

Disclaimer: The data presented in this report is the result of data collection/processing for a specific US Army Corps of Engineers activity and is not intended for general use. 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 this data and the recipient accepts and uses them with the express understanding that the United States Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, or suitability for any particular purpose of the data. The recipient agrees to hold the United States Government harmless from any liability whatsoever to any person by reason of any use made thereof. These data belong to the Government. Therefore the recipient shall not disseminate, distribute, or otherwise make these data available to others without also transferring the Disclaimer.

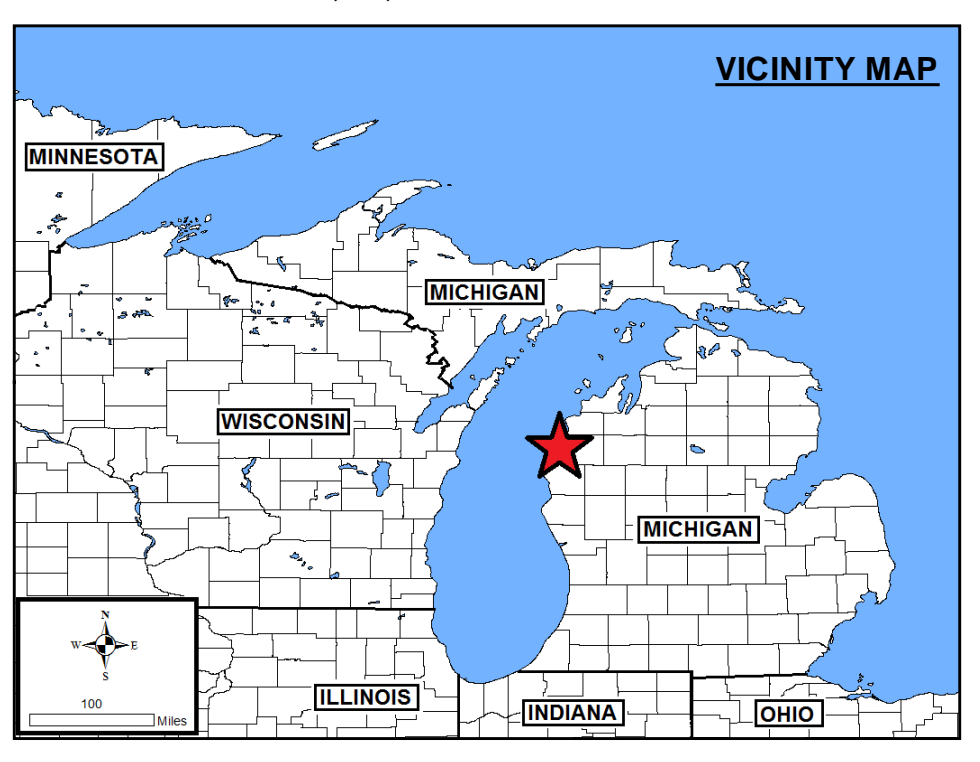
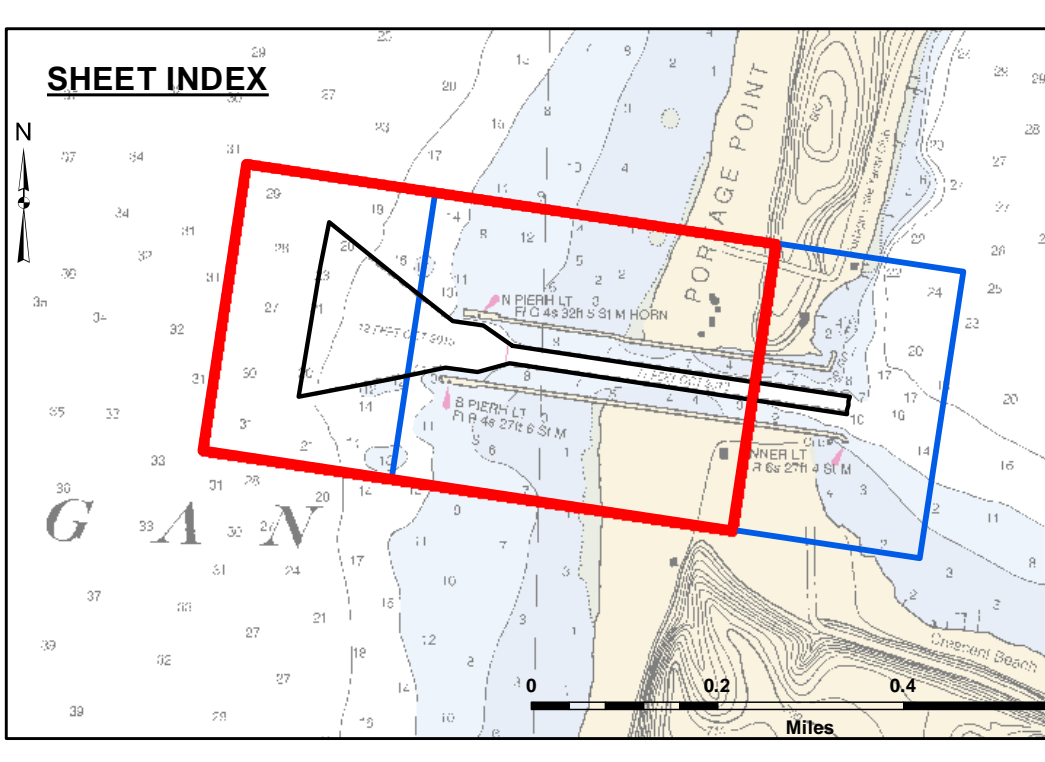
Submitted:	Surveyed By:
Recommended:	Plotted By:
Approved:	Checked By:

