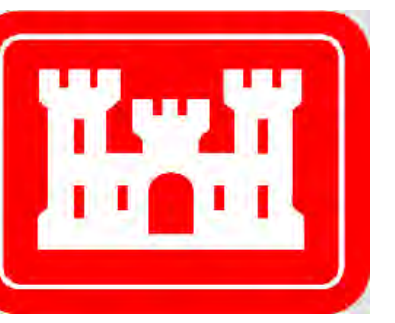
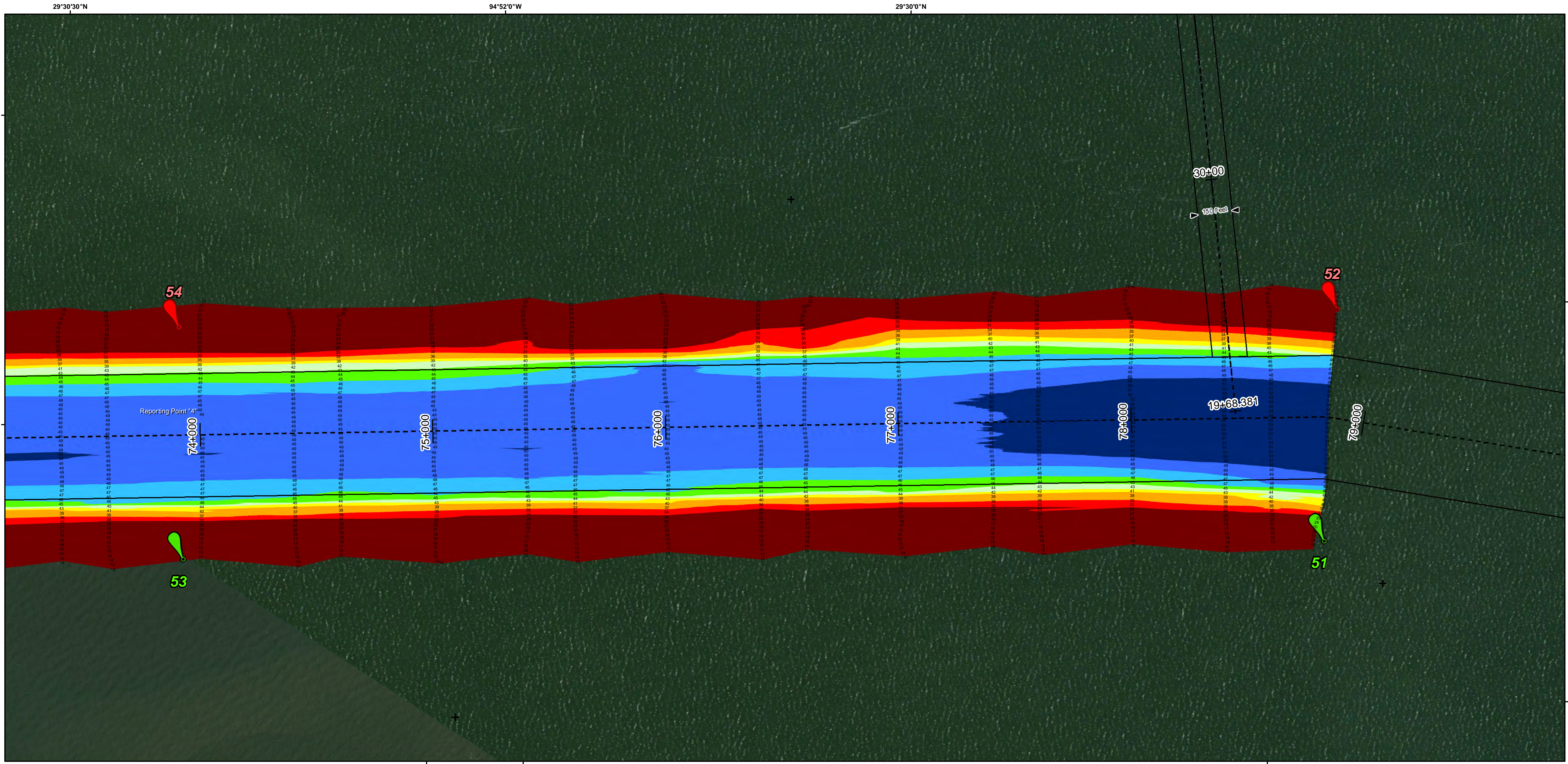
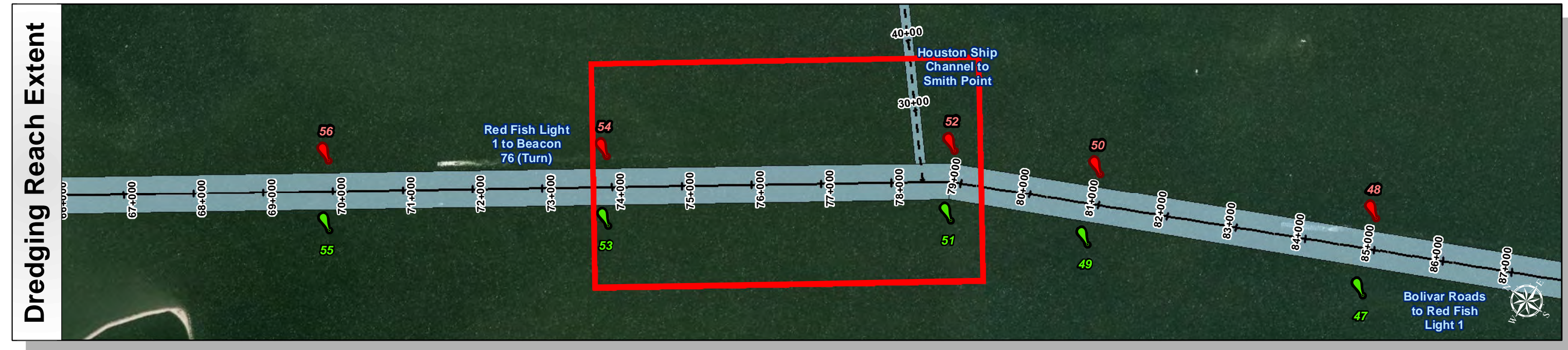
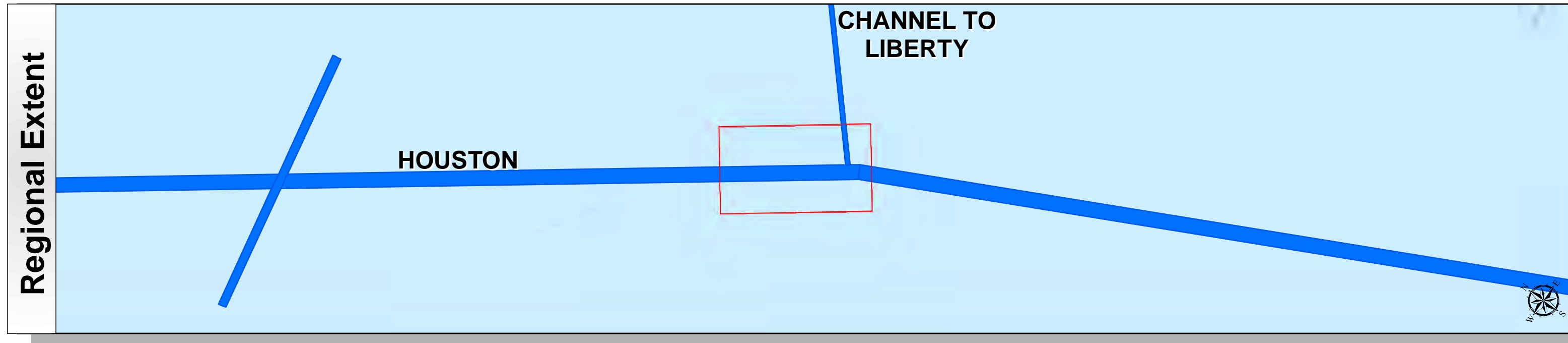


Houston Ship Channel: Red Fish Light 1 to Beacon 76 (Turn)



U.S. Army Corps of Engineers
Galveston District



Channel Features	Aids to Navigation	MLLW
— Channel Toe	Green Side Aids	
- - - Channel Center Line	Red Side Aids	0 - 30
— Channel Station Lines	Lights	30 - 35
↔ Channel Dimensions		35 - 40
		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:

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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): 07 October 2019	Authorized Depth: -46ft.
Page: 11 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/8/2019
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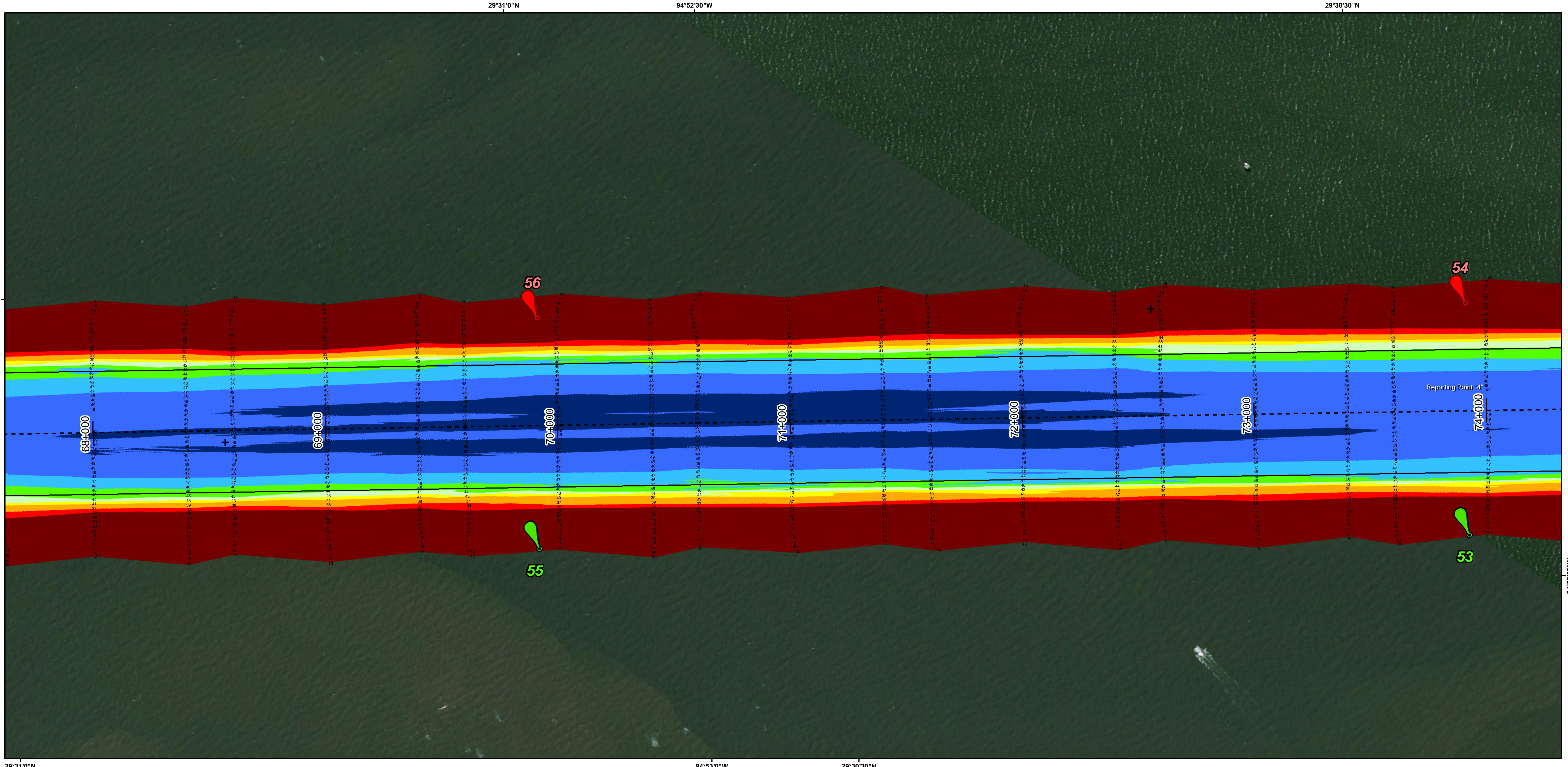
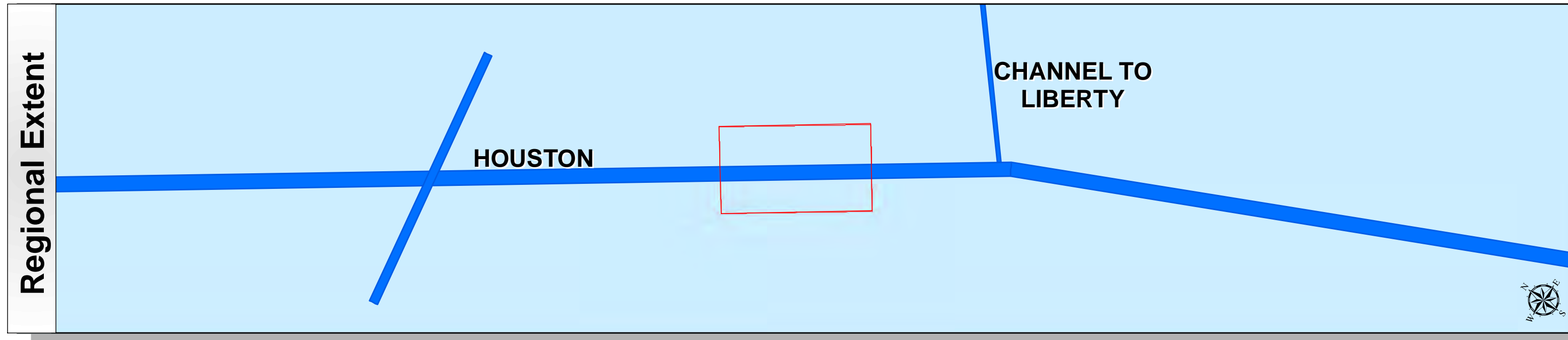
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station : 78+844 to 30+091
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Red Fish Light 1 to Beacon 76 (Turn)



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)

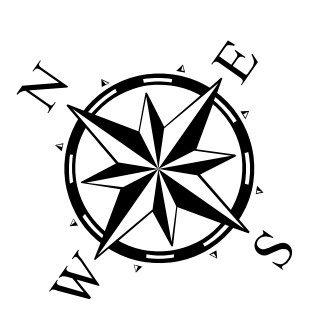
0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 50
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NOTES:

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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): 07 October 2019	Authorized Depth: -46ft.
Page: 12 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Map:	Print Date: 10/8/2019
Mapped by: MSAOX PAC	
Additional Info:	

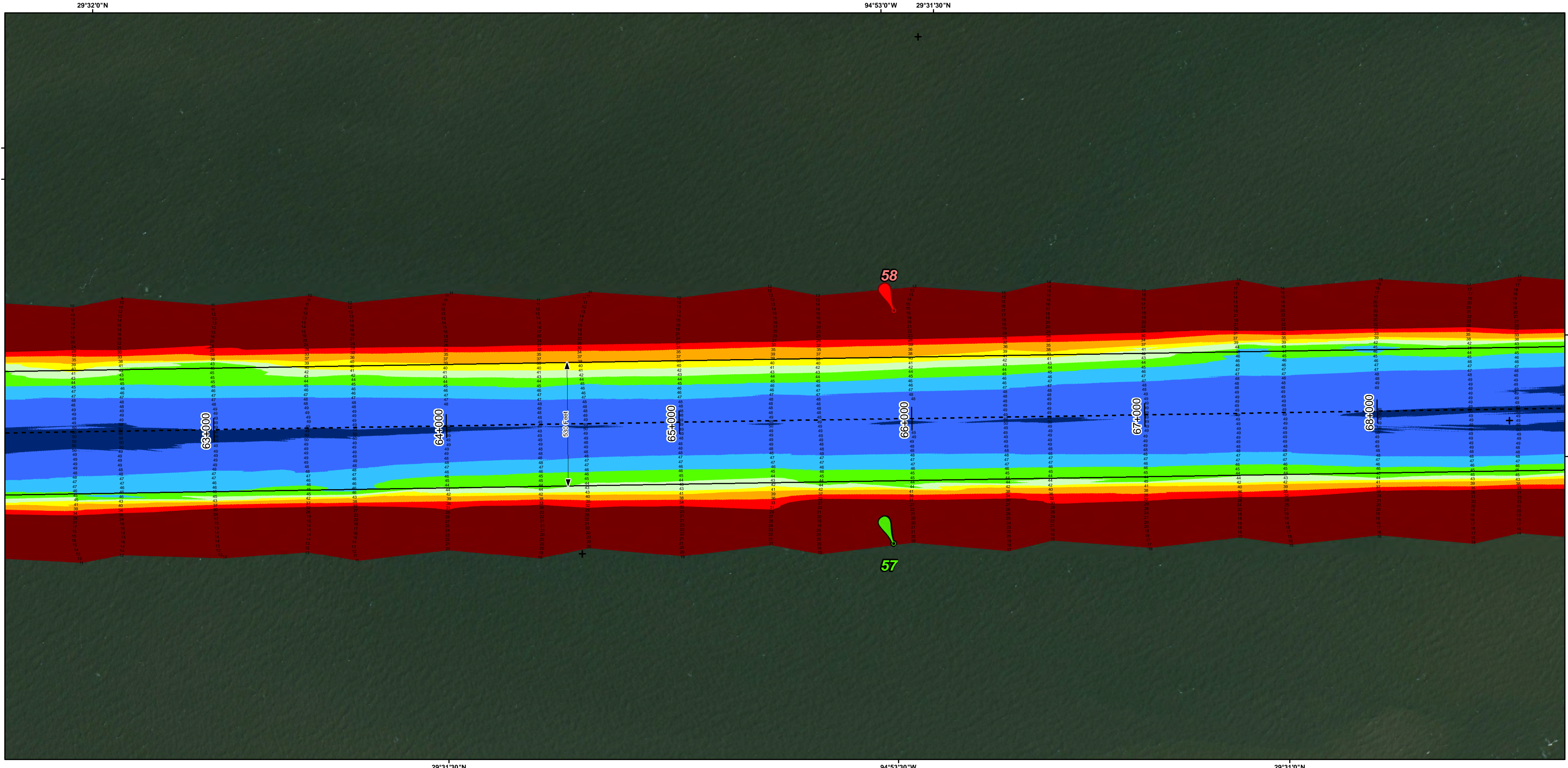
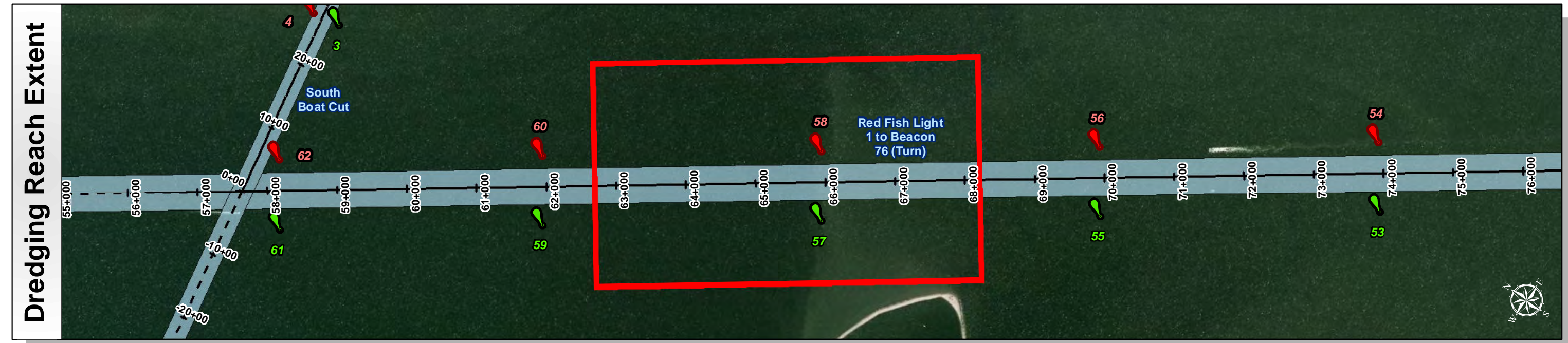
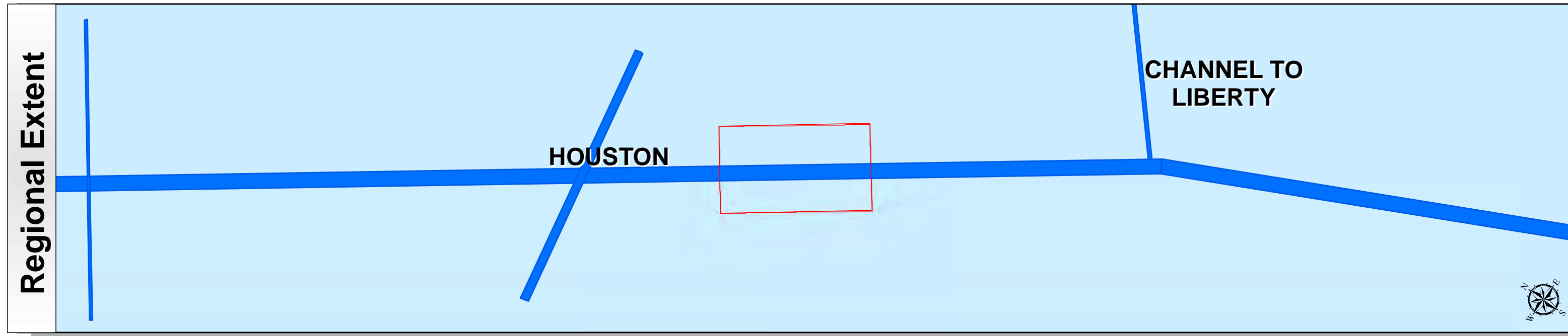
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station : 78+844 to 30+091
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Red Fish Light 1 to Beacon 76 (Turn)



