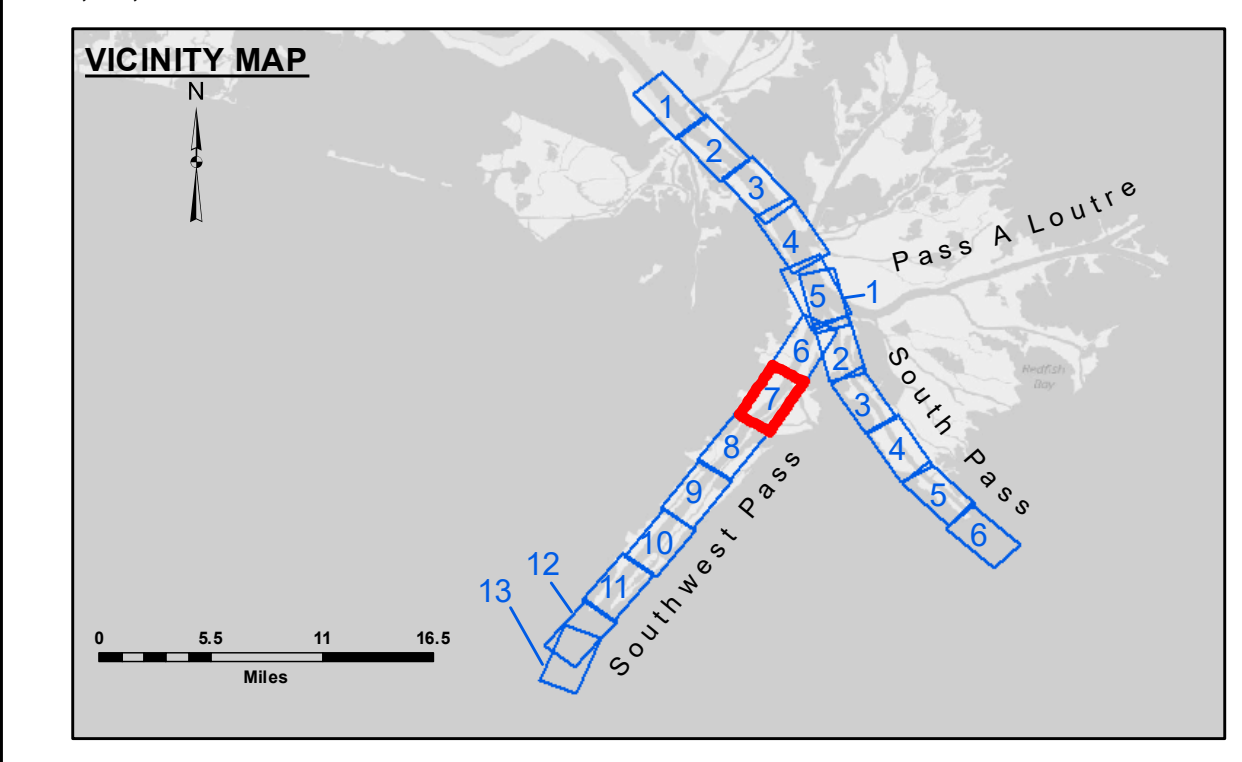
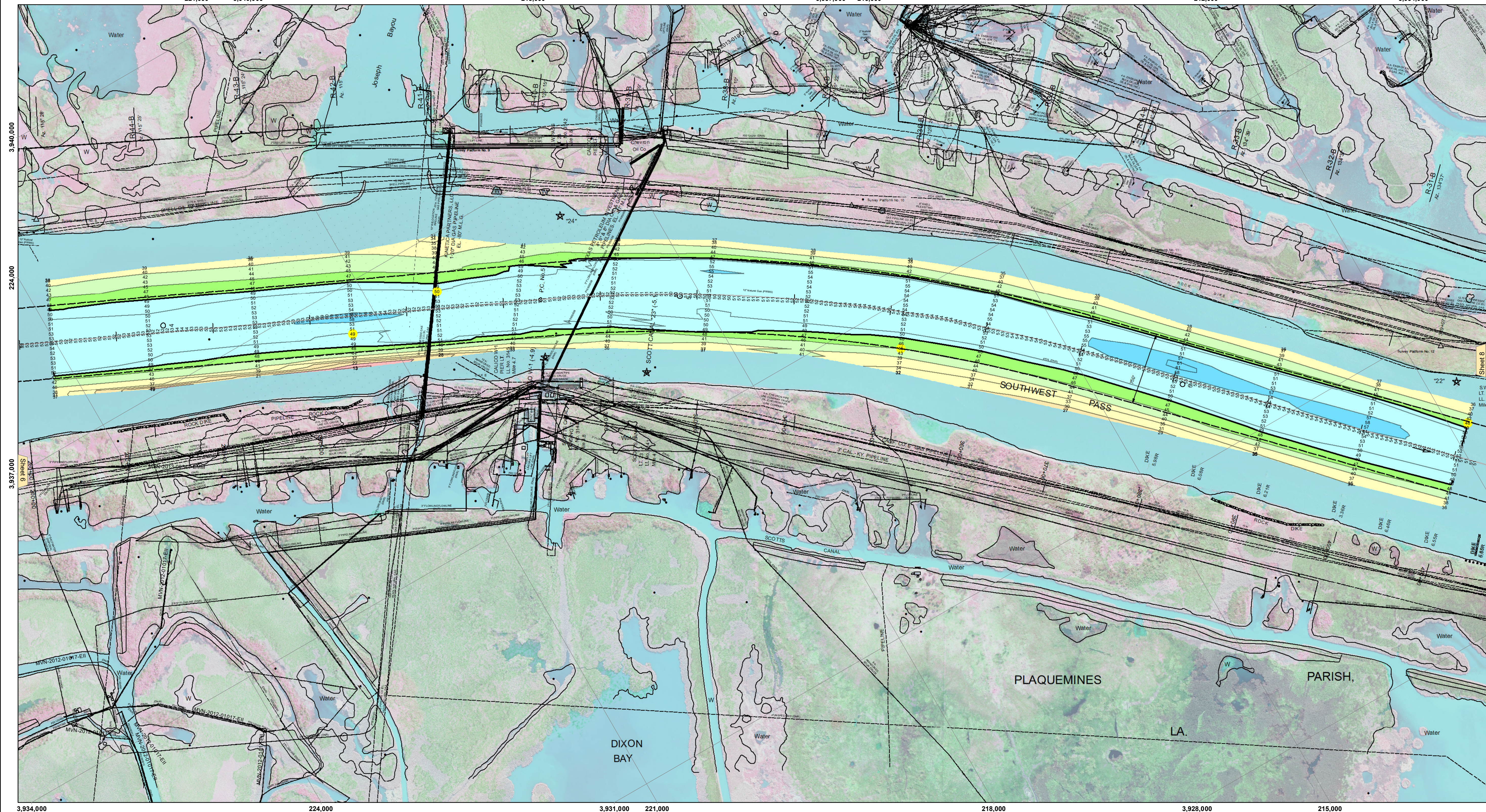
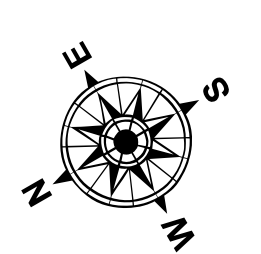


