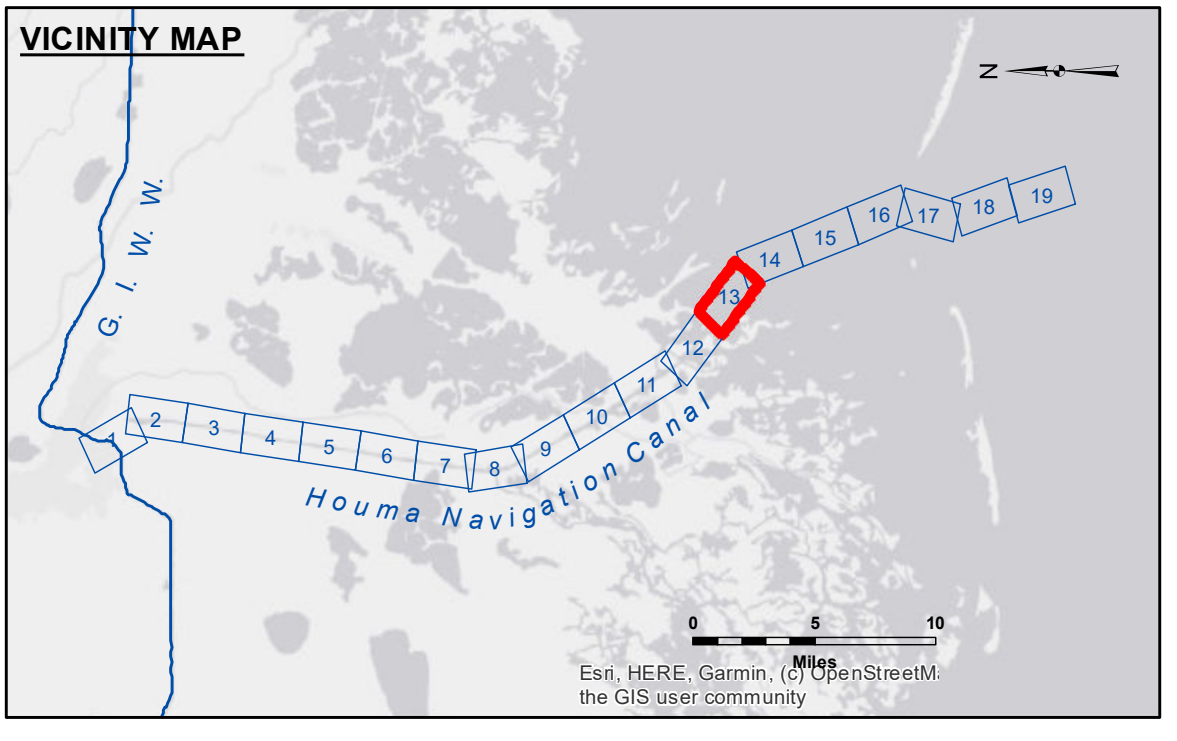


DISCLAIMER
 The information depicted on this map represents the results of a survey conducted by the U.S. Army Corps of Engineers. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use. The user is responsible for the accuracy, completeness, and reliability of the data for its intended use.

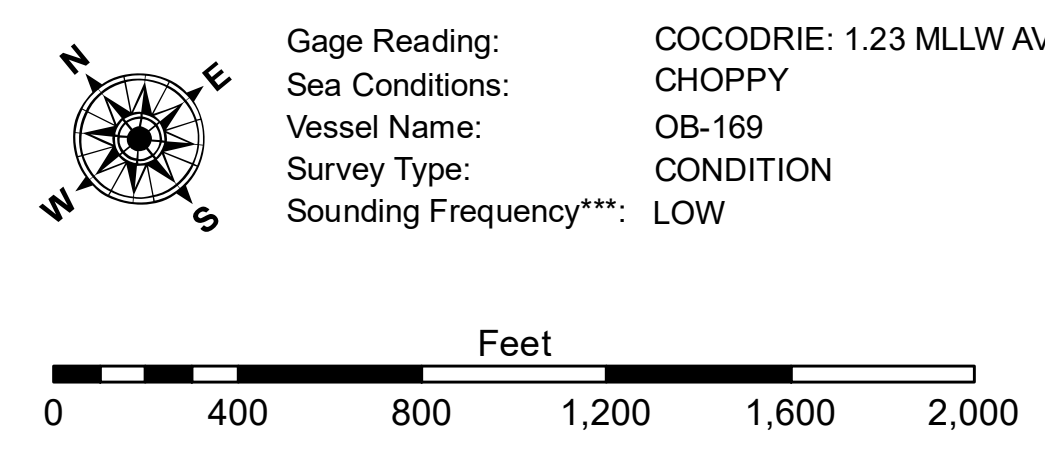
Submitted:	SP-SK
Recommended:	JH
Approved:	JH

**HOUMA NAVIGATION CANAL
 BAY CHANNEL
 HN_13_BAY_20230404_CS
 04 April 2023**



LEGEND

--- Federal Navigation Channel	● Cable Area	3 Fluff Thickness (feet)*	-8' and above
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**	-8' to -10'
— As-built Pipeline/Cable	□ Anchorage Area	★ Beacon, General	-10' to -12'
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy	-12' to -16'
— Project Depth Contour	⚓ Wrecks-Submerged	◆ Green Navigation Buoy	-16' to -19'
			-19' and below



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 Datum (MLLW). Datum Relationships for 88455 as of September 2022:
 0.0' NAVD88 (OPUS 2019) = 0.40' MLLW (2012-2016) = 1.40' MLG
 Distances on the Houma Nav. Canal are shown at 1 mile intervals.
 The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE survey crews.
 2022 Aerial Photography data source: Optimal GEO, Inc. (1998 DOQQ Imagery in green)
 Reference is N.O.A. Navigation Chart No. 11355.
 * Difference between high and low frequency elevations where greater than 1.0'.
 ** 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.

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