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

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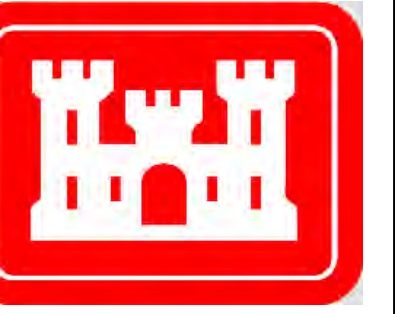
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Dredging Reach Extent	0 0.25 0.5 1 Miles
Hydrographic Survey Extent	0 215 430 860 Feet

Survey Date(s): 07 October 2019	Authorized Depth: -46ft.
Page: 13 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/8/2019
Additional Info:	

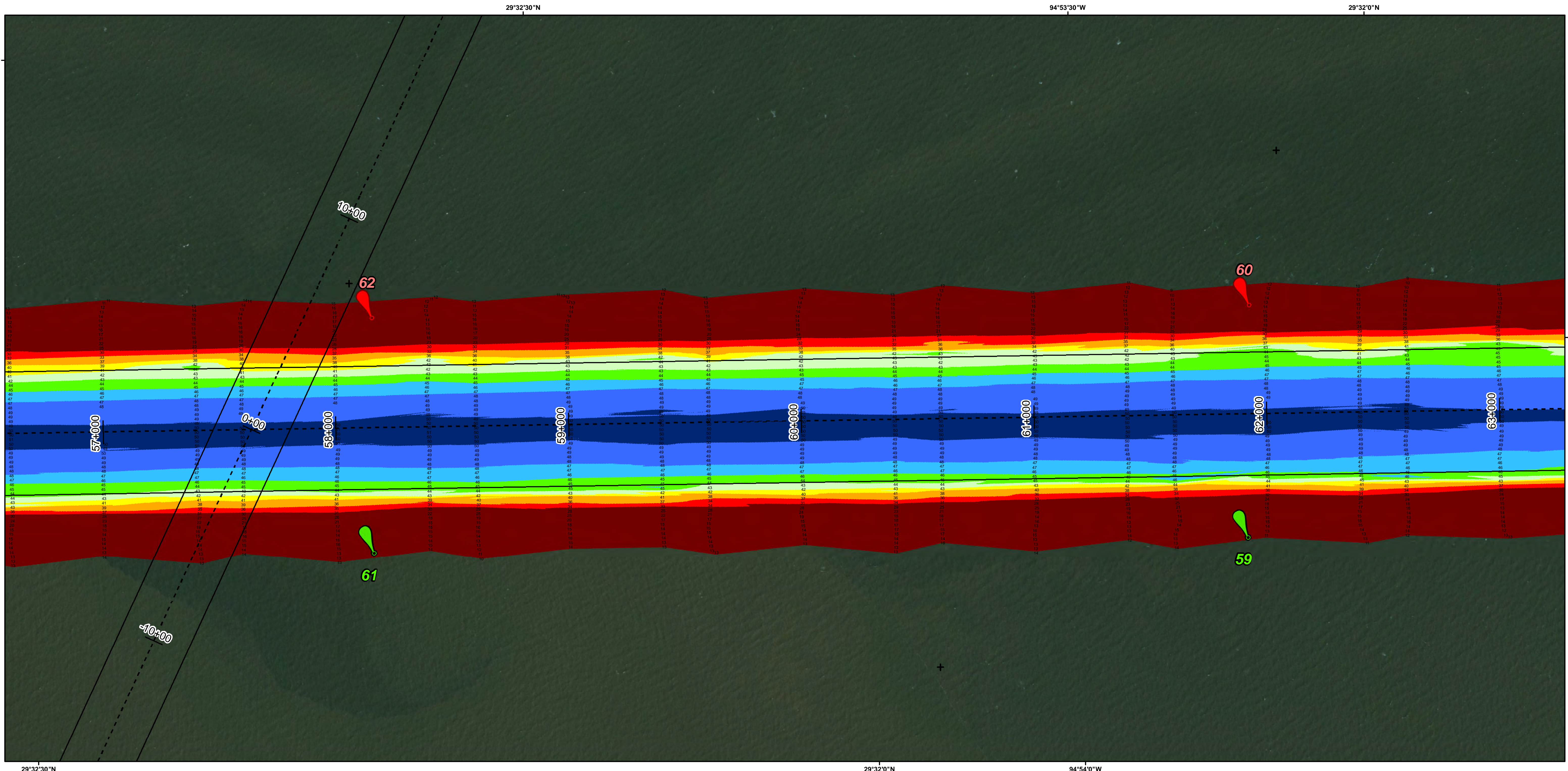
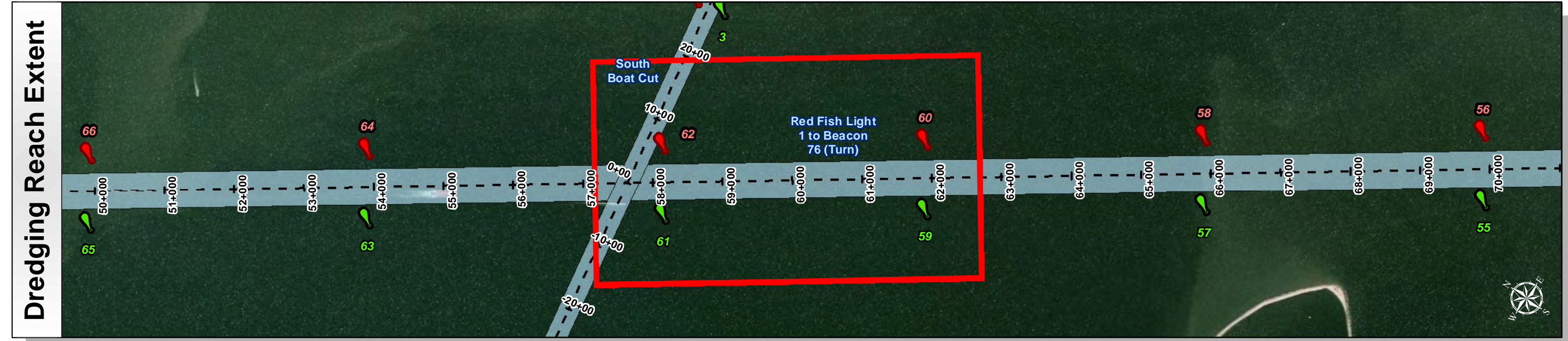
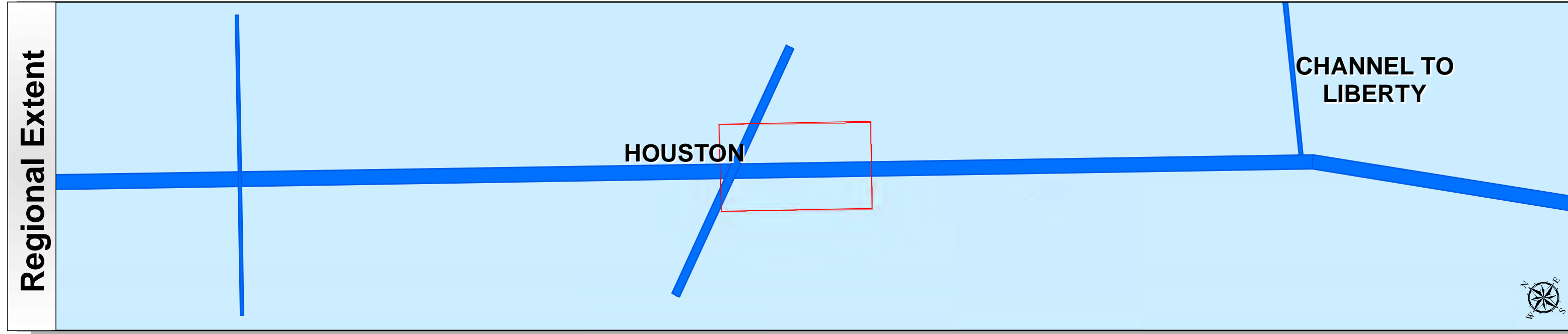
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station : 78+844 to 30+091
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Red Fish Light 1 to Beacon 76 (Turn)



