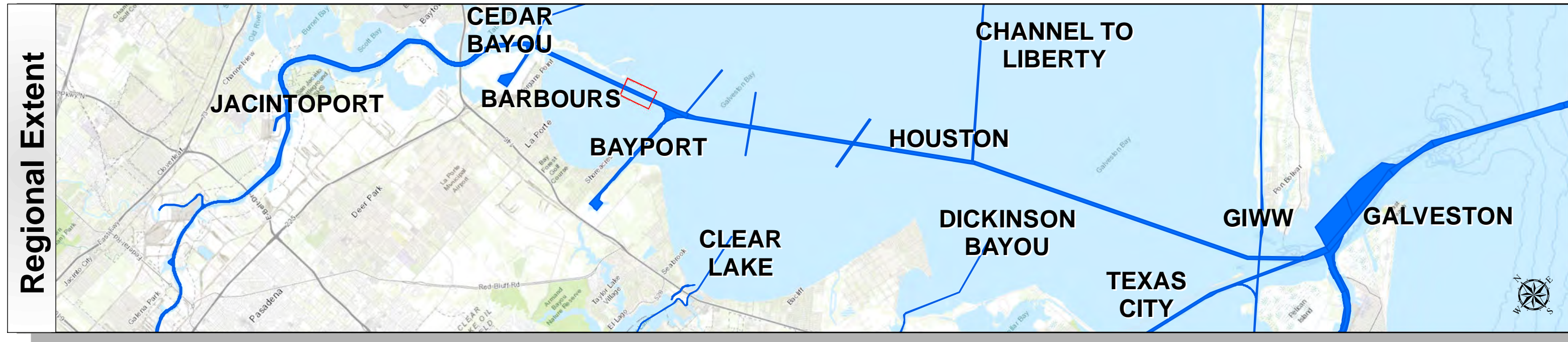
Survey Date(s): 14 May 2019	Authorized Depth: -46ft.
Page: 20 of 56	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 5/16/2019
Additional Info:	

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 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
Station: 28+604.06 to -0+003.944 (Bay)
 HOUSTON
 HOUSTON, TEXAS

Houston Ship Channel: Beacon 76 to Lower End Morgans Point Cut



U.S. Army Corps of Engineers
Galveston District

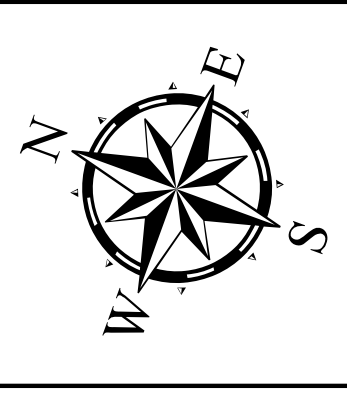


Channel Features	Aids to Navigation	MLLW
Channel Toe	Green Side Aids	0 - 30
Channel Center Line	Red Side Aids	30 - 35
Channel Station Lines	Lights	35 - 40
Channel Dimensions		40 - 42
		42 - 44
		44 - 46
		46 - 48
		48 - 50
		50+
		NOAA Bathymetry (DREDGING REACH EXTENT)
		0 - 10
		10 - 15
		15 - 20
		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.
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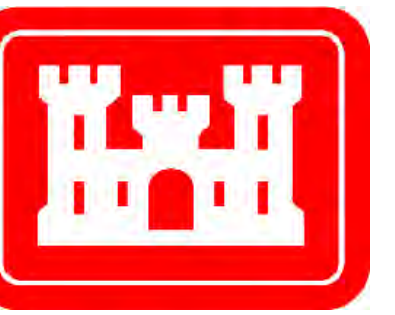


Coordinate System	Dredging Reach Extent	Hydrographic Survey Extent
NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983	0 0.25 0.5 1 Miles	0 215 430 860 Feet

