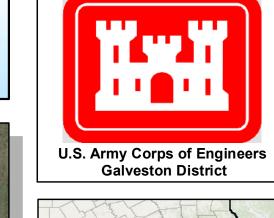


Houston Ship Channel: Lower End Morgans Point to Alexander Island **CEDAR BAYOU** TEXAS HOUSTON BARBOURS 103 HYDROGRA U.S. ARMY EN 95°1'30"W 95°1[']0"W 29°42'0"N Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Aids to Navigation | MLLW 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community **Channel Features** Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL 1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET. CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, Dredging Reach Extent Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, 2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM. Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: **- - -** Channel Center Line B. THIS PROJECT WAS DESIGNED BY THE GALVESTON DISTRICT OF THE U.S. ARMY HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/ CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) —— Channel Station Lines THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. 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 Bathymetry (DREDGING REACH EXTENT) ← Channel Dimensions

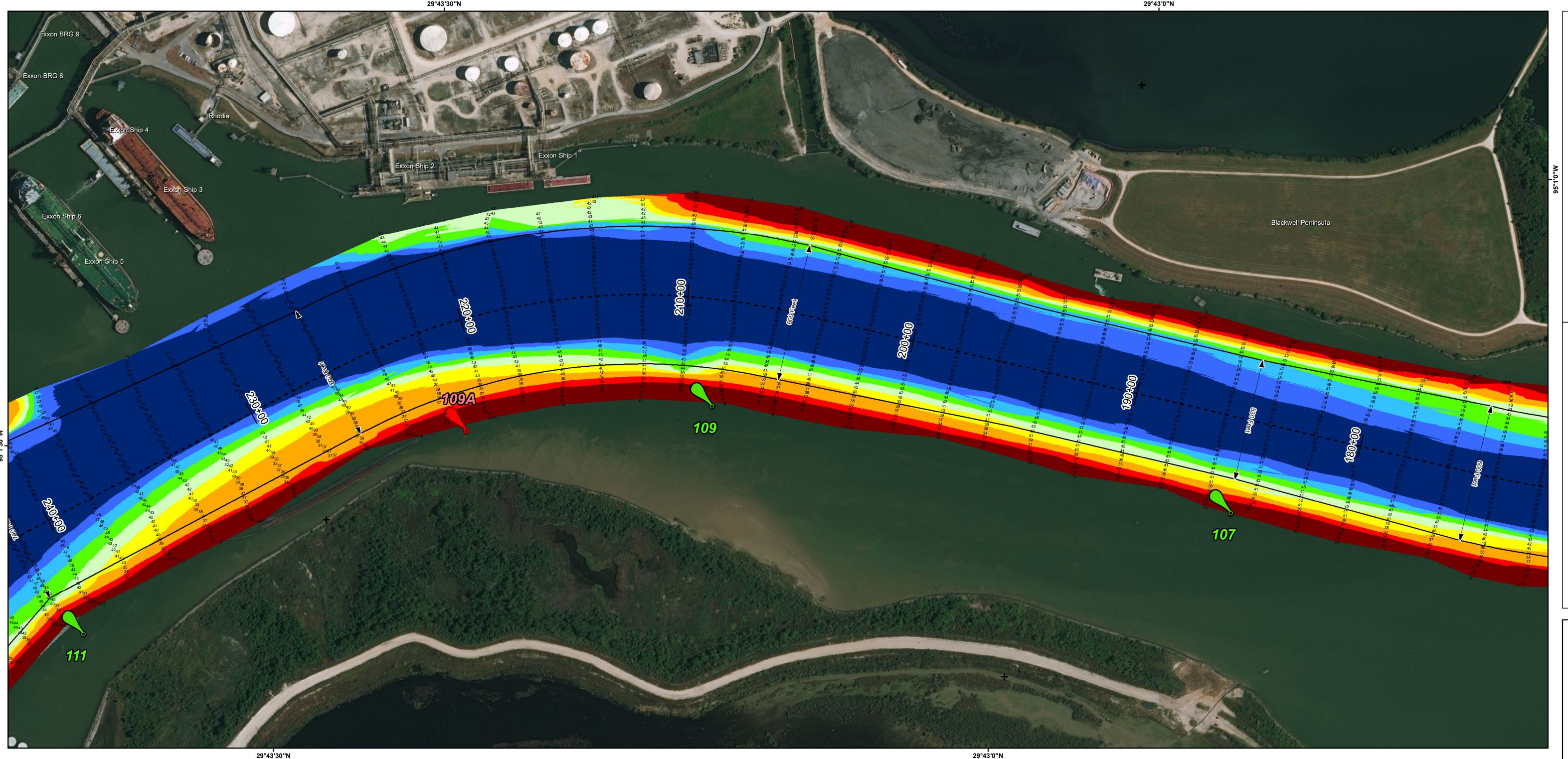
Houston Ship Channel: Lower End Morgans Point to Alexander Island

BARBOURS









HYDROGRAF U.S. ARMY ENG CORPS OF

Projection: Lambert Conformal Conic /Datum: North American 1983 Dredging Reach Extent

Esri, Garmin, GEBCO, NOAA NGDC, and other contributors

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User

29°43'0"N

Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Hydrographic Survey Extent

Channel Features Channel Toe **- - -** Channel Center Line —— Channel Station Lines

← Channel Dimensions

Aids to Navigation | MLLW NOAA Bathymetry (DREDGING REACH EXTENT)

- 1. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET.
- B. 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.

