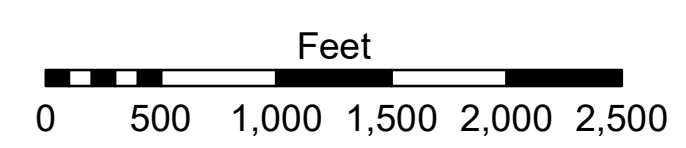
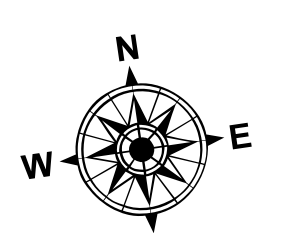


LEGEND

--- Federal Navigation Channel	○ Cable Area	□ Borrow Area	■ 0' and above
— Federal Navigation Center Line	▭ Placement Area	● Shoalest Sounding**	■ 0' to -5'
— As-built Pipeline/Cable	⊠ Anchorage Area	☆ Beacon, General	■ -5' to -10'
⋯ Unconfirmed Pipeline/Cable	⊗ Obstruction Point	★ Red Navigation Buoy	■ -10' to -20'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	■ -20' to -30'
			■ -30' to -35'
			■ -35' to -40'
			■ -40' to -45'
			■ -45' and below



LWRP: 1.9
 Gage Reading: BR:24.0D:15.3 USED: 20.1 NGVD
 Sea Conditions: SMOOTH
 Vessel Name: OB189
 Survey Type: AD
 Sounding Frequency***: HIGH

NOTES:
 Horizontal Coordinate System:
 North American Datum of 1983 (NAD83), projected to the State Plane
 Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.
 Vertical Datum:
 Soundings are shown in feet and indicate depths below Low Water Reference Plane 2007 (NGVD).
 Distances on the Mississippi River, above and below Head of Passes are shown
 at 1 mile intervals.
 The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE crew.
 2015 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.
 Reference is N.O.A. Navigation Chart No. 11370.
 ** Shoalest Sounding per Quarter per Reach.
 *** High frequency (200 kHz) survey data represents the first signal return at a sounding
 location and will include suspended solids, known as "fluff", if present. Low frequency (20 kHz)
 survey data normally penetrates through this "fluff" layer to depict elevations of consolidated bottom
 material. Low frequency accuracies may vary depending on channel conditions and fathometer
 settings.



ACCESS LIMITS
 Access Constraints: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were provided, and that the user is responsible for the results of any use of the data. The application of the data for other than its intended purpose is not warranted. The recipient may not transfer these data to others without also transferring this Disclaimer. The information depicted on this map represents the results of a survey conducted on or about the date shown. The information is considered to represent the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS NEW ORLEANS DISTRICT		
Submitted:	Surveyed By: DS/JH	Plotted By: AO
Recommended:	Chief, Survey Section	Checked By: AC
Approved:	Chief, Waterways Maintenance Section	

MISSISSIPPI RIVER - B.R. TO GULF
GRANADA CROSSING
MD_10_GRA_20180709_AD
09 July 2018

Sheet Reference Number
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