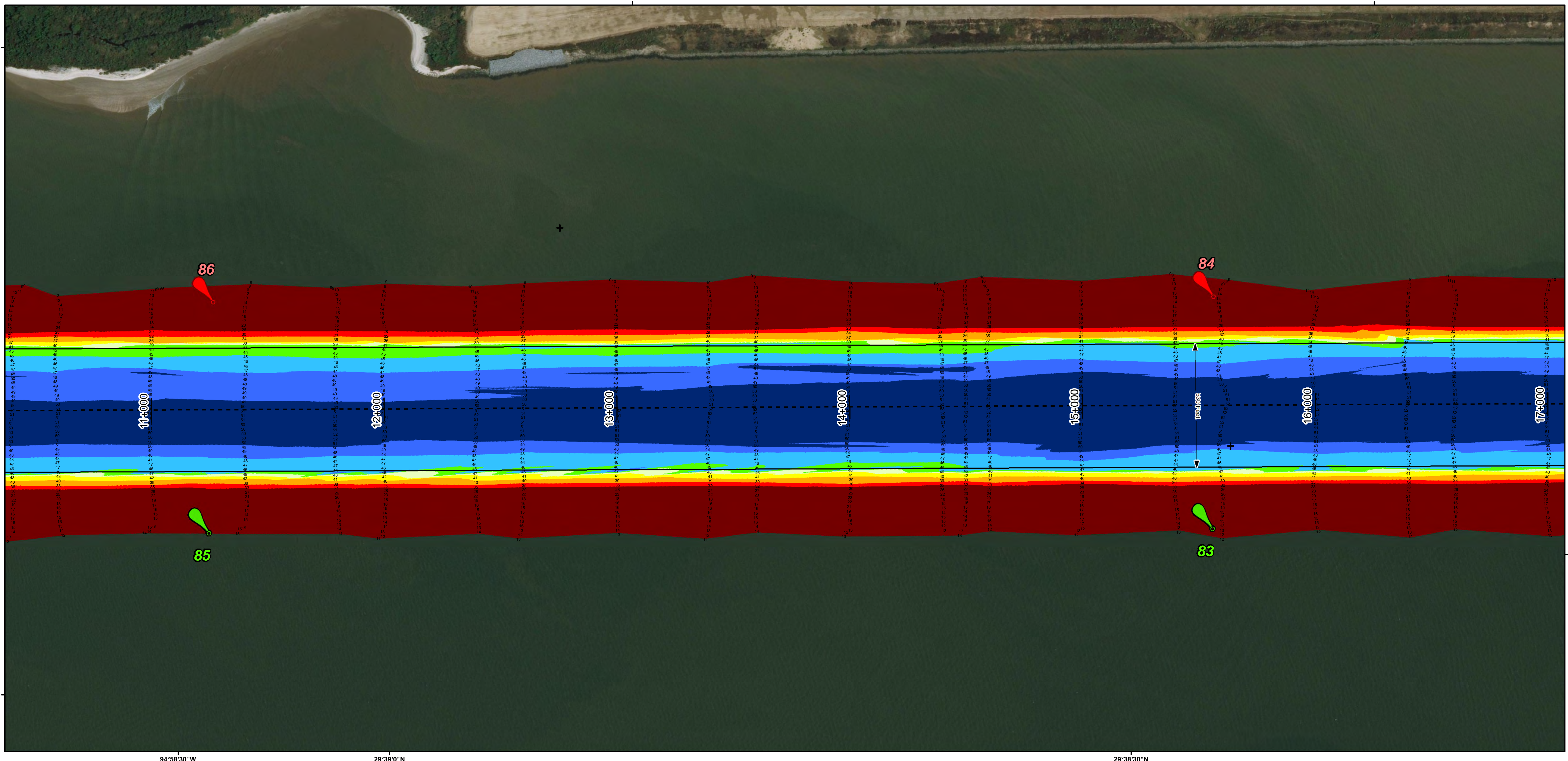
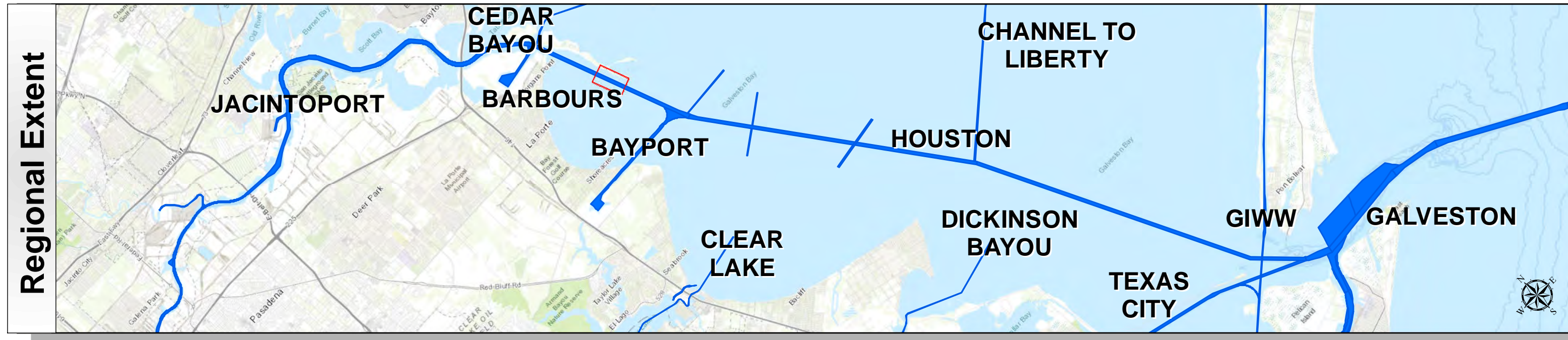
Survey Date(s): 14 May 2019	Authorized Depth: -46ft.
Page: 21 of 56	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 5/16/2019
Additional Info :	

