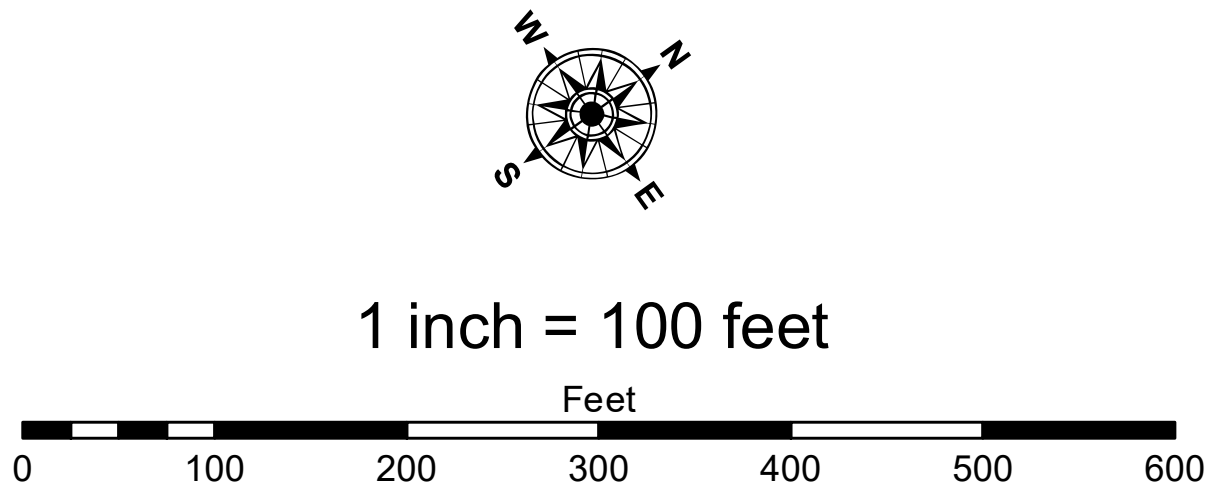


- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - ⊥ Beacon, General
  - Contour Lines
  - ▭ Channel Limits

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



**NOTES:**

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

FOR MULTIBEAM SURVEYS: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 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/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85). L.W.D. AS INDICATED. PROJECT DEPTHS FOR THIS RIVER RANGE FROM 27.1' TO 30.0'

TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS:  
ST CLAIR SHORES (19034052)  
ALGONAC, MI (19014070)  
ST CLAIR POLICE, MI (19014080)  
BLACK RIVER, MI (19014090)  
DRY DOCK, MI (19014087)  
DUNN PAPER, MI (19014096)

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS. ALL COORDINATES ARE IN U.S. SURVEY FEET.



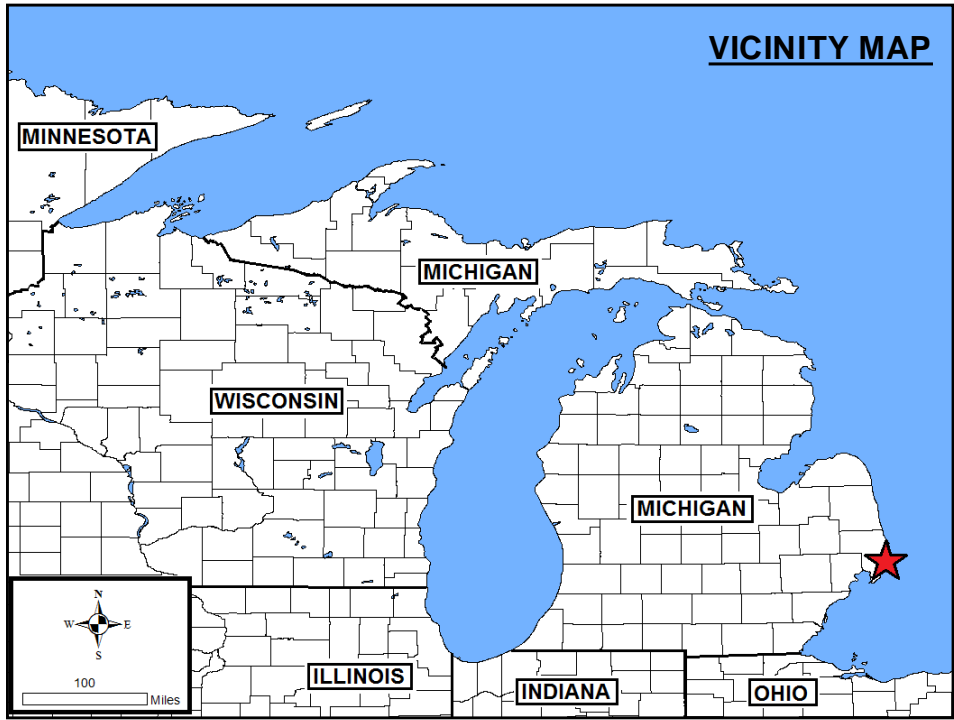
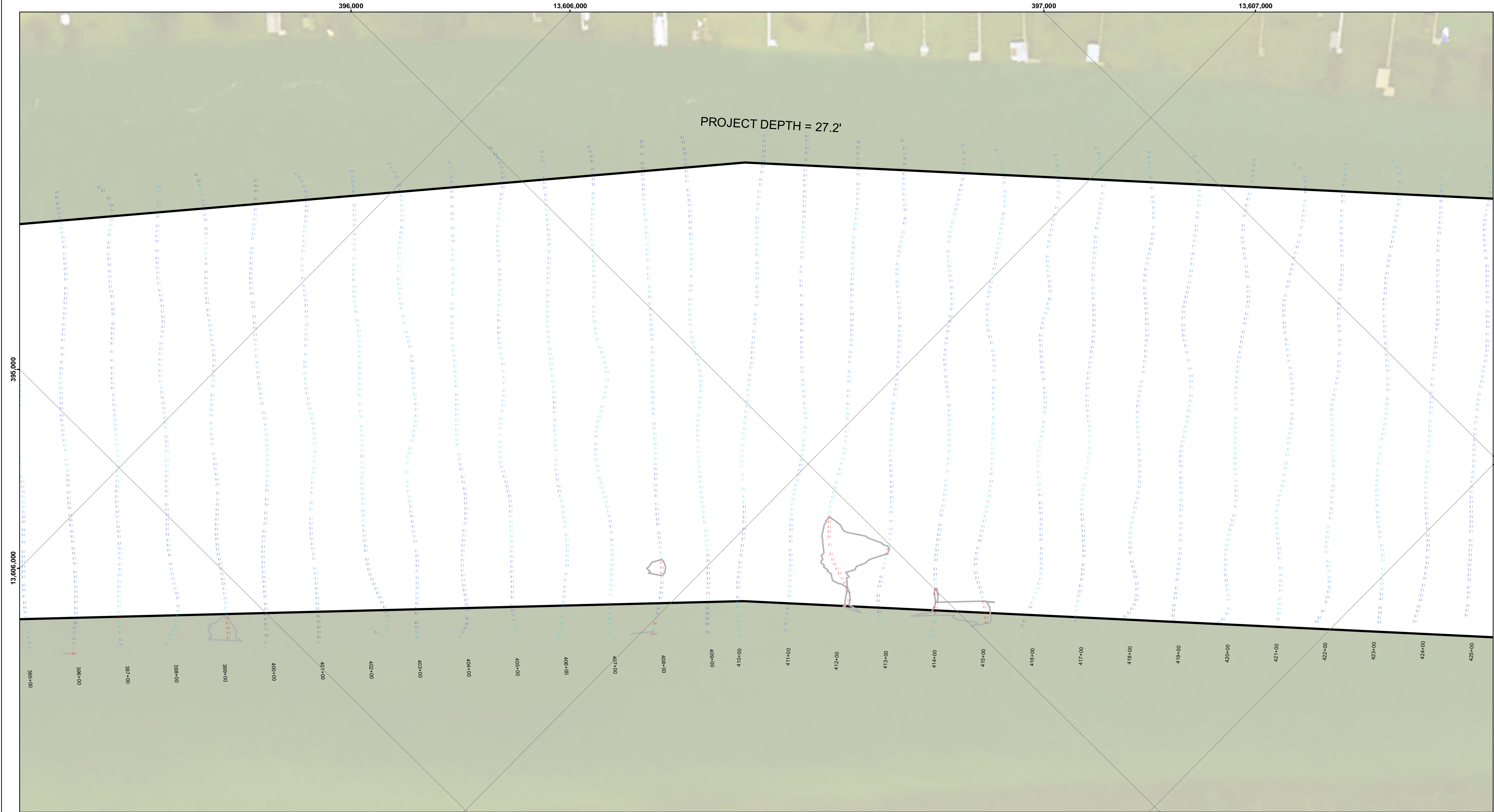
**DISCLAIMER:** The data represents the results of data collection and is not intended for use in any other manner than that for which it was collected. The data is not intended for use in any other manner than that for which it was collected. The data is not intended for use in any other manner than that for which it was collected.

