

NOTES: THE SOUNDINGS INDICATED HEREON ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10 FOOT BY 10 FOOT AREA CENTERED ON THE TEXT. DERIVED FROM A 1 FOOT BY 1 FOOT AVERAGE DATASET AT CELL CENTER. THIS MAP SHOULD NOT BE USED FOR CLEARANCE OR VOLUME COMPUTATIONS. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.

ALL DEPTHS AND PROJECT DEPTHS ARE REFERRED TO LOW WATER DATUM ELEVATION 577.5 FT. ABOVE MEAN WATER LEVEL, I.G.L.D. 1985.

GRIDS SHOWN ARE BASED ON THE NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, CENTRAL ZONE (2112), LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM, US SURVEY FOOT.

PROJECT DEPTHS: 30.0' 29.5' and 29.0' FOR MAIN CHANNEL.
18.0' TURNING BASIN (AS NOTED)

POSITION SYSTEM: Applanix POSMV
CORRECTIONS: MARINESTAR GNSS G2
SOUNDER: R2SONIC 2024
SOFTWARE: HYPACK 2021
VESSEL: LAUNCH 3058

WATER LEVEL ELEVATIONS OBTAINED DURING THE SURVEY WERE FROM THE NOAA GAGE STATION.

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS



DISCLAIMER: The data presented in this report is the result of data collection and processing for a specific purpose. The U.S. Army Corps of Engineers activity and indicates the general existing conditions. The user is responsible for the accuracy, completeness, and reliability of the data for other than its intended purpose. The user is responsible for the accuracy, completeness, and reliability of the data for other than its intended purpose.

DISCLAIMER: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that they are not to be used for any purpose other than that for which they were prepared, or implied concerning the accuracy, completeness, or reliability of the data for other than its intended purpose. The user is responsible for the accuracy, completeness, and reliability of the data for other than its intended purpose. The user is responsible for the accuracy, completeness, and reliability of the data for other than its intended purpose.

U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Submitted: _____

Recommended: Chief, Survey Section

Approved: Chief, Technical Services

Surveyed By: _____

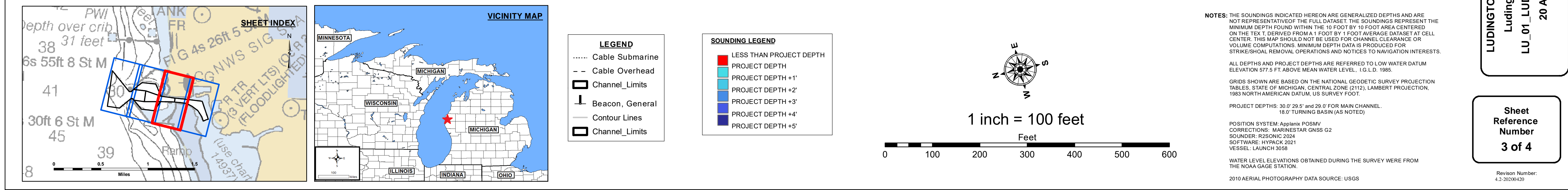
Plotted By: _____

Checked By: _____

LUDINGTON HARBOR, MI
Ludington Harbor
LU_01_LUD_20220420_CS
20 April 2022

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Revision Number:
4.2 20240420