U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

Chief, Survey Section
Chief, Technical Services

Portage Lake Harbor, MI
Portage Lake Harbor
PO_01_TGE_20220907_CS
07 September 2022

Sheet Reference Number
1 of 2

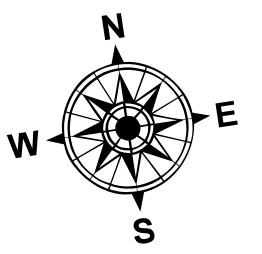


LEGEND

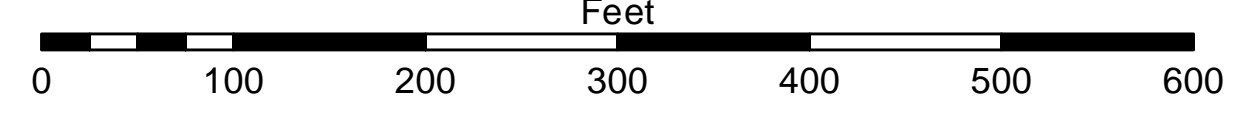
- Cable Submarine
- - - Cable Overhead
- Channel Limits
- I Beacon, General
- Contour Lines
- Channel Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
- PROJECT DEPTH +1'
- PROJECT DEPTH +2'
- PROJECT DEPTH +3'
- PROJECT DEPTH +4'
- PROJECT DEPTH +5'