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

St. Clair River, MI  
St Clair River  
CR\_01\_SCR\_20211116\_CS  
16 November 2021

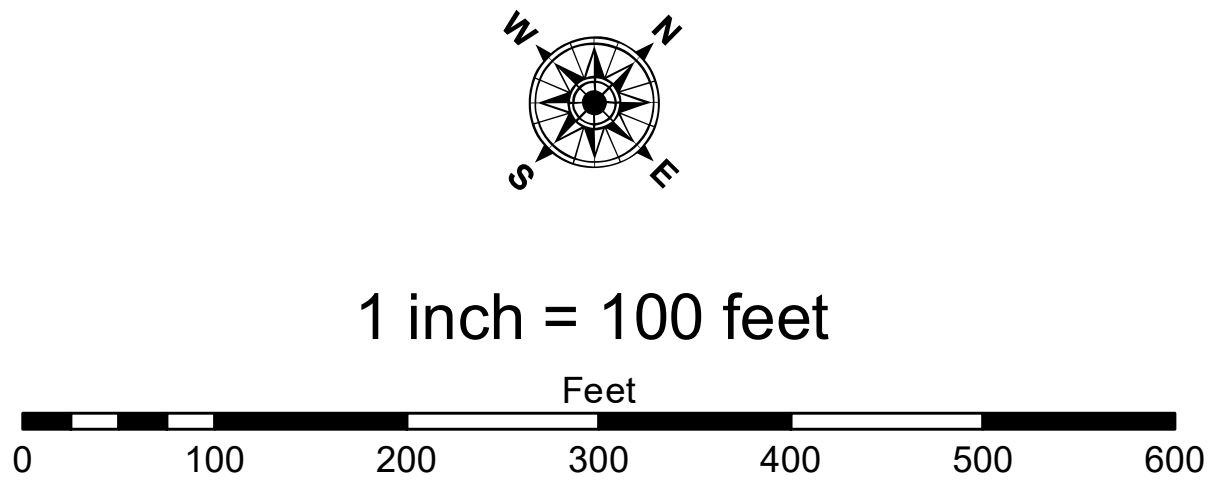
Sheet  
Reference  
Number  
4 of 69





- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - ⊥ 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'



**NOTES:**

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

FOR MULTIBEAM SURVEYS: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 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/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85). L.W.D. AS INDICATED. PROJECT DEPTHS FOR THIS RIVER RANGE FROM 27.1' TO 30.0'

TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS:  
ST CLAIR SHORES (#9034052)  
ALGONAC, MI (#9014070)  
ST CLAIR POLICE, MI (#9014080)  
BLACK RIVER, MI (#9014090)  
DRY DOCK, MI (#9014087)  
DUNN PAPER, MI (#9014096)

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS. ALL COORDINATES ARE IN U.S. SURVEY FEET.