U.S. Army Corps of Engineers
Galveston District



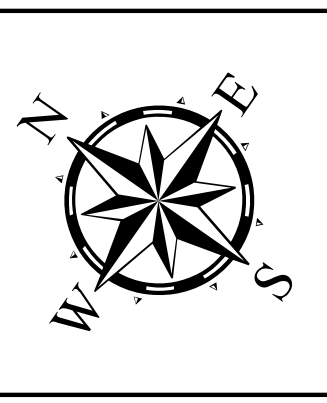
Channel Features	Aids to Navigation	MLLW
<ul style="list-style-type: none"> Channel Toe Channel Center Line Channel Station Lines Channel Dimensions 	<ul style="list-style-type: none"> Green Side Aids Red Side Aids Lights 	<p>NOAA Bathymetry (DREDGING REACH EXTENT)</p> <p>0 - 10 10 - 15 15 - 20 20 -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

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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

Hydrographic Survey Extent

Survey Date(s): 07 October 2019	Authorized Depth: -46ft.
Page: 14 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/8/2019
Additional Info:	

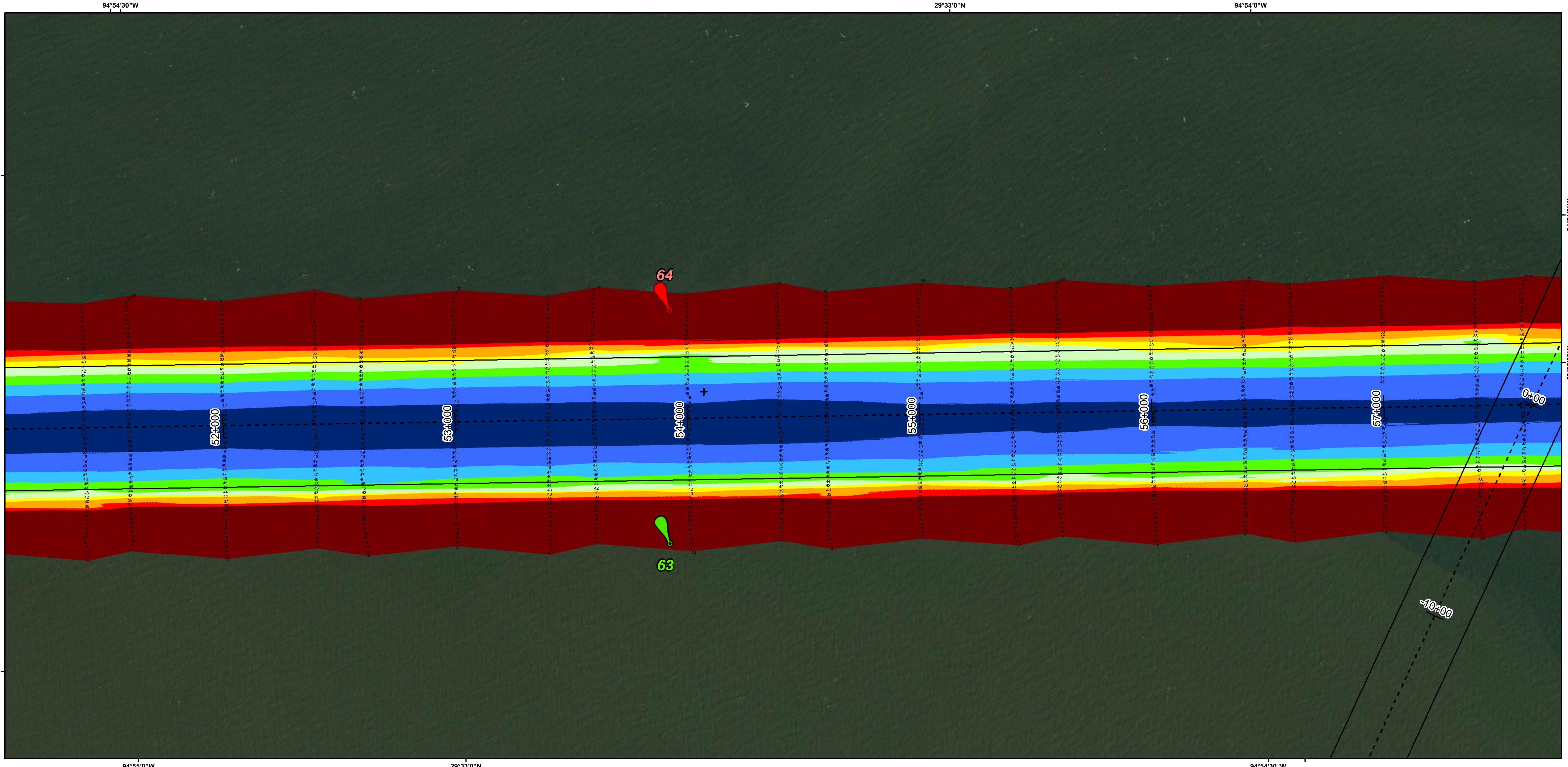
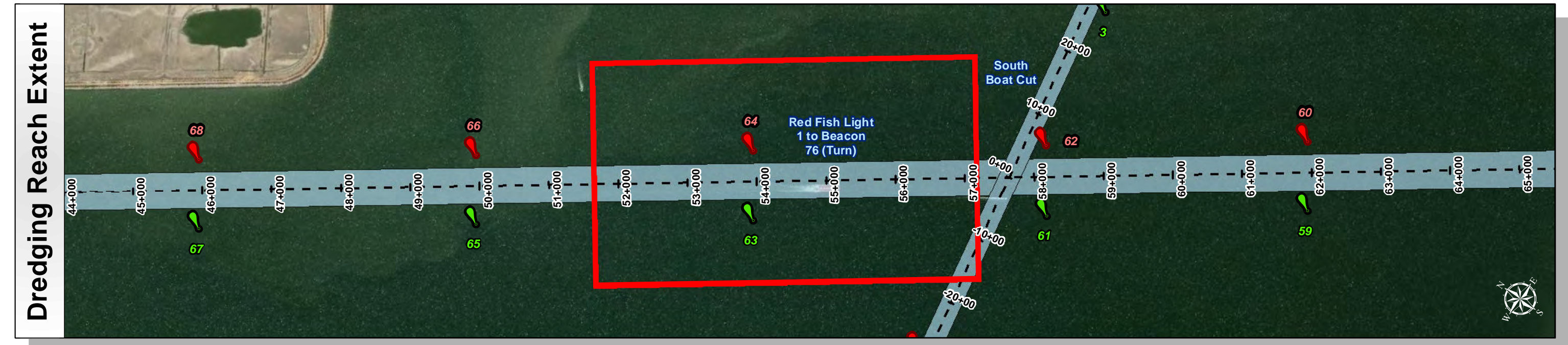
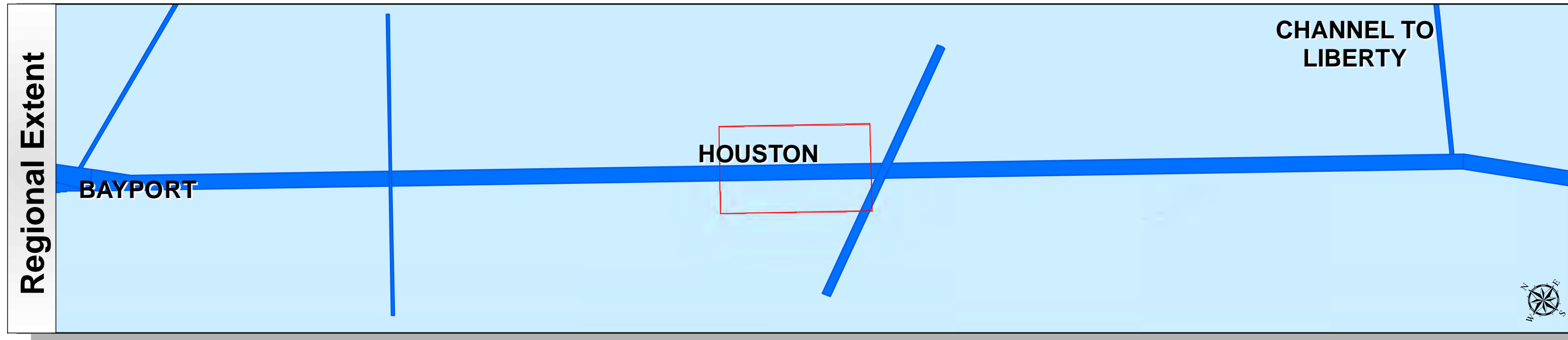
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station : 78+844 to 30+091
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Red Fish Light 1 to Beacon 76 (Turn)