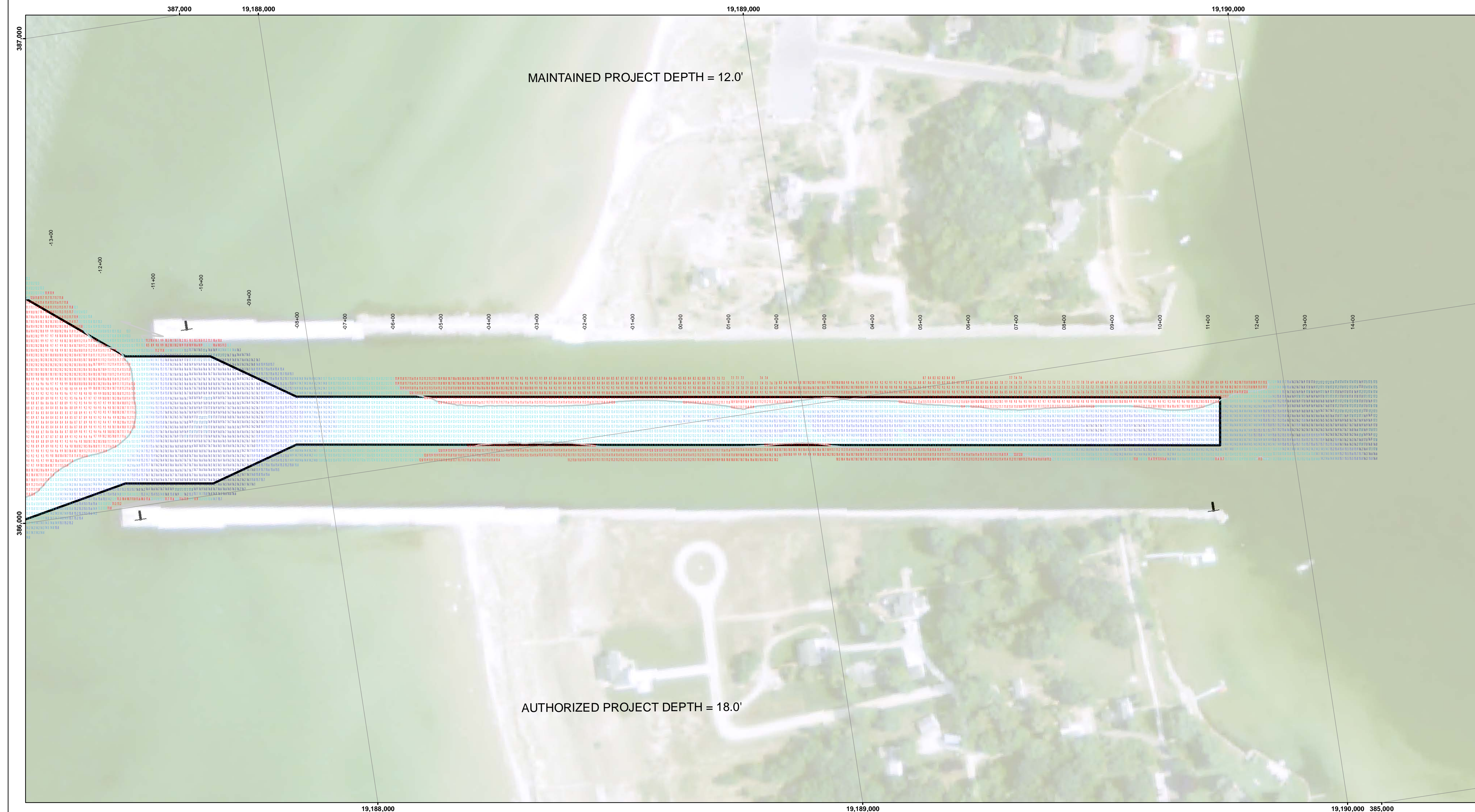
1 inch = 100 feet



NOTES:

1. 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 CHANNEL CLEARANCE OR VOLUME COMPUTATIONS. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.
2. 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.
3. ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC.
4. VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A FIXED GAGE MARK ALONG THE SHEET STEEL WALL NEAR CROSS SECTION 11+00E IN PORTAGE LAKE HARBOR, MI.
5. PROJECT DEPTH = 12.0 FEET
6. POSITIONING: APFLANK POS MV
CORRECTIONS: MARINESTAR GNSS G2
SONAR: R2SONIC 2024 MULTIBEAM
SOFTWARE: HYPACK 2022
VESSEL: LAUNCH 3058