**DISCLAIMER:** The data represents the results of data collection and is not a guarantee of accuracy. The Corps of Engineers actively and continuously monitors the accuracy of the data. The user is responsible for the results of any application of the data for other than its intended purpose.

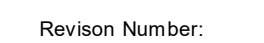
**DISCLAIMER:** The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not a guarantee of accuracy, completeness, or implied concerning the accuracy, completeness, or reliability of the data for any particular purpose of the recipient. The data are provided for the recipient's use under no liability whatsoever to any person by reason of any use made thereof. These data belong to the Government. Therefore, the recipient agrees to hold the Government harmless from any and all claims, damages, or losses, including reasonable attorneys' fees, that may be incurred by the Government or its agents, officers, or employees, arising out of or from the use of these data by others without transferring this Disclaimer.

Submitted:	Surveyed By:
	Plotted By:
	Checked By:

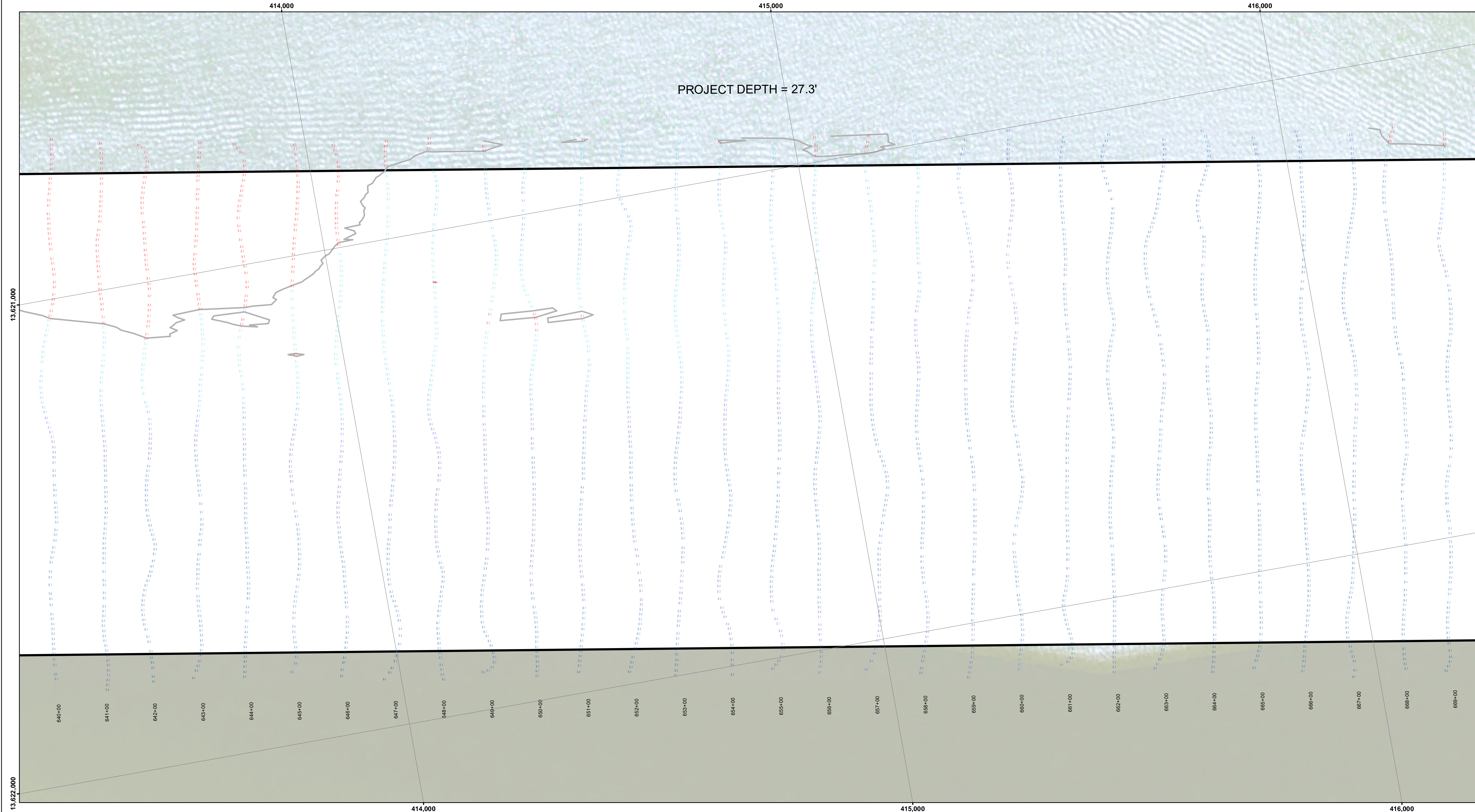
**St. Clair River, MI**  
**St. Clair River**  
**CR\_01\_SCR\_20211116\_CS**  
**16 November 2021**