2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM.

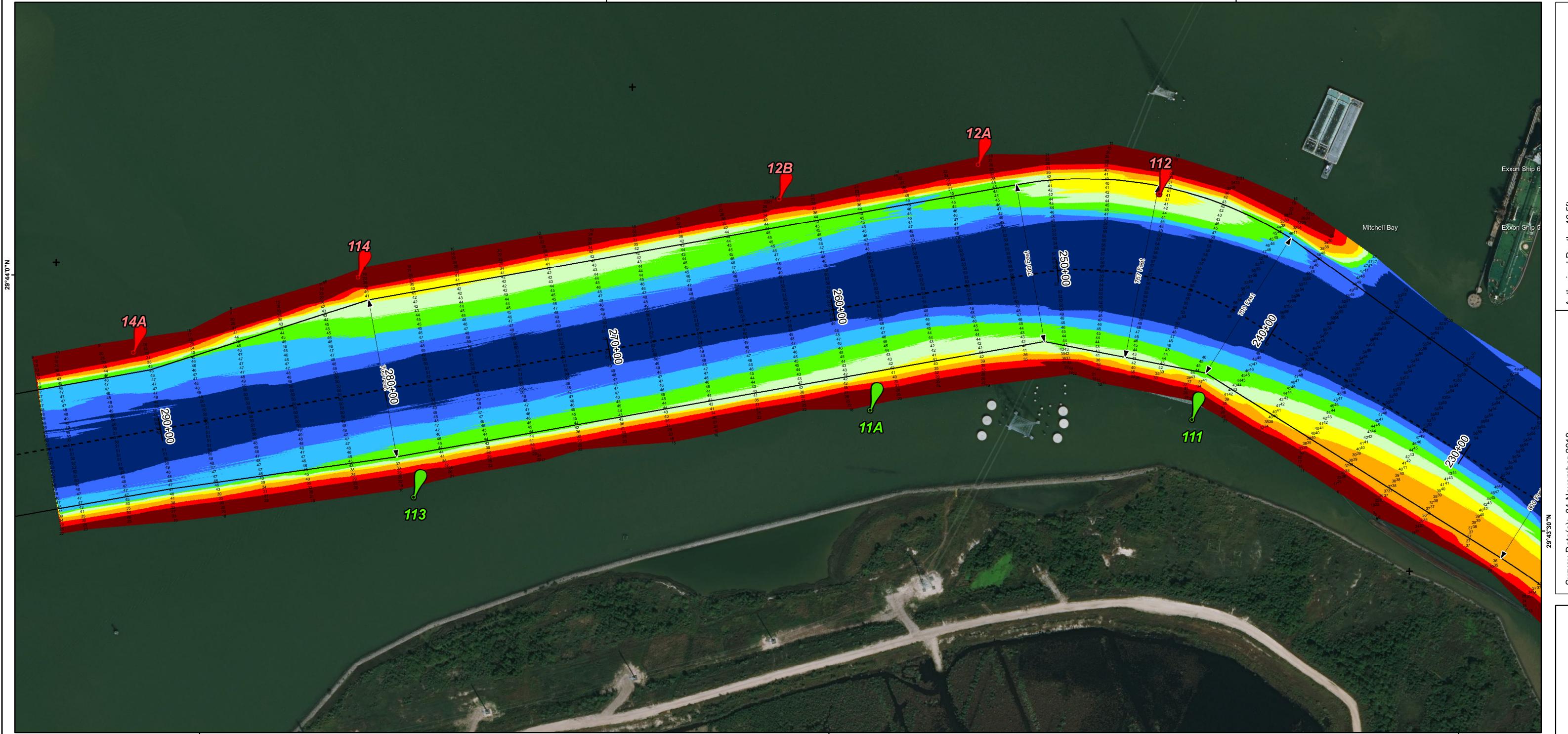
- 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325
- 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/
- 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.

Houston Ship Channel: Lower End Morgans Point to Alexander Island





HOUSTON



HYDROGRAF U.S. ARMY ENG CORPS OF

Channel Features Channel Toe

JACINTOPORT

- - Channel Center Line —— Channel Station Lines ← Channel Dimensions

95°2'30"W Aids to Navigation | MLLW

NOAA Bathymetry (DREDGING REACH EXTENT)

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. B. 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.

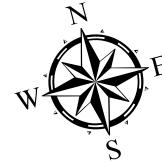
4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325

95°2[']0"W

- 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/
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Esri, Garmin, GEBCO, NOAA NGDC, and other contributors



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