2012 AERIAL PHOTOGRAPHY DATA SOURCE: NAIP



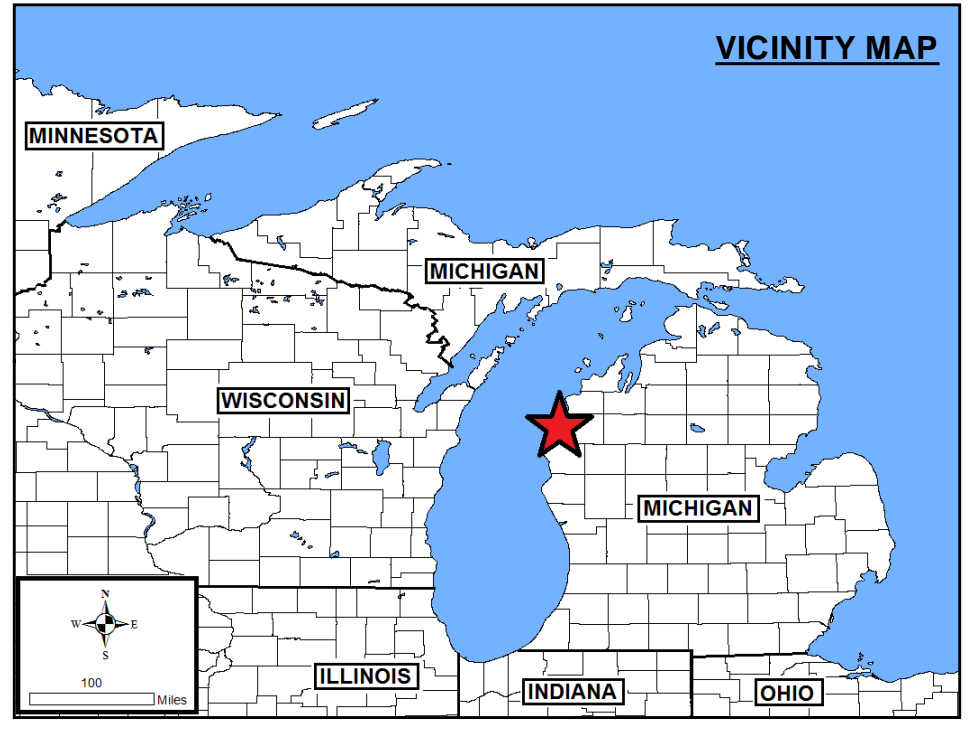
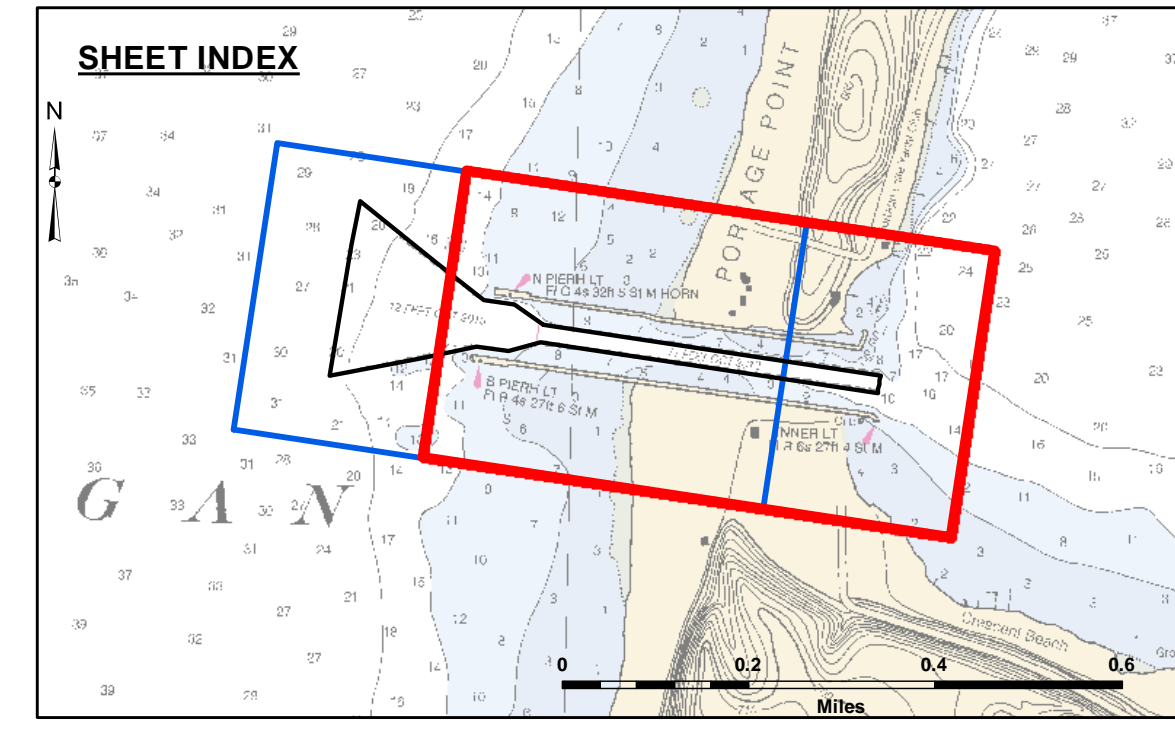
DISCLAIMER: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the United States Government makes no warranty, expressed or implied, concerning the accuracy, completeness, reliability, or suitability for any particular purpose of the data. The United States Government shall not be liable for any damage or loss, including consequential damage, arising from the use of the data. The recipient may not transfer these data to others without also transferring the Disclaimer.