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)

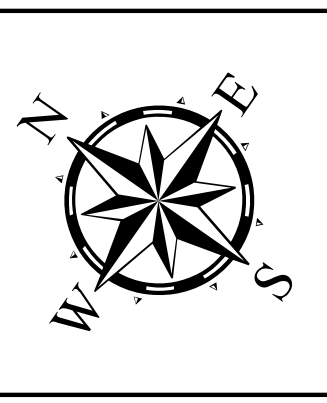
0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 50
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Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet
Projection: Lambert Conformal Conic /Datum: North American 1983

Dredging Reach Extent

0 0.25 0.5 1 Miles

Hydrographic Survey Extent

0 215 430 860 Feet

Survey Date(s): 07 October 2019	Authorized Depth: -46ft.
Page: 15 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Map:	Print Date: 10/8/2019
Maped by: MSAOX PAC	Additional Info:

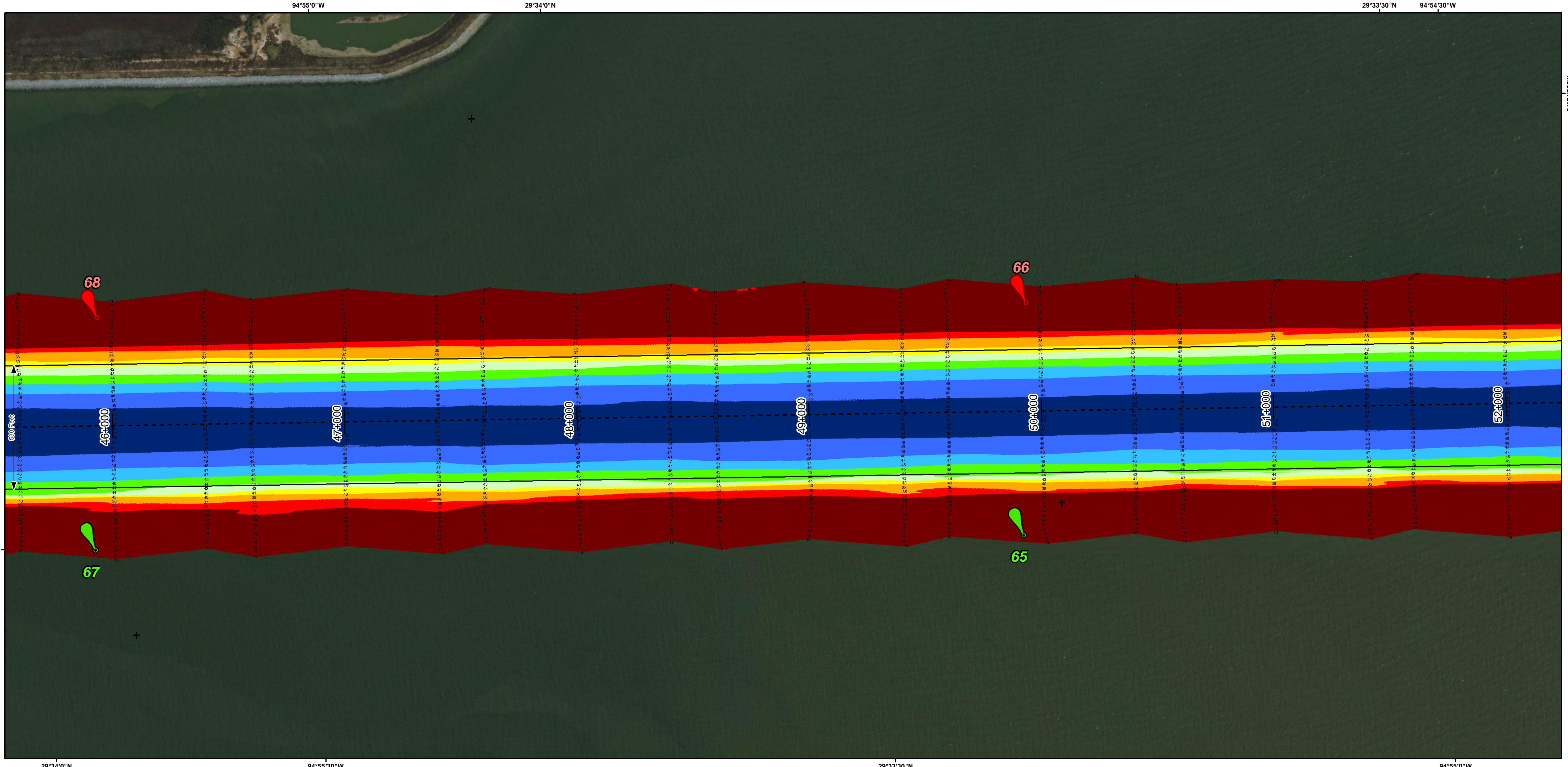
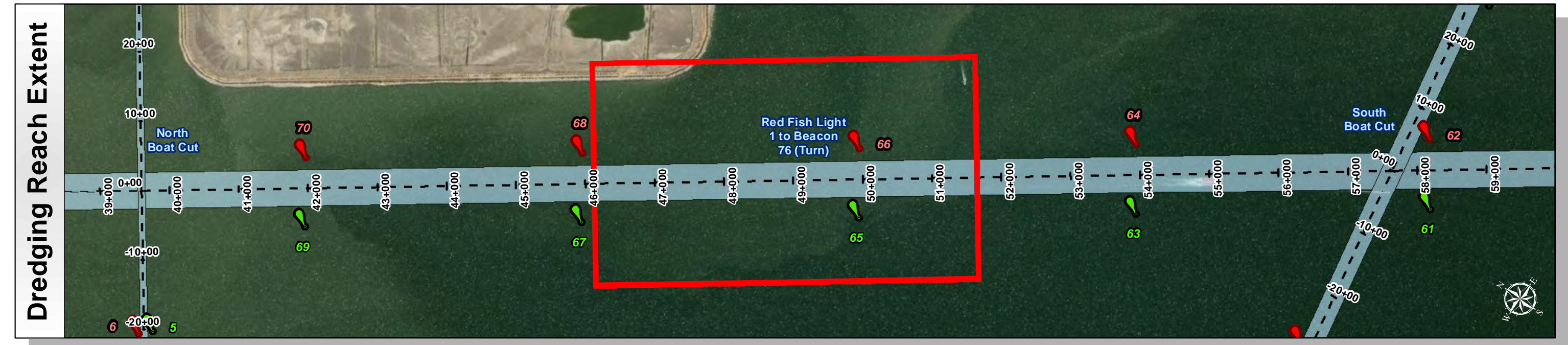
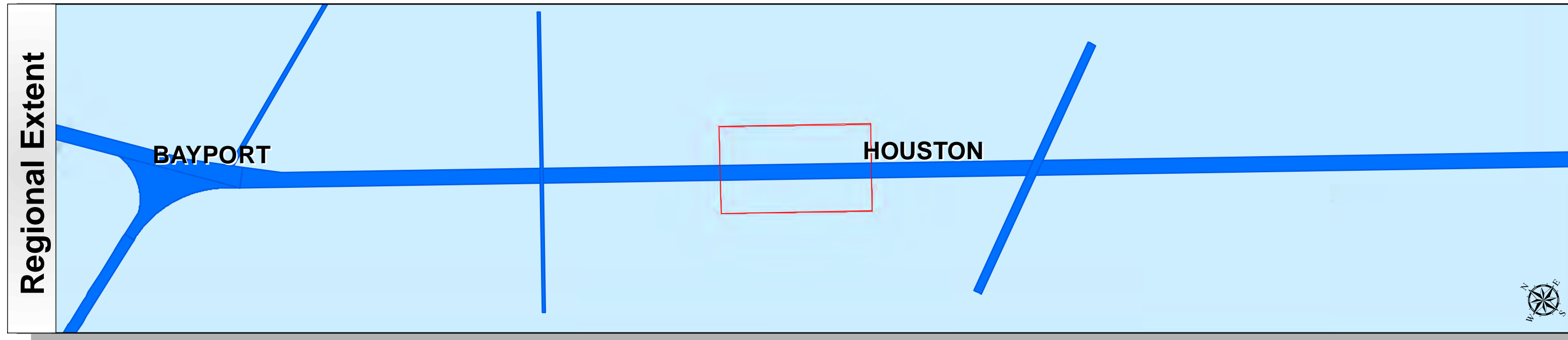
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station : 78+844 to 30+091
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Red Fish Light 1 to Beacon 76 (Turn)