**Sheet**  
**Reference**  
**Number**  
**5 of 69**







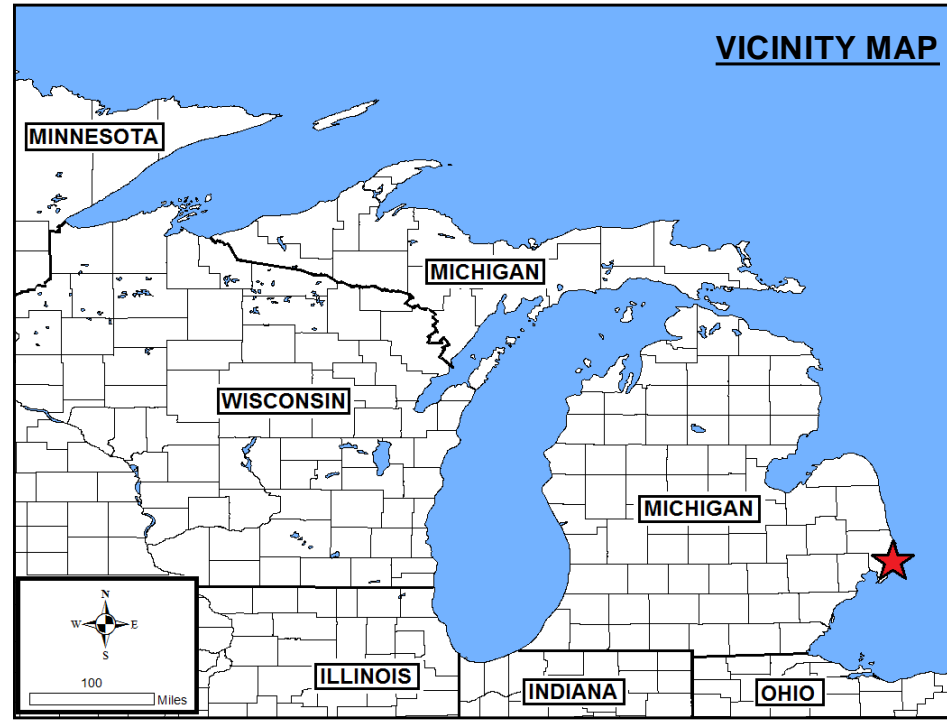


DISCLAIMER: The data represents the results of data collection and processing for a specific US Army Corps of Engineers activity and indicates the general existing conditions. The user is responsible for the results and accuracy of the data for other than its intended purpose. The user is responsible for the results and accuracy of the data for other than its intended purpose.

Submitted:	Surveyed By:	
	Plotted By:	
Recommended:	Chief, Survey Section	
	Checked By:	
Approved:	Chief, Technical Services	

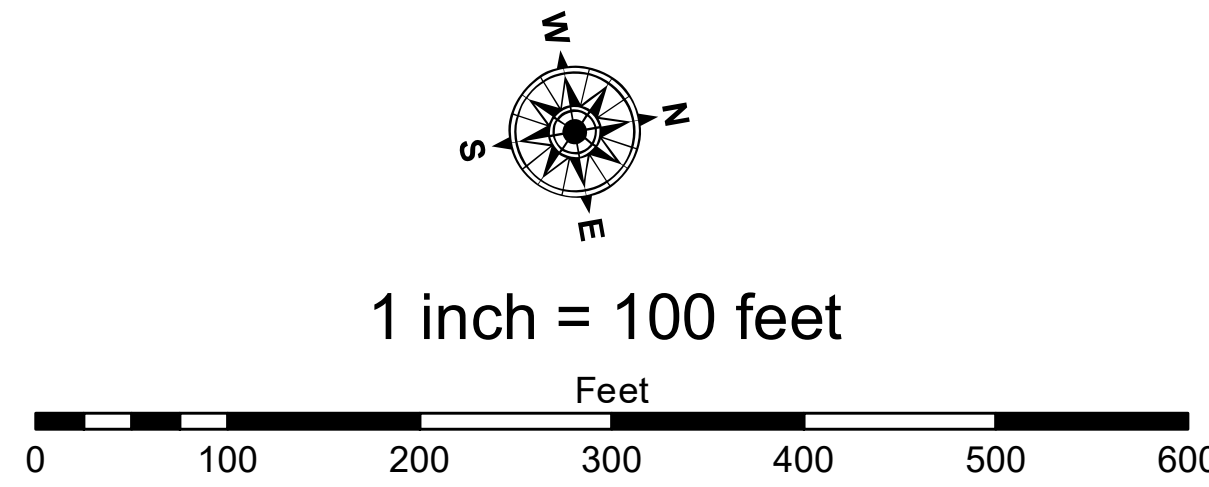
St. Clair River, MI  
St Clair River  
CR\_01\_SCR\_20211116\_CS  
16 November 2021

Sheet  
Reference  
Number  
14 of 69



- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - ⊥ 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'



**NOTES:**

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

FOR MULTIBEAM SURVEYS: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 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/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