U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT		
Submitted:	Surveyed By:	
Recommended:	Plotted By:	
Approved:	Checked By:	

Portage Lake Harbor, MI
Portage Lake Harbor
PO_01_TGE_20220907_CS
07 September 2022

Sheet Reference Number
2 of 2

Revision Number:
 4.2-202/604/30

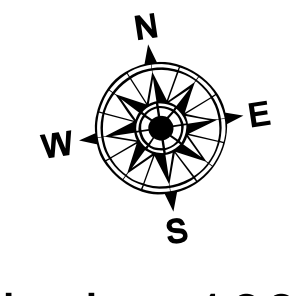


LEGEND

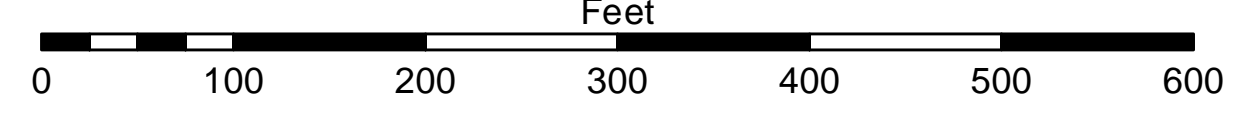
- Cable Submarine
- - - Cable Overhead
- Channel_Limits
- Beacon, General
- Contour Lines
- Channel_Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
- PROJECT DEPTH +1'
- PROJECT DEPTH +2'
- PROJECT DEPTH +3'
- PROJECT DEPTH +4'
- PROJECT DEPTH +5'



1 inch = 100 feet



- NOTES:**
1. 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 CHANNEL CLEARANCE OR VOLUME COMPUTATIONS. MINIMUM DEPTH DATA IS PRODUCED FOR STRIKE/SHOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.
 2. 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.
 3. ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC.
 4. VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A FIXED GAGE MARK ALONG THE SHEET STEEL WALL NEAR CROSS SECTION 11+00E IN PORTAGE LAKE HARBOR, MI.
 5. PROJECT DEPTH = 12.0 FEET
 6. POSITIONING: APFLANK POS MV
 CORRECTIONS: MARINESTAR GNSS G2
 SONAR: R2SONIC 2024 MULTIBEAM
 SOFTWARE: HYPACK 2022
 VESSEL: LAUNCH 3058
- 2012 AERIAL PHOTOGRAPHY DATA SOURCE: NAIP