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)

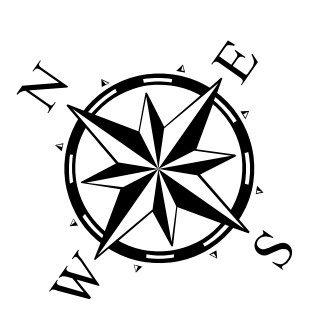
0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 50
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Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet
Projection: Lambert Conformal Conic /Datum: North American 1983

Dredging Reach Extent

Hydrographic Survey Extent

Survey Date(s): 07 October 2019	Authorized Depth: -46ft.
Page: 16 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
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Additional Info:	

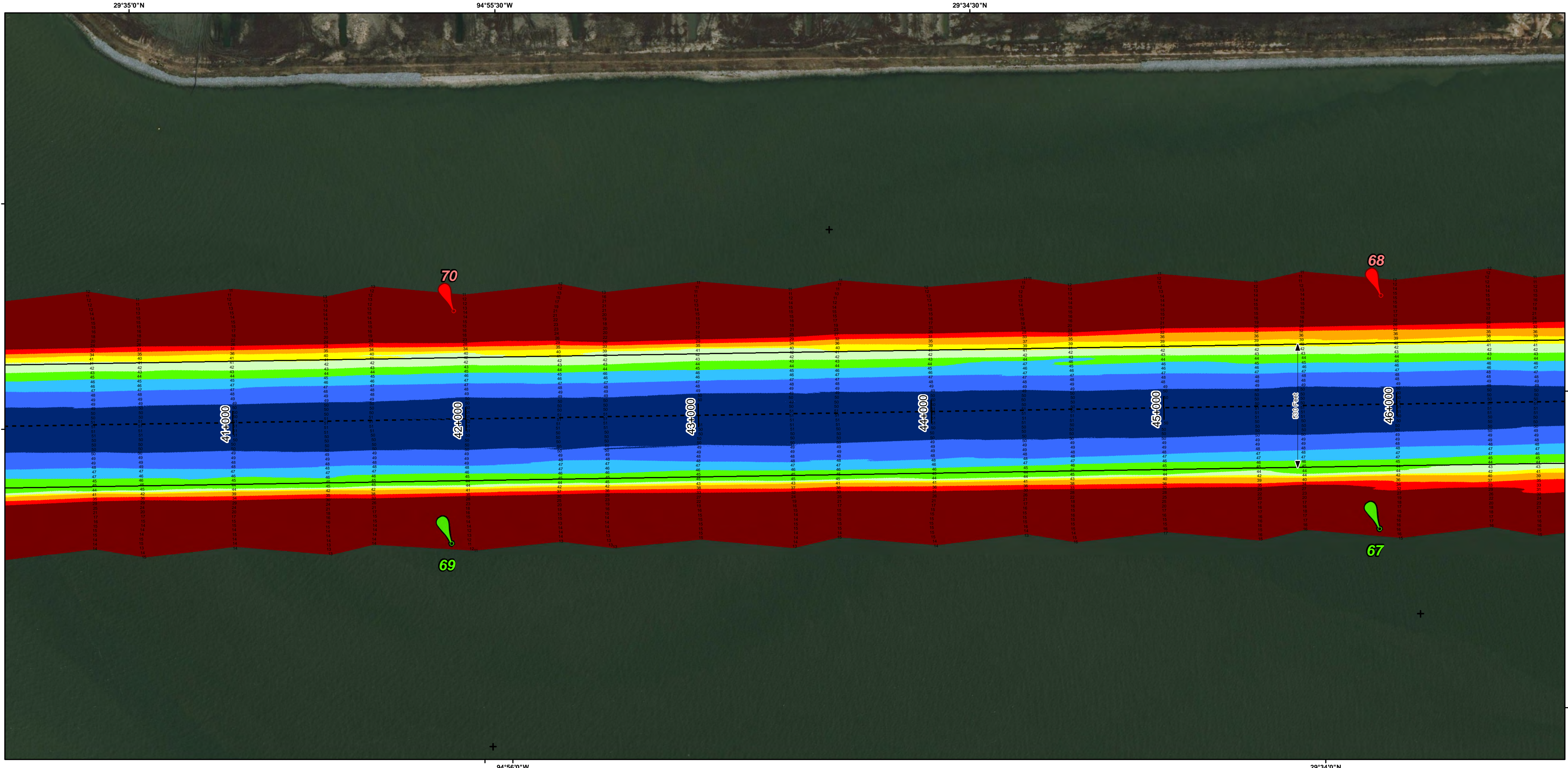
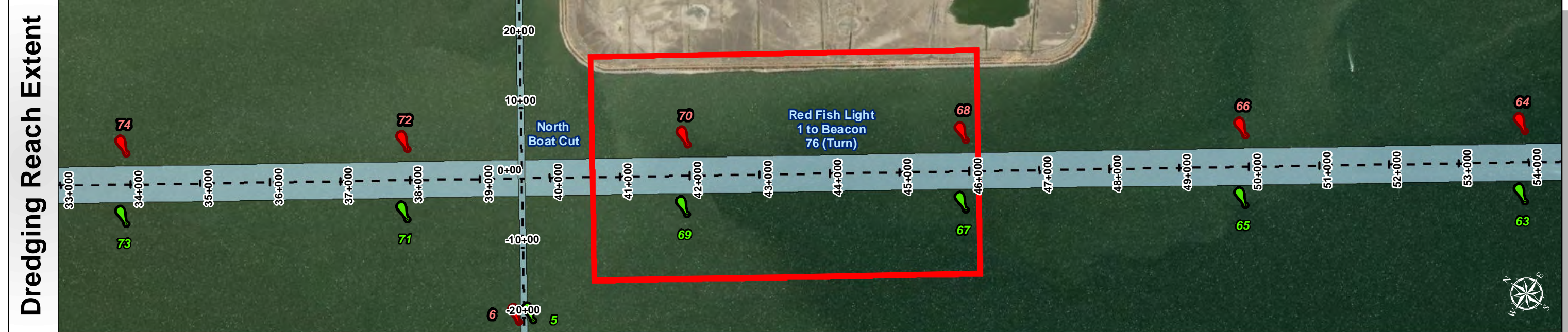
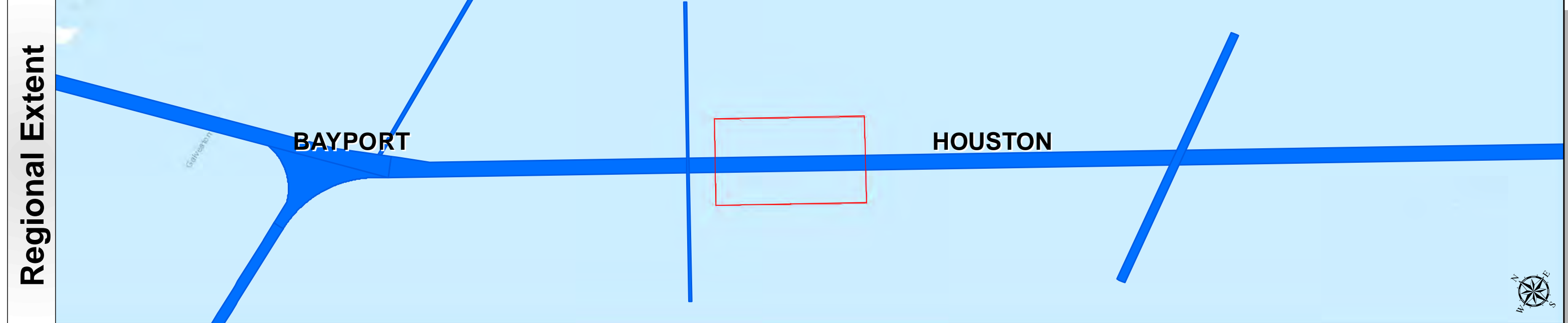
HYDROGRAPHIC SURVEY
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
GALVESTON, TEXAS

Station : 78+844 to 30+091
HOUSTON
HOUSTON, TEXAS

Houston Ship Channel: Red Fish Light 1 to Beacon 76 (Turn)