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 U.S. ARMY ENGINEER DISTRICT
 CORPS OF ENGINEERS
 GALVESTON, TEXAS
Station: 28+604.06 to -0+003.944 (Bay)
 HOUSTON
 HOUSTON, TEXAS

Houston Ship Channel: Beacon 76 to Lower End Morgans Point Cut



U.S. Army Corps of Engineers
Galveston District



Channel Features

- Channel Toe
- Channel Center Line
- Channel Station Lines
- Channel Dimensions

Aids to Navigation

- Green Side Aids
- Red Side Aids
- Lights

MLLW

0 - 30	30 - 35	35 - 40	40 - 42	42 - 44	44 - 46	46 - 48	48 - 50	50+
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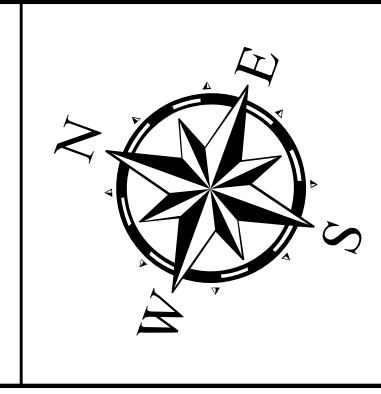
NOAA Bathymetry (DREDGING REACH EXTENT)

0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 50
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NOTES:

- 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

Dredging Reach Extent

0 0.25 0.5 1 Miles

Hydrographic Survey Extent

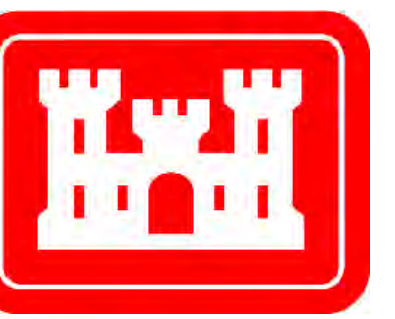
0 215 430 860 Feet

Survey Date(s): 14 May 2019	Authorized Depth: -46ft.
Page: 22 of 56	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 5/16/2019
Additional Info :	