221,000 3,940,000 218,000 3,937,000 215,000 212,000 3,934,000

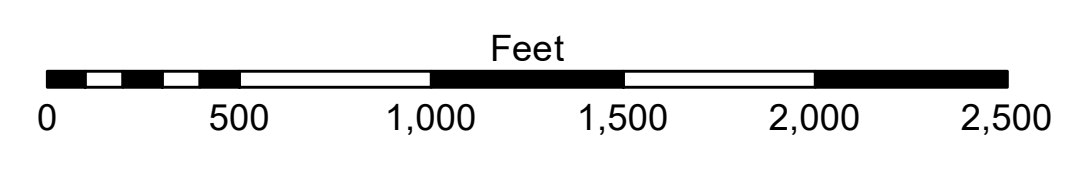


**LEGEND**

--- Federal Navigation Channel	○ Cable Area	□ Borrow Area	■ -10' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	■ -10' to -20'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	■ -20' to -30'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	■ -30' to -40'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	■ -40' to -45'
			■ -45' to -48.5'
			■ -48.5' to -55'
			■ -55' and below



Gage Reading: 0.60 MLLW @ HEAD OF PASSES @ 1100  
 Sea Conditions: CALM  
 Vessel Name: JOHN BOPP  
 Survey Type: CONDITION, SB  
 Sounding Frequency\*\*\*: LOW



**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 Mean Lower Low Water (MLLW, 07-11). Datum Relationships for gage 01545 as of July 2015: 0.0' NAVD86 = -0.18' MLLW = 3.32' MLG  
 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.  
 2016 Aerial Photography data source: Precision Aerial Reconnaissance, LLC (1998 DOQQ in green)  
 Reference is N.O.A. Navigation Chart No. 11361.  
 \*\* 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 (24 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.



**DISTRIBUTION LIABILITY:** The data represents the results of data collection/processing for a specific US Army Corps of Engineers project. It is only valid for its intended use, content, time and accuracy specifications. The user is responsible for the results. The user shall not be held liable for any damages or losses resulting from the use of this data for other than its intended purpose.  
 Data Constants: Hydrographic survey data is subject to change rapidly due to several factors including but not limited to dredging, channel migration, and other factors. The user is responsible for the hydrographical conditions which develop after the date of the survey. The user shall not be held liable for any damages or losses resulting from the use of this data for other than its intended purpose.  
 The information depicted on this map represents the results of a survey conducted on the date indicated. It is not to be considered as a representation of the general condition existing at that time.

U.S. ARMY CORPS OF ENGINEERS  
NEW ORLEANS DISTRICT

Submitted:	Surveyed By: JH & MGF
Recommended:	Plotted By: RSL
Approved:	Checked By: MSK

**MISSISSIPPI RIVER - B.R. TO GULF  
 SOUTHWEST PASS - SHEET 7  
 SW\_07\_SWP\_20181210\_CS  
 10 December 2018**

**Sheet Reference Number  
 7 of 13**

Revision Number: 3.13-20160811