U.S. Army Corps of Engineers
Galveston District



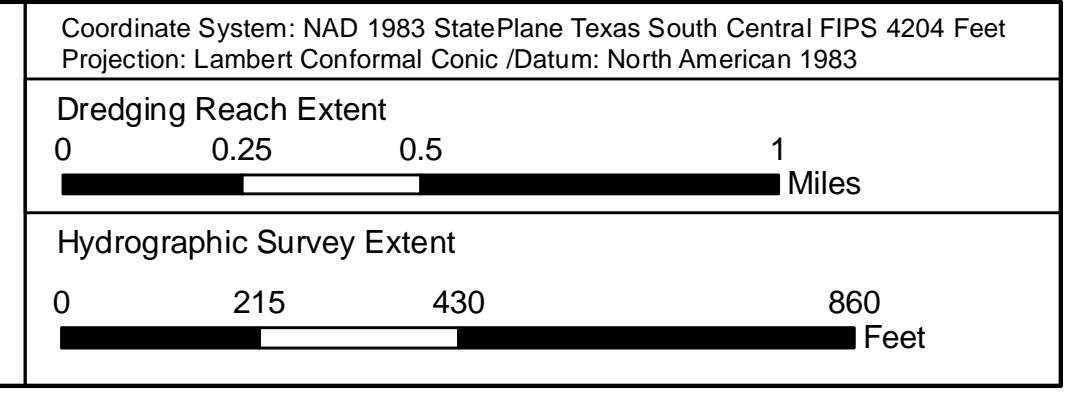
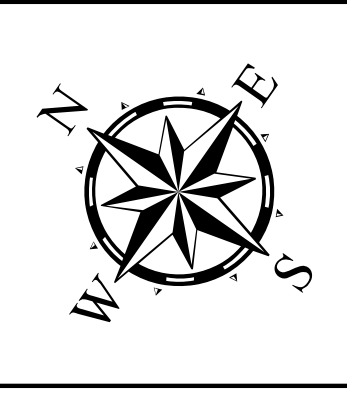
Channel Features	Aids to Navigation	MLLW
<ul style="list-style-type: none"> Channel Toe Channel Center Line Channel Station Lines Channel Dimensions 	<ul style="list-style-type: none"> Green Side Aids Red Side Aids Lights 	<p>NOAA Bathymetry (DREDGING REACH EXTENT)</p> <p>0 - 10 10 - 15 15 - 20 20 -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

NOTES:

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Page: 17 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
Mapped by: MSAOX PAC	Print Date: 10/8/2019
Additional Info:	

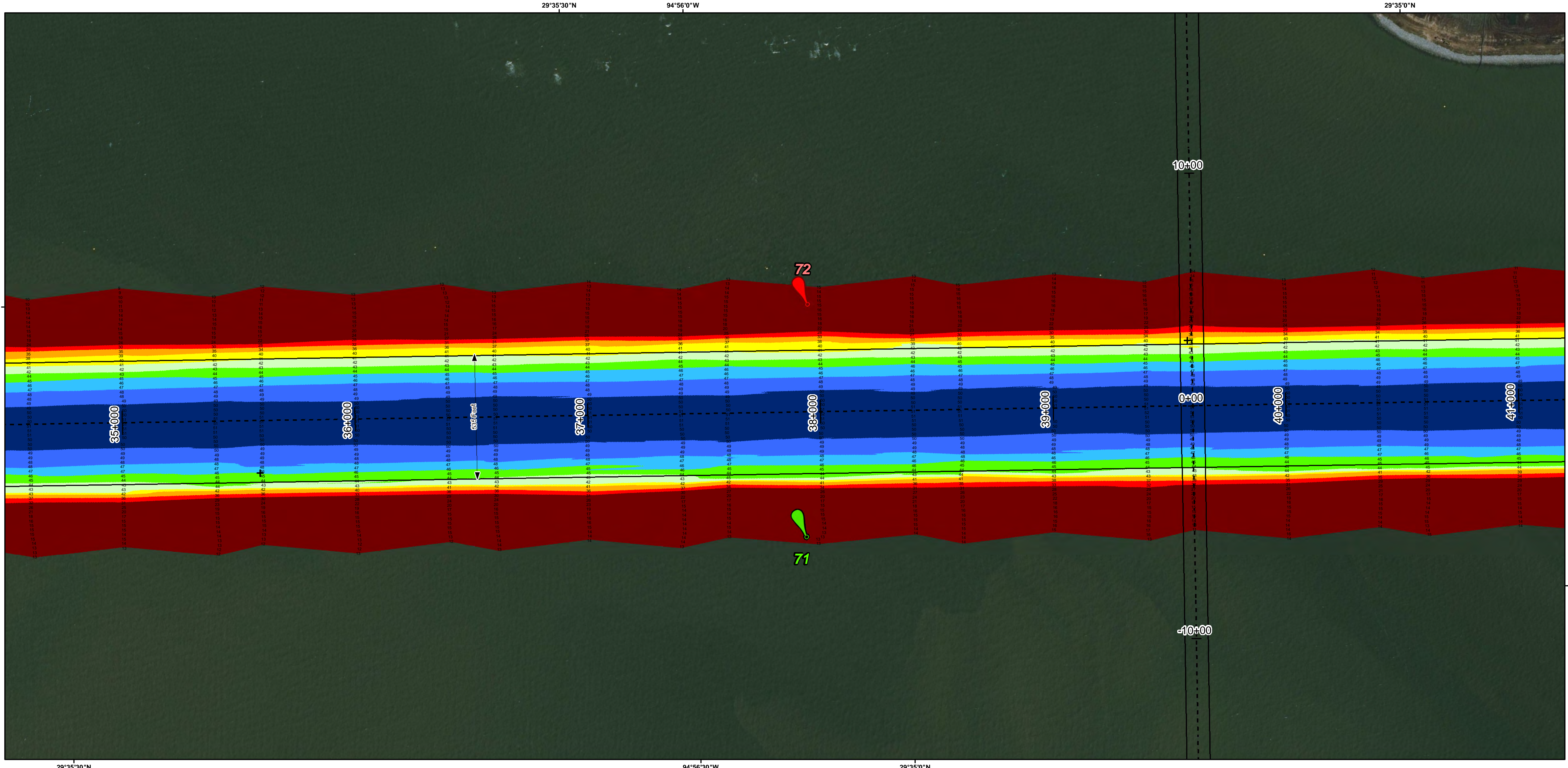
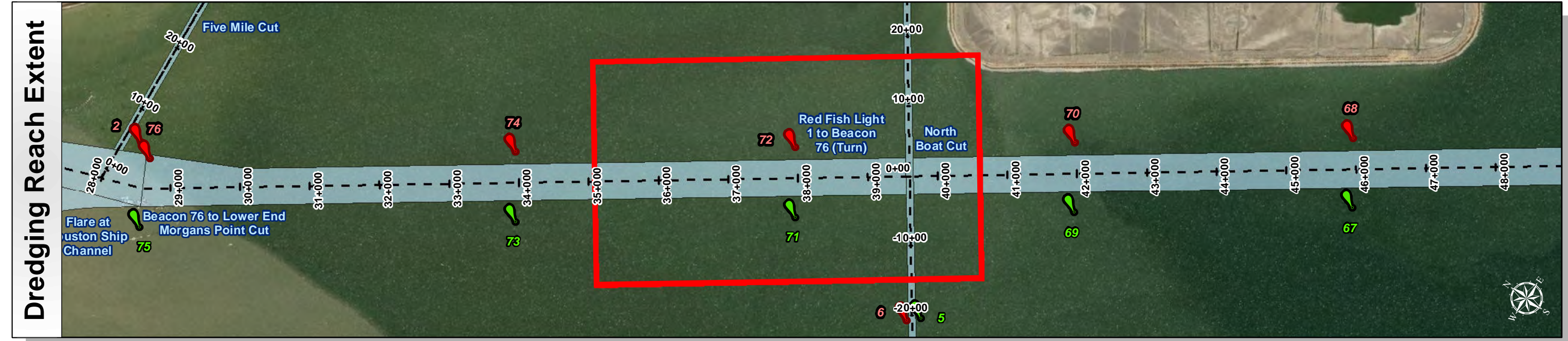
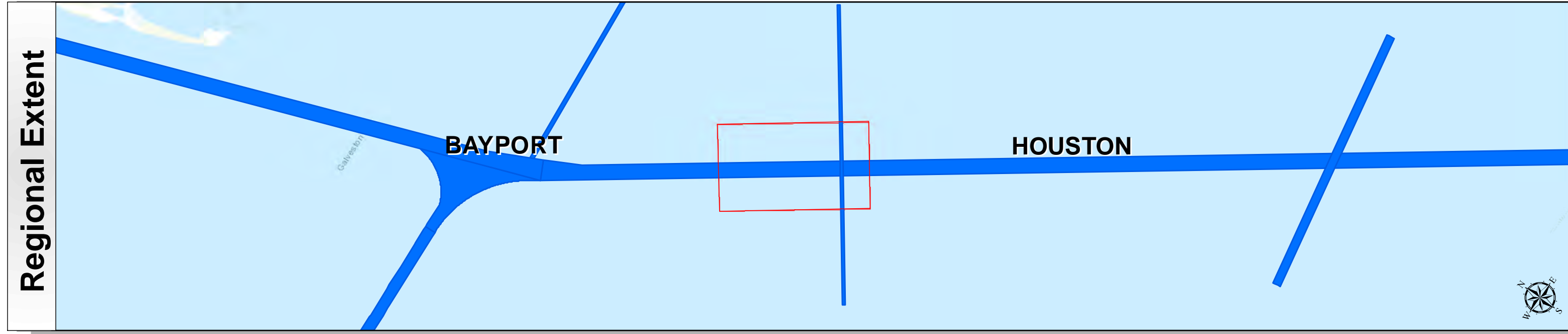
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U.S. Army Corps of Engineers
Galveston District



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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Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet
Projection: Lambert Conformal Conic /Datum: North American 1983

Dredging Reach Extent

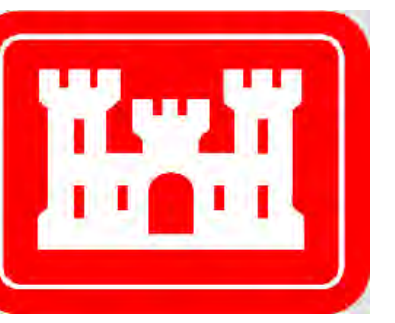
Hydrographic Survey Extent

Survey Date(s): 07 October 2019	Authorized Depth: -46ft.
Page: 18 of 61	Side Slope Ratio: (Rise : Run)
Scale: 1:2,500	Additional Imagery: © DigitalGlobe Inc.
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Additional Info:	