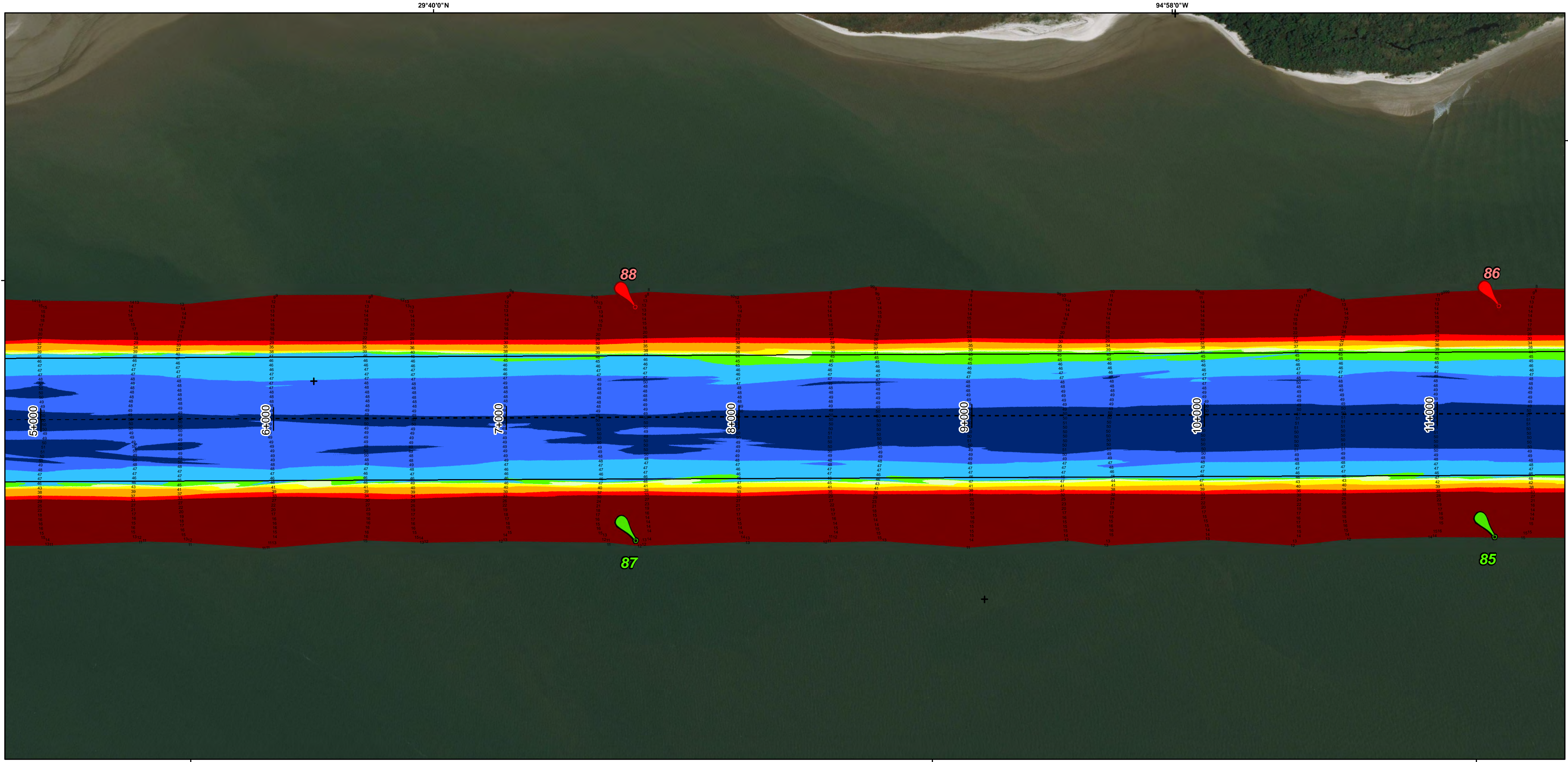
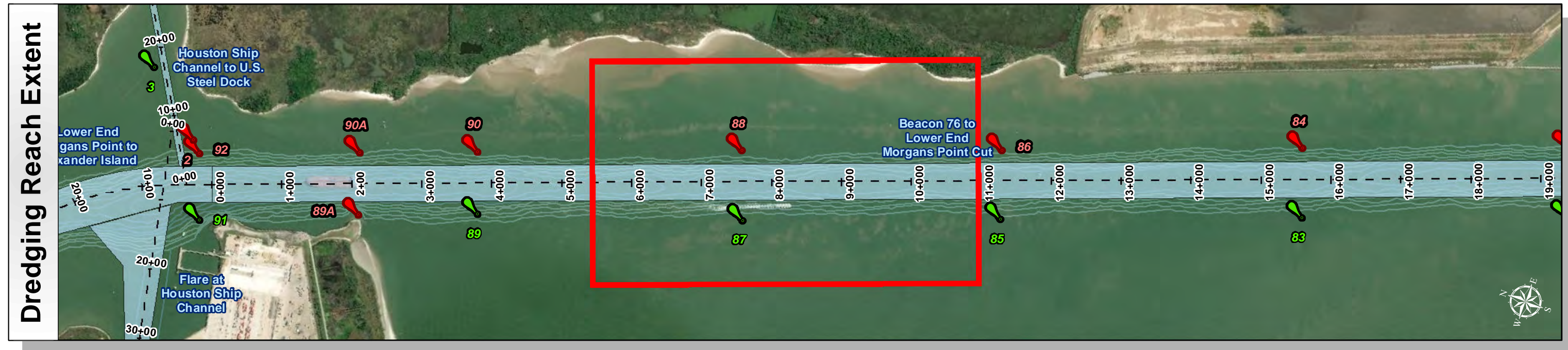
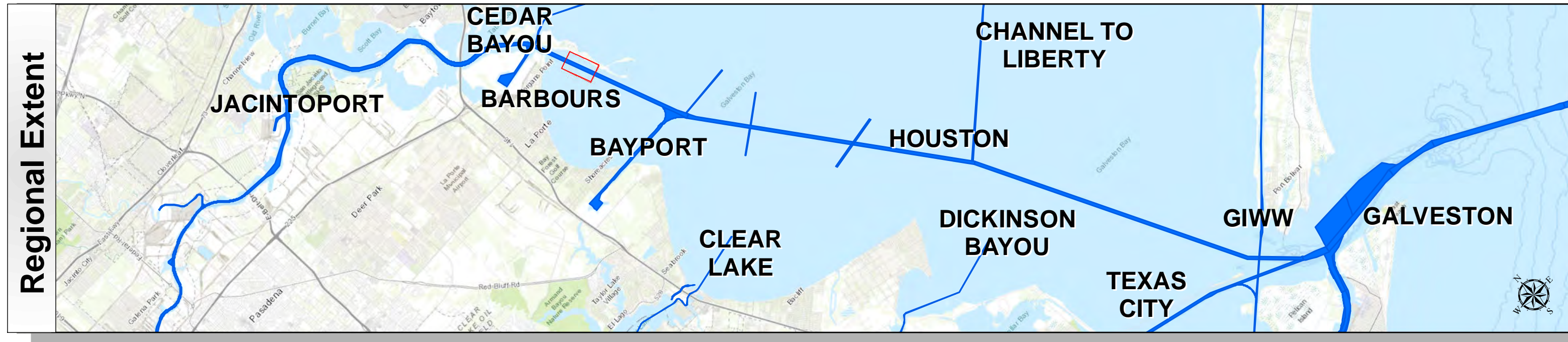
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station: 28+604.06 to -0+003.944 (Bay)
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Beacon 76 to Lower End Morgans Point Cut