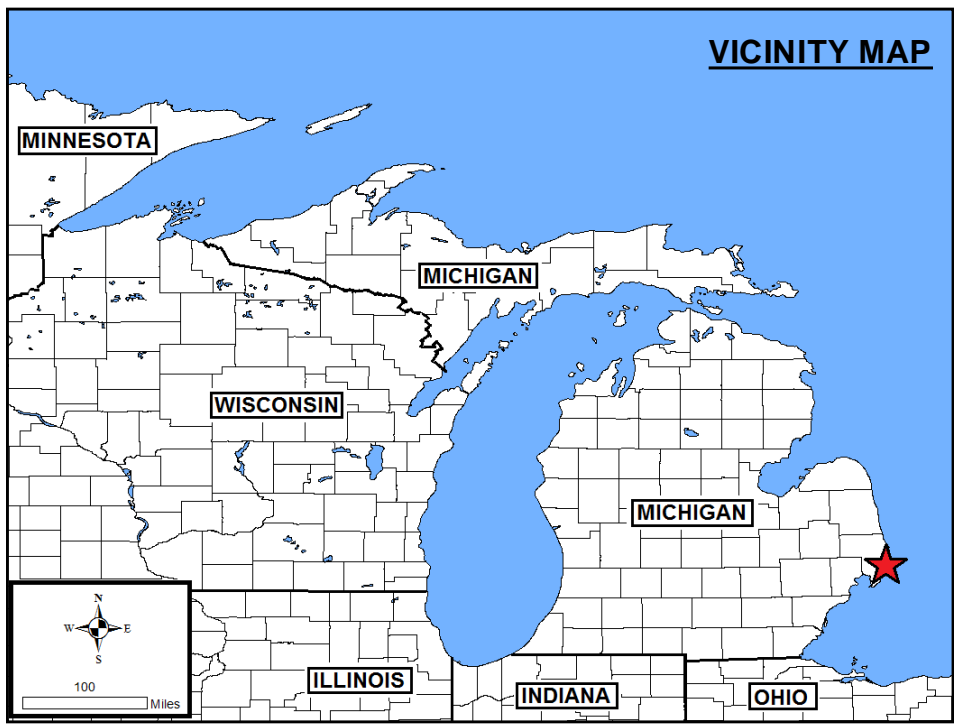
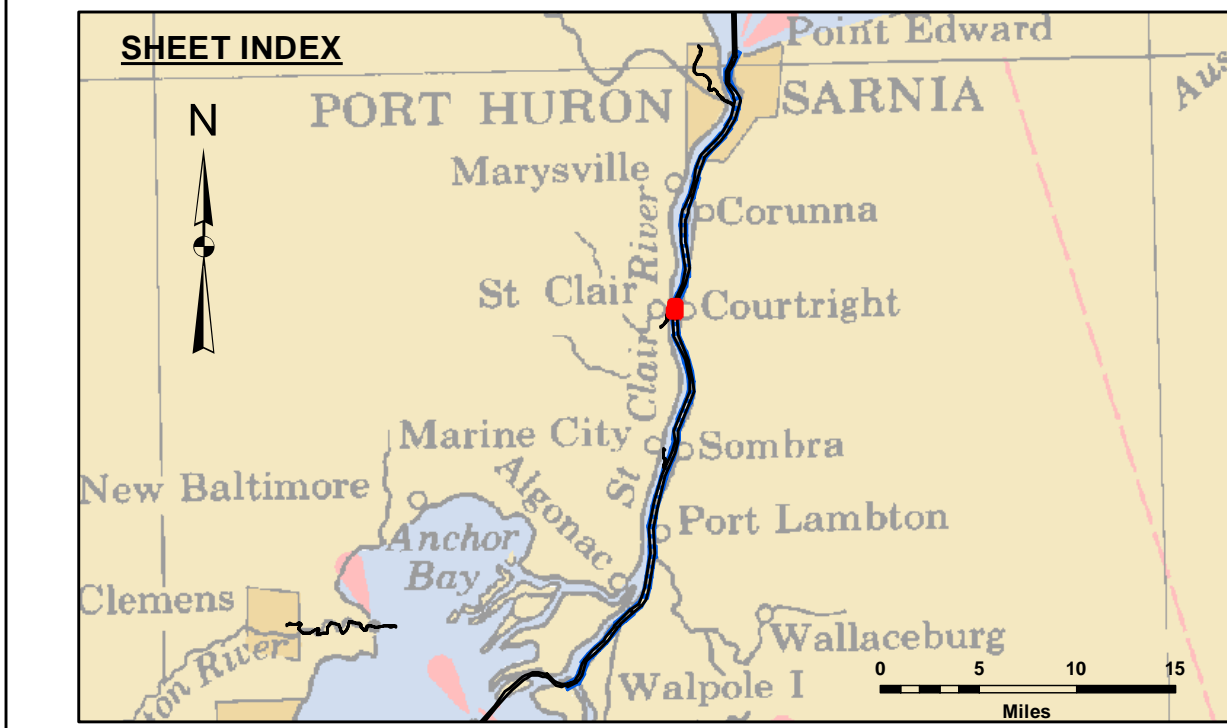
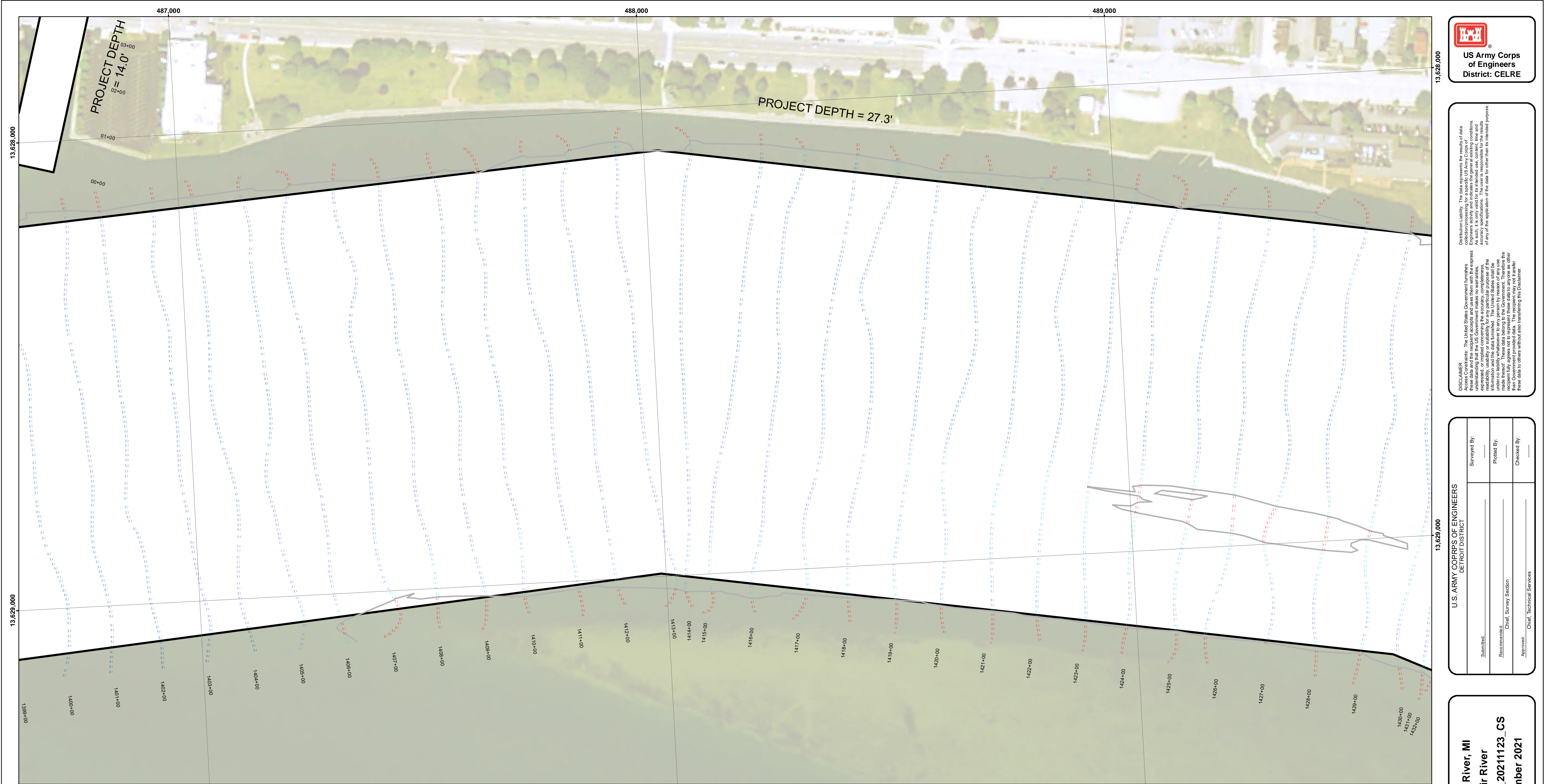
POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85). L.W.D. AS INDICATED. PROJECT DEPTHS FOR THIS RIVER RANGE FROM 27.1' TO 30.0'

TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS:  
ST CLAIR SHORES (19034052)  
ALGONAC, MI (19014070)  
ST CLAIR POLICE, MI (19014080)  
BLACK RIVER, MI (19014090)  
DRY DOCK, MI (19014087)  
DUNN PAPER, MI (19014096)

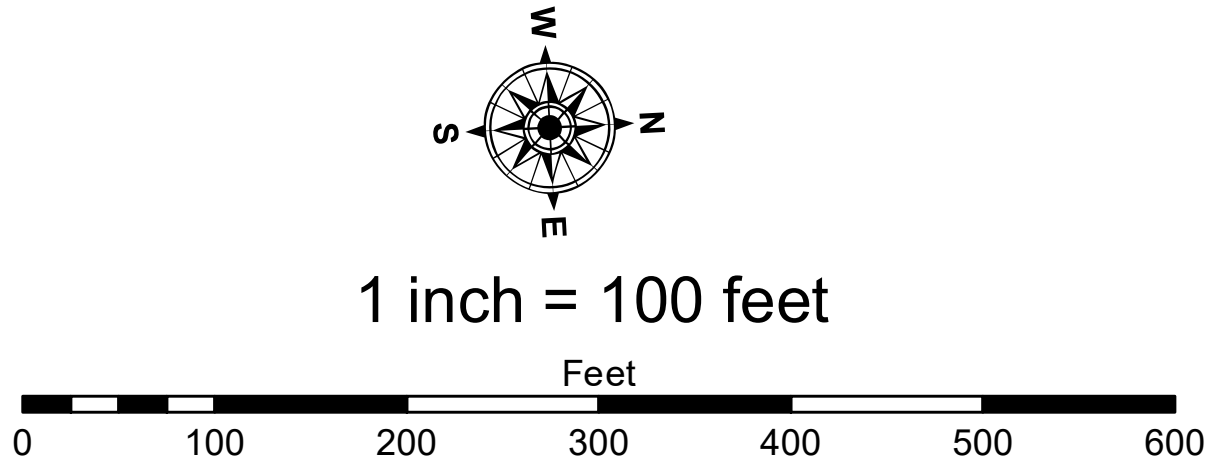
2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS. ALL COORDINATES ARE IN U.S. SURVEY FEET.





- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - ⊥ 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'



**NOTES:**

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

FOR MULTIBEAM SURVEYS: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 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/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85). L.W.D. AS INDICATED. PROJECT DEPTHS FOR THIS RIVER RANGE FROM 27.1' TO 30.0'

TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

WATER LEVEL STATIONS:  
ST CLAIR SHORES (#9034052)  
ALGONAC, MI (#9014070)  
ST CLAIR POLICE, MI (#9014080)  
BLACK RIVER, MI (#9014090)  
DRY DOCK, MI (#9014087)  
DUNN PAPER, MI (#9014096)

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS. ALL COORDINATES ARE IN U.S. SURVEY FEET.



**DISCLAIMER:** The data represents the results of data collection and is not intended for use in any legal proceeding. Engineers actively and indicates the general existing conditions. The user is responsible for the results of any of the application of the data for other than its intended purpose.