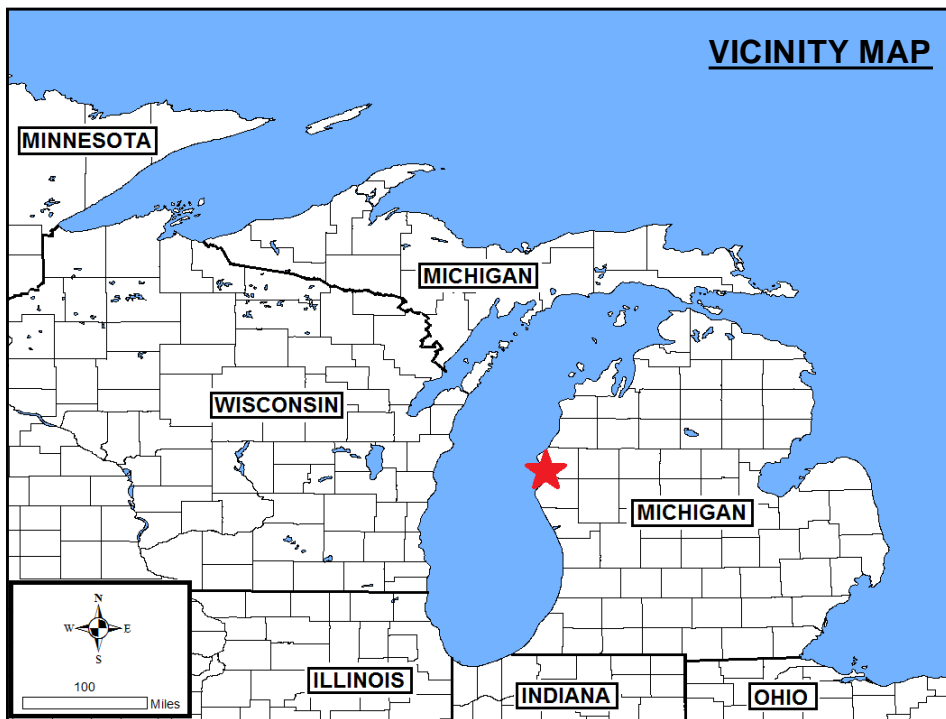
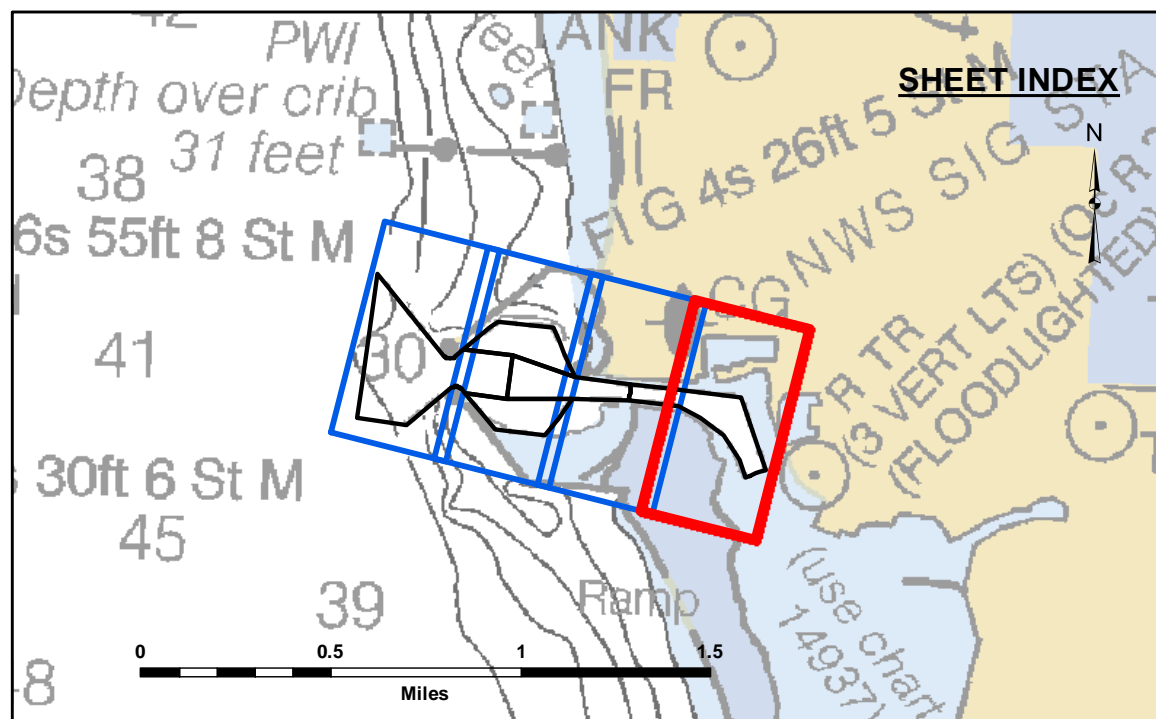
DISCLAIMER: The data represented by the soundings and contours on this chart are the result of a collection of data from various sources. The Corps of Engineers is not responsible for the accuracy of the data or the results of any application of the data for other than its intended purpose. The user is responsible for the results of any application of the data for other than its intended purpose.

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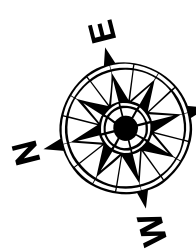
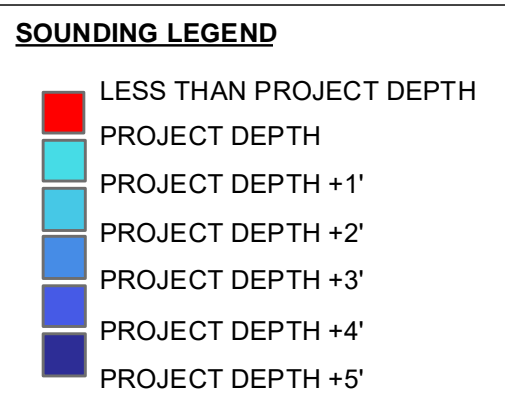
Submitted:	Surveyed By:
Recommended:	Plotted By:
Approved:	Checked By:

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20 April 2022

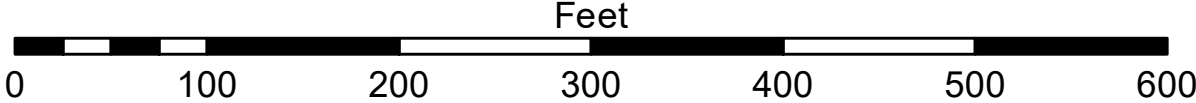
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- LEGEND
- Cable Submarine
 - - - Cable Overhead
 - Channel_Limits
 - Beacon, General
 - Contour Lines
 - Channel_Limits



1 inch = 100 feet



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