U.S. Army Corps of Engineers
Galveston District



Channel Features

- Channel Toe
- Channel Center Line
- Channel Station Lines
- Channel Dimensions

Aids to Navigation

- Green Side Aids
- Red Side Aids
- Lights

MLLW

0 - 30	30 - 35	35 - 40	40 - 42	42 - 44	44 - 46	46 - 48	48 - 50	50+
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NOAA Bathymetry (DREDGING REACH EXTENT)

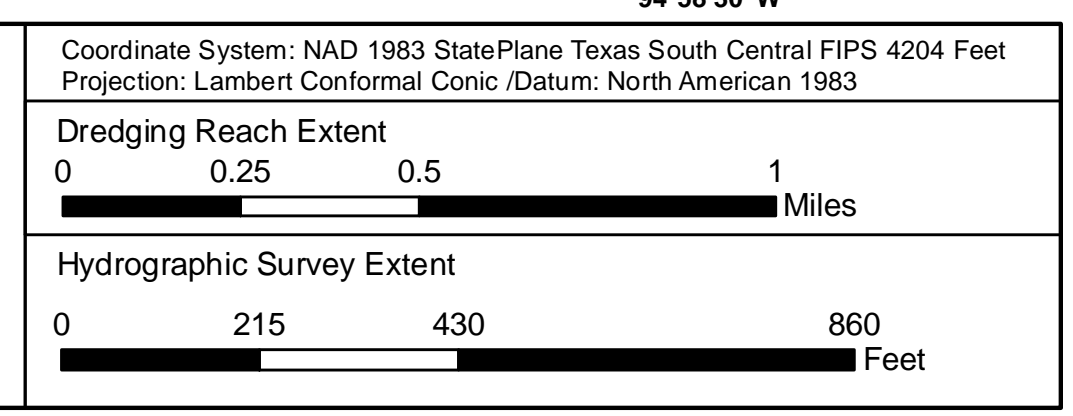
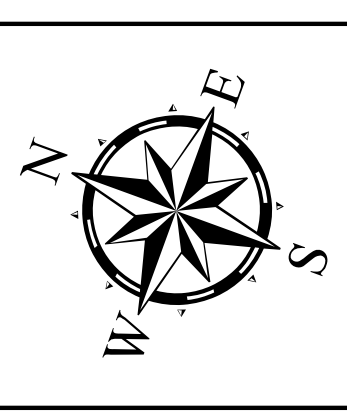
0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 50
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NOTES:

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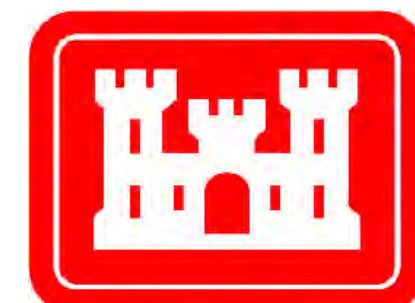


Survey Date(s): 14 May 2019	Authorized Depth: -45ft.
Page: 23 of 56	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 5/16/2019
Additional Info:	

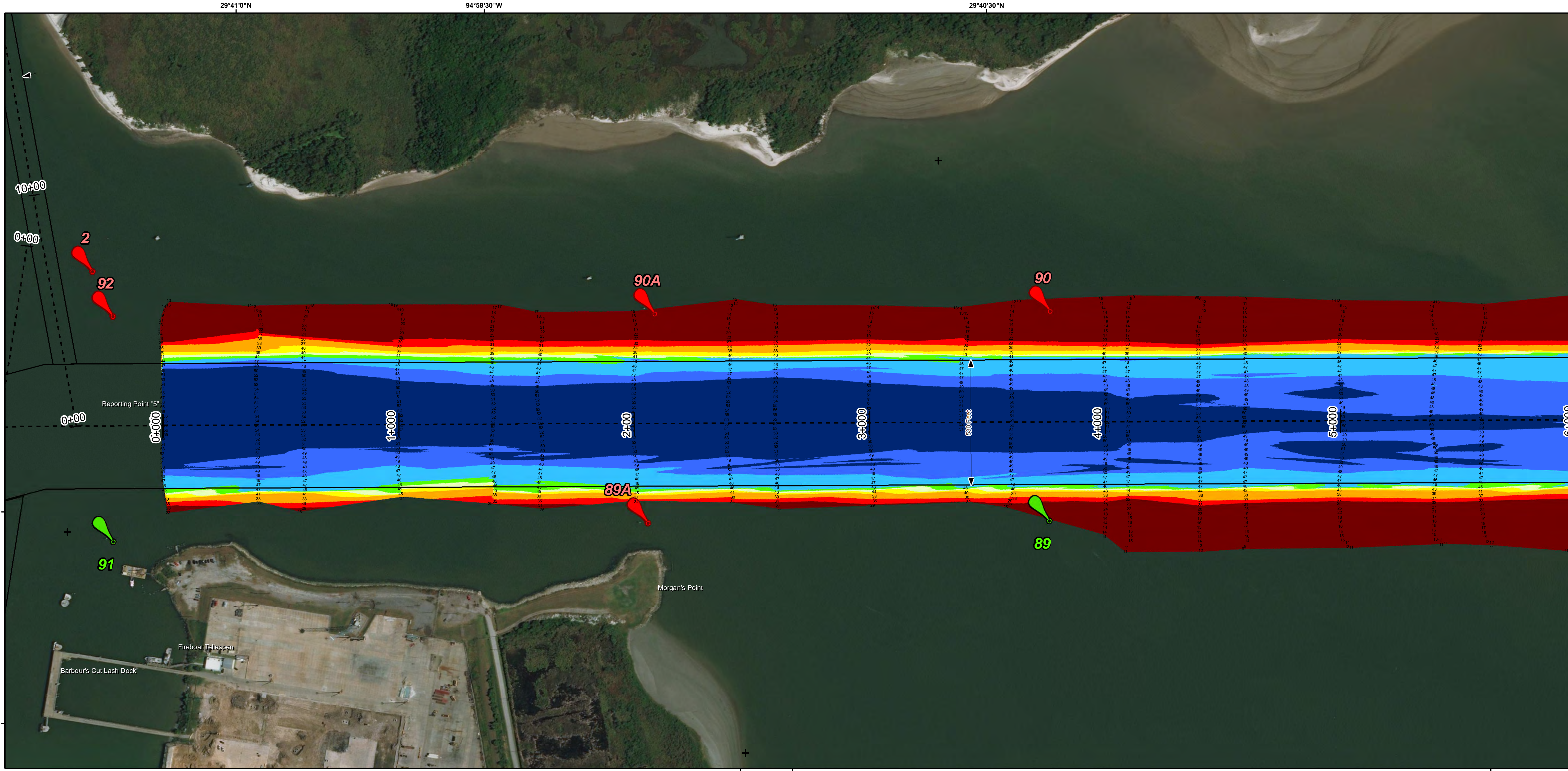