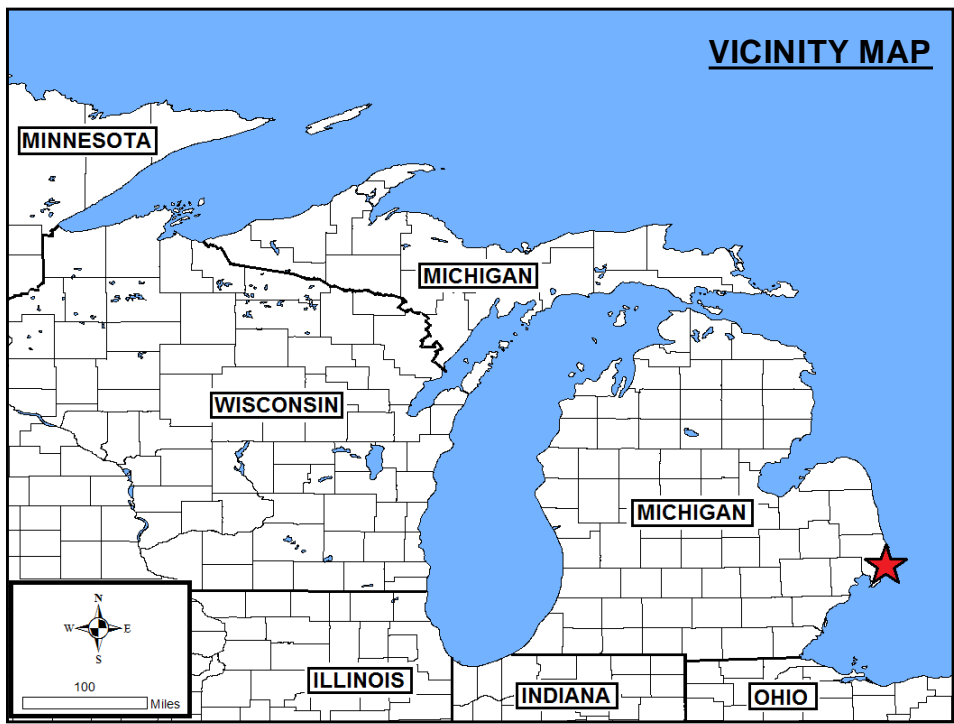
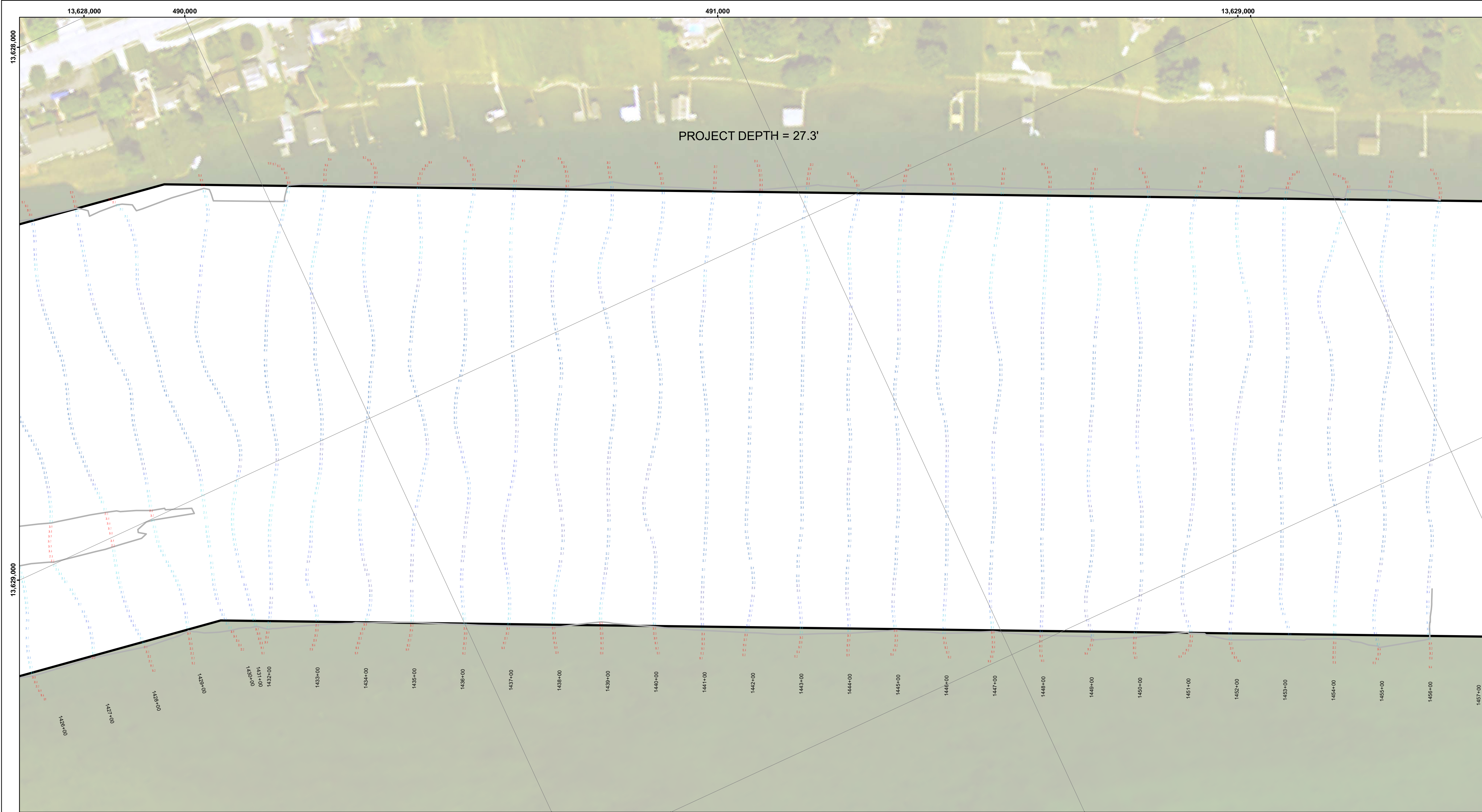
**ACCESS CONTRACTS:** The United States Government (unlike these data and the recipient accepts and uses them with the express understanding that the data is not to be used for any purpose other than that for which it was provided. The user is responsible for the results of any of the application of the data for other than its intended purpose.

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

St. Clair River, MI  
St. Clair River  
CR\_01\_SCR\_20211123\_CS  
23 November 2021