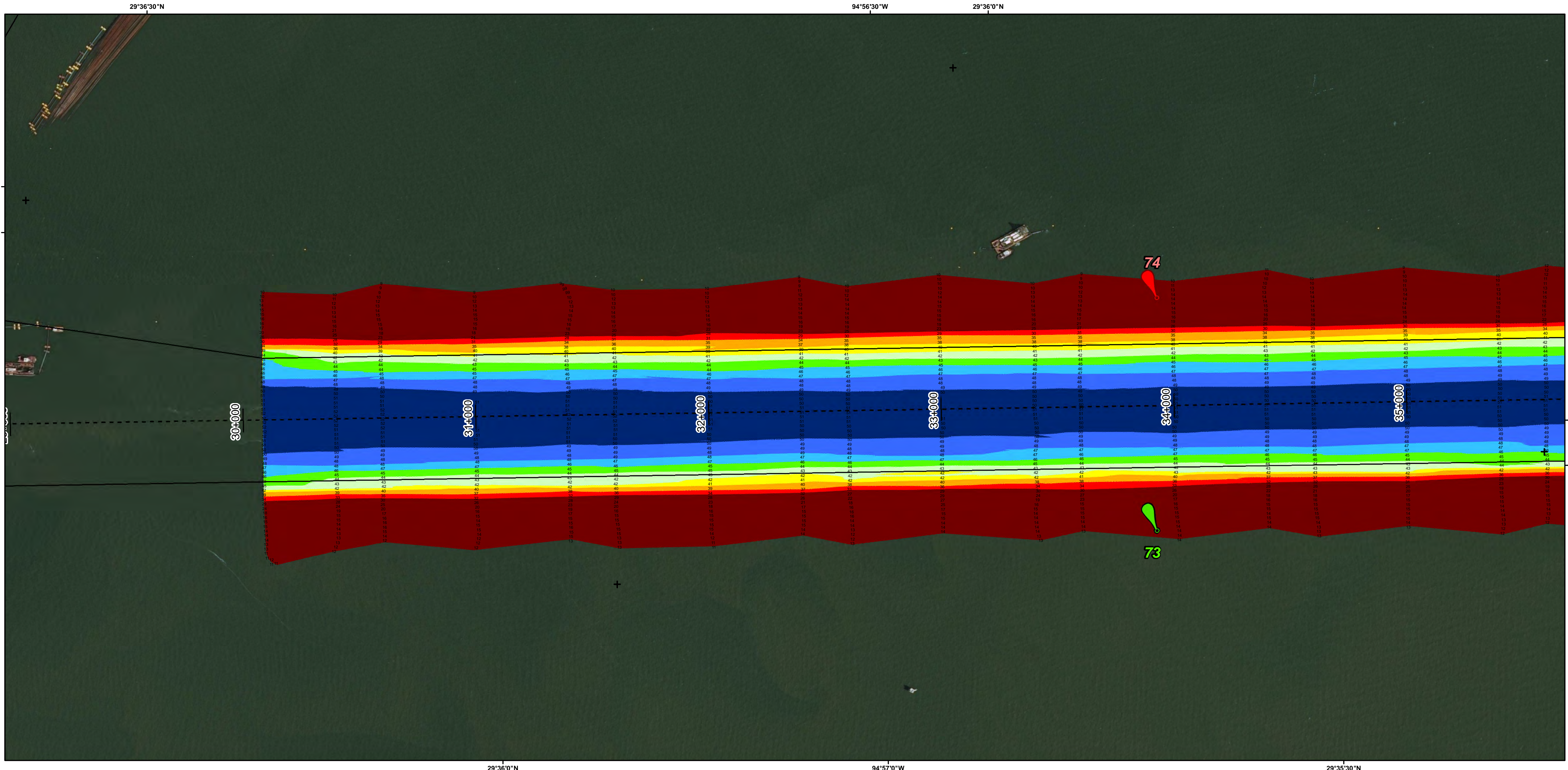
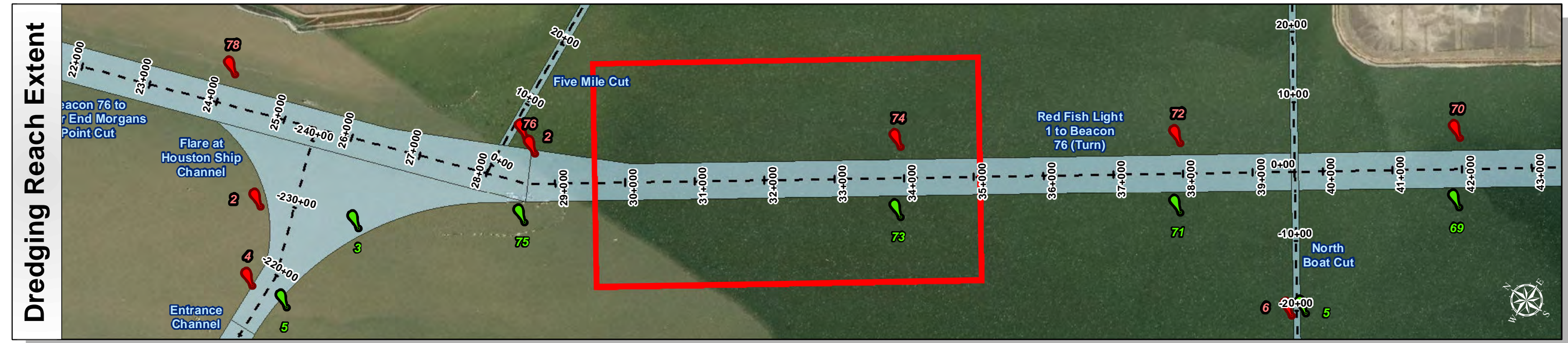
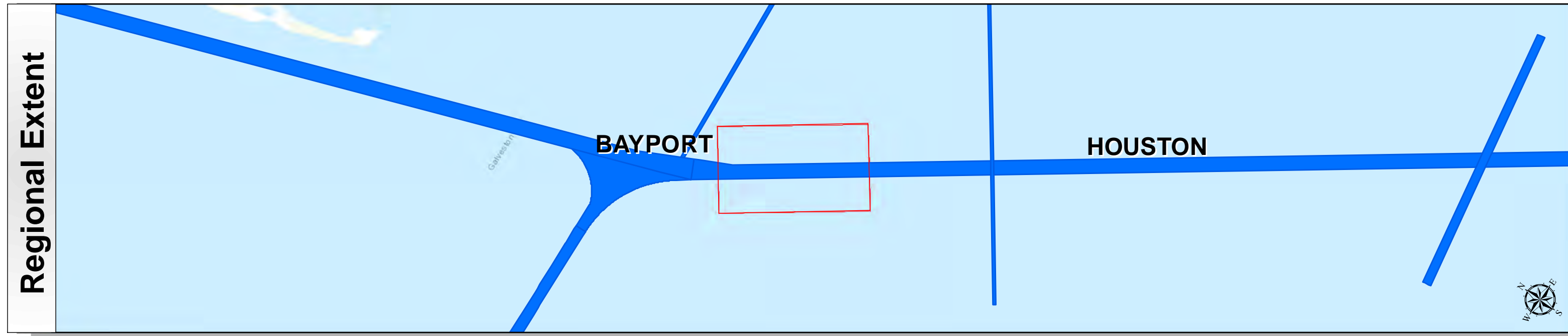
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Channel Features	Aids to Navigation	MLLW
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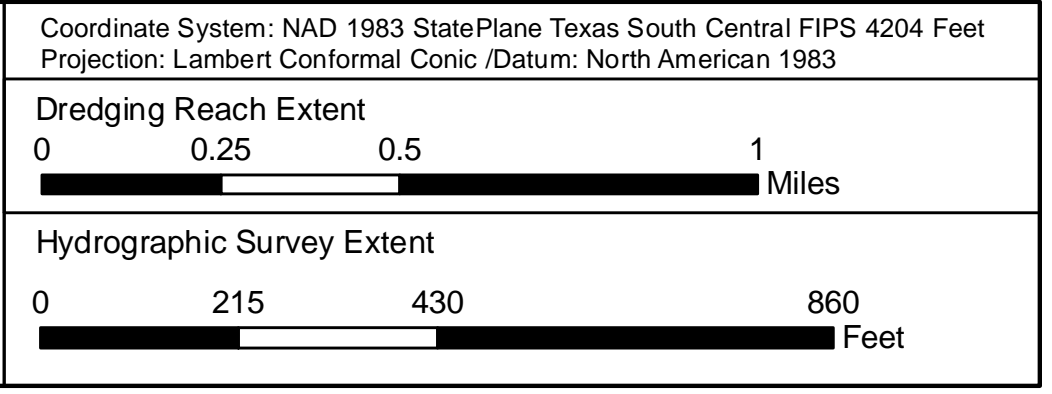
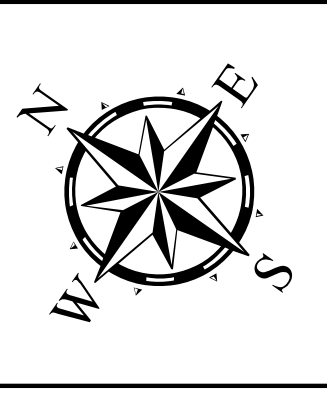
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