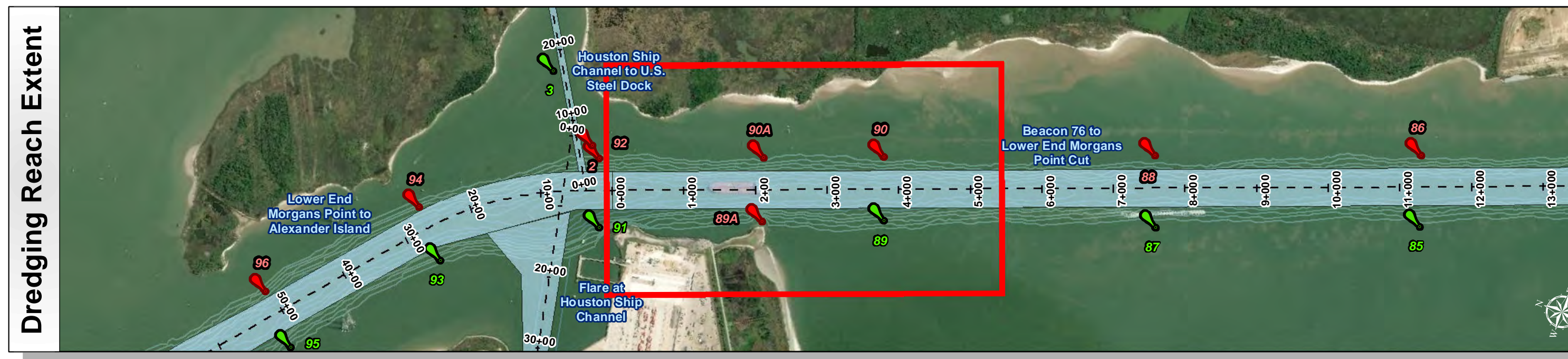
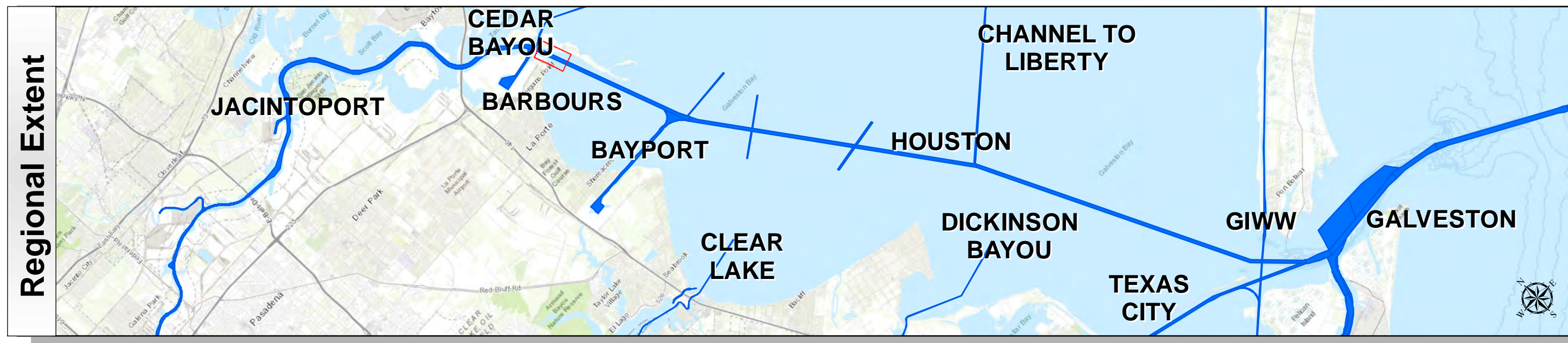
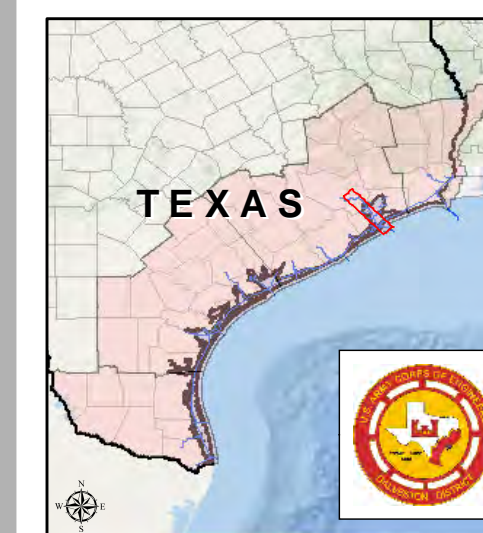
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station: 28+604.06 to -0+003.944 (Bay)
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Beacon 76 to Lower End Morgans Point Cut