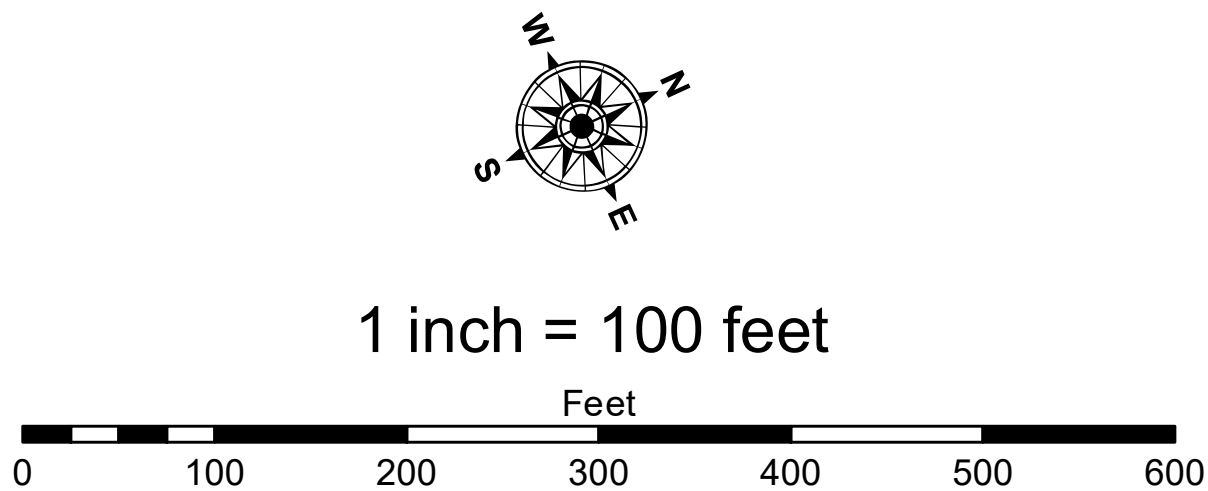
Sheet  
Reference  
Number  
42 of 69





- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - ⊥ 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'



**NOTES:**

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

FOR MULTIBEAM SURVEYS: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 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/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85). L.W.D. AS INDICATED. PROJECT DEPTHS FOR THIS RIVER RANGE FROM 27.1' TO 30.0'

WATER LEVEL STATIONS:  
ST CLAIR SHORES, MI (#9034052)  
ALGONAC, MI (#9014070)  
ST CLAIR POLICE, MI (#9014080)  
BLACK RIVER, MI (#9014090)  
DRY DOCK, MI (#9014087)  
DUNN PAPER, MI (#9014096)

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS. ALL COORDINATES ARE IN U.S. SURVEY FEET.



This data is publicly available. The data represents the results of data collection and processing for a specific project. The US Army Corps of Engineers actively and regularly updates the general existing conditions of the project. The data is not intended for use in any other application of any of the application of the data for other than its intended purpose.

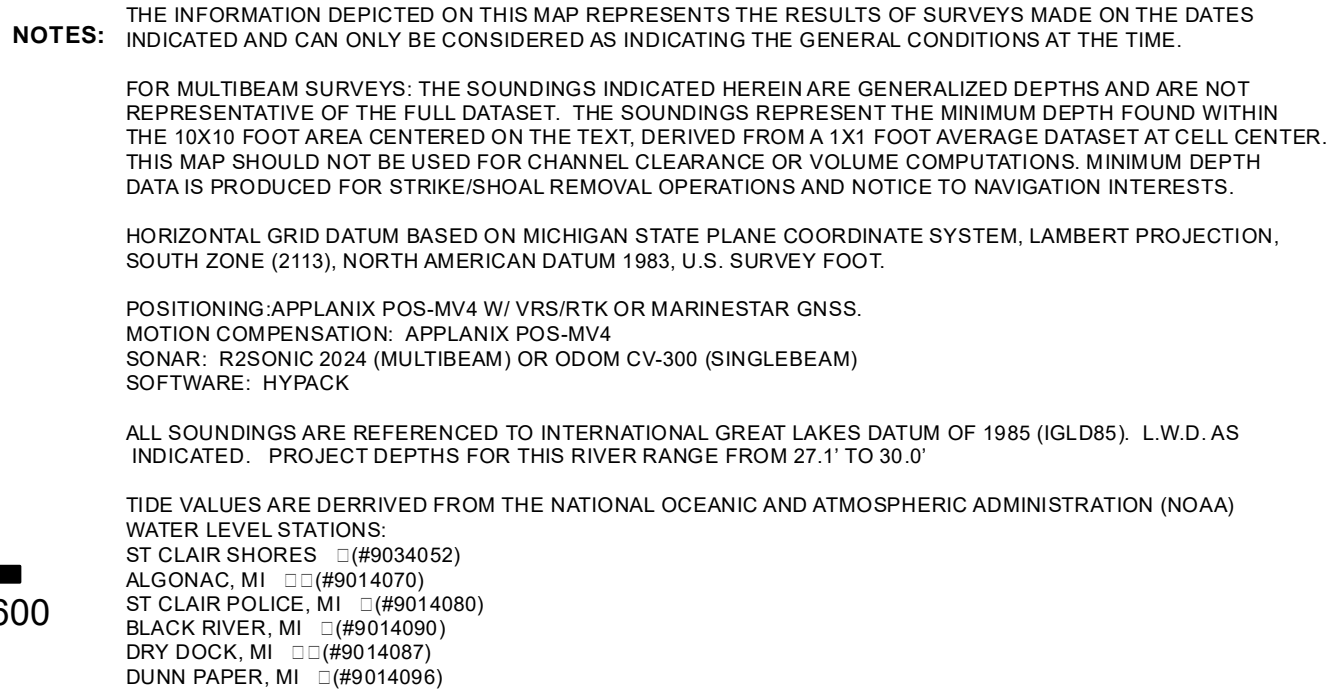
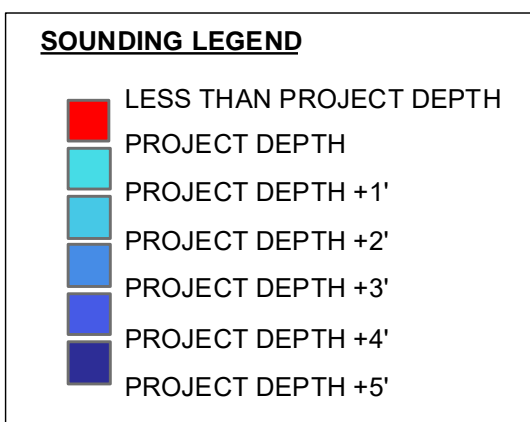
