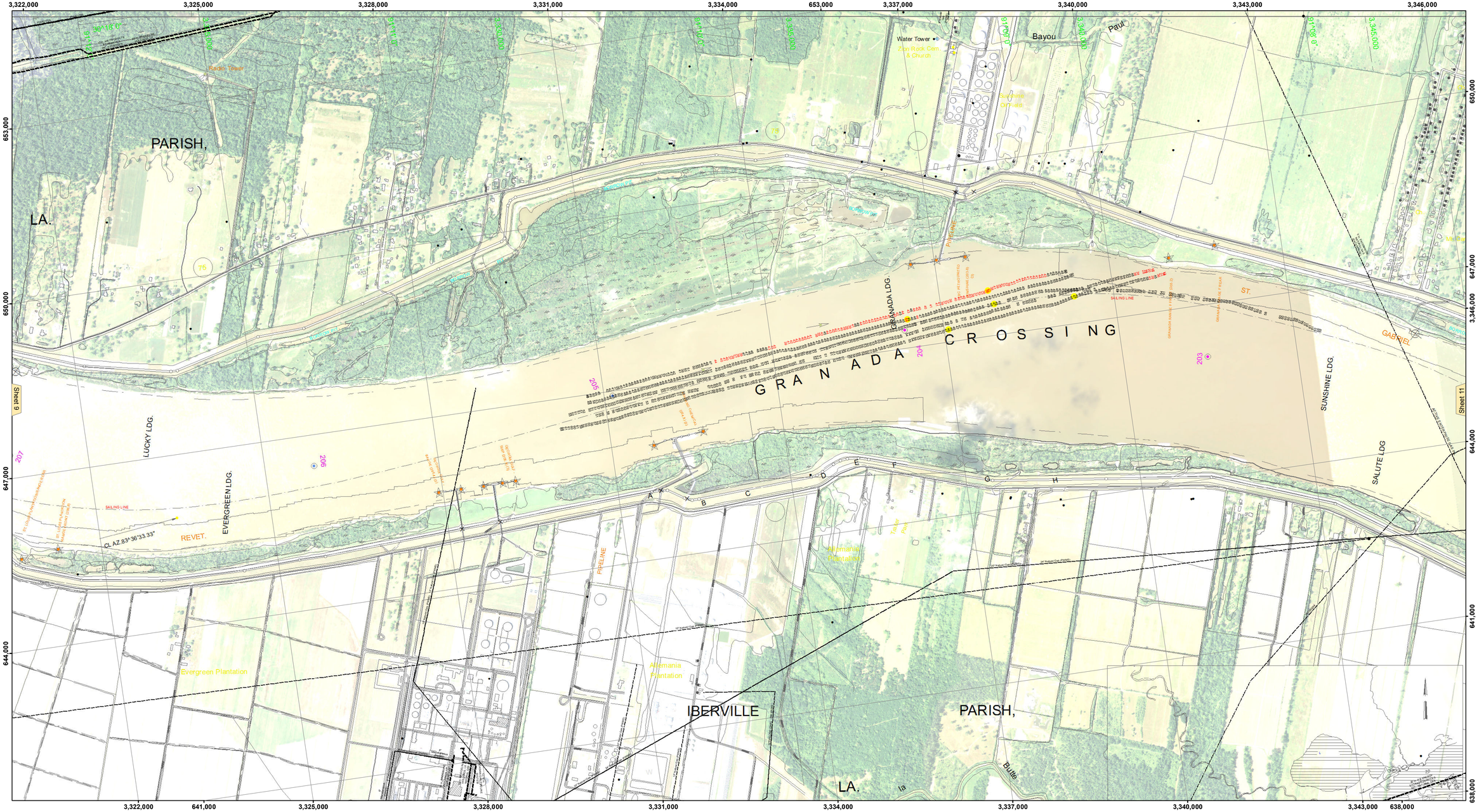

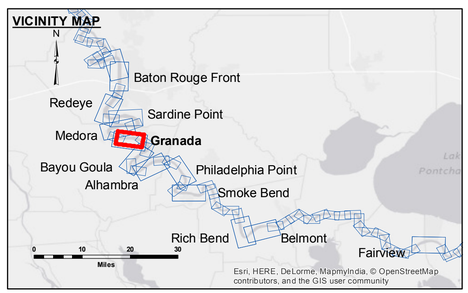

LEGEND

- Federal Navigation Channel
- Federal Navigation Center Line
- As-built Pipeline/Cable
- Unconfirmed Pipeline/Cable
- Project Depth Contour
- Cable Area
- Placement Area
- Anchorage Area
- Obstruction Point
- Wrecks-Submerged
- Borrow Area
- Shoalest Sounding**
- Beacon, General
- Red Navigation Buoy
- Green Navigation Buoy
- 0' and above
- 0' to -5'
- -5' to -10'
- -10' to -20'
- -20' to -30'
- -30' to -35'
- -35' to -40'
- -40' to 45'
- -45' and below

N W E S

Feet
0 500 1,000 1,500 2,000 2,500

LWRP:	1.9
Gage Reading:	BR:9.17 D:6.4 USED:7.90 NGVD
Sea Conditions:	CALM
Vessel Name:	M/V OB189
Survey Type:	CONDITION
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.

2010 Aerial Photography data source: NAIP, USDA-FSA-APFO Aerial Photography Field Office.

Reference is N.O.A.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.

US Army Corps of Engineers
District: CEMVN

DISCLAIMER
Access Constraints: The United States Government furnishes these data and has no obligation to provide updates on the information and the data furnished. The United States shall be under no liability whatsoever to any person by reason of any use made thereof. It is agreed that in consideration for the data the recipient fully agrees not to represent these data to anyone as other than the best available data of the United States and to indemnify these data to others without also transferring this Disclaimer.

The information depicted on this map represents the results of a survey conducted on the date indicated and can only be considered as represent the general conditions existing at that time.

Distribution Liability: The data represents the results of data collected by the U.S. Army Corps of Engineers for navigation activity and indicates the general existing conditions. As such it is only valid for its intended use, content, time and accuracy of the data. The U.S. Army Corps of Engineers assumes no liability of any of the application of the data for other than its intended purpose.

Data Constraints: Hydrographic survey data is subject to change due to environmental factors such as storms and navigation activity and natural shoaling and scouring processes. The U. S. Army Corps of Engineers accepts no responsibility for changes in the data that occur after the survey date indicated on this publication. This data is intended for U. S. Army Corps of Engineers' internal use. Private business should not rely solely upon it.

U.S. ARMY CORPRS OF ENGINEERS
NEW ORLEANS DISTRICT

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Recommended: Chief, Survey Section	Plotted By: BTD
Approved: Chief, Waterways Maintenance Section	Checked By: MSK

MISSISSIPPI RIVER - B.R. TO GULF
GRANADA RECON
MR_10_GRA_20151030
30 October 2015

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