U.S. Army Corps of Engineers
Galveston District



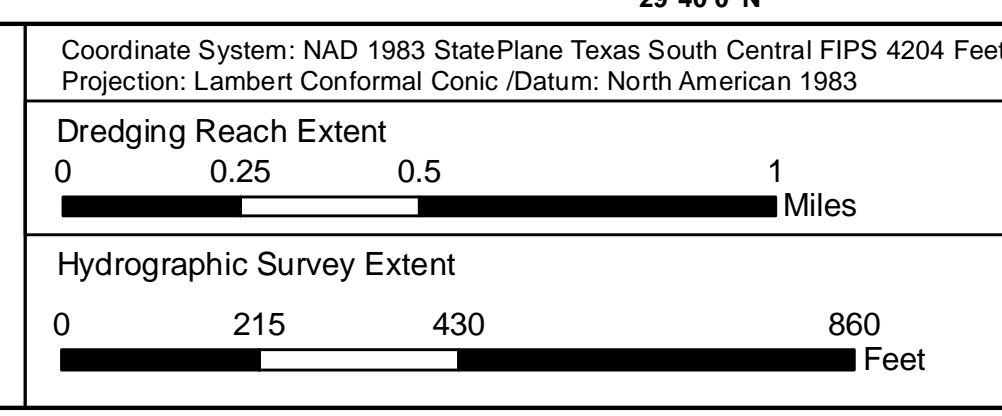
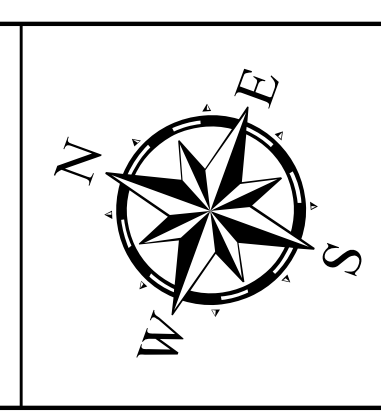
Survey Date(s): 14 May 2019	Authorized Depth: -45ft.
Page: 24 of 56	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 5/16/2019
Additional Info:	

Channel Features	Aids to Navigation	MLLW
<ul style="list-style-type: none"> Channel Toe Channel Center Line Channel Station Lines Channel Dimensions 	<ul style="list-style-type: none"> Green Side Aids Red Side Aids Lights 	<ul style="list-style-type: none"> 0 - 30 30 - 35 35 - 40 40 - 42 42 - 44 44 - 46 46 - 48 48 - 50 50+ <p>NOAA Bathymetry (DREDGING REACH EXTENT)</p> <ul style="list-style-type: none"> 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50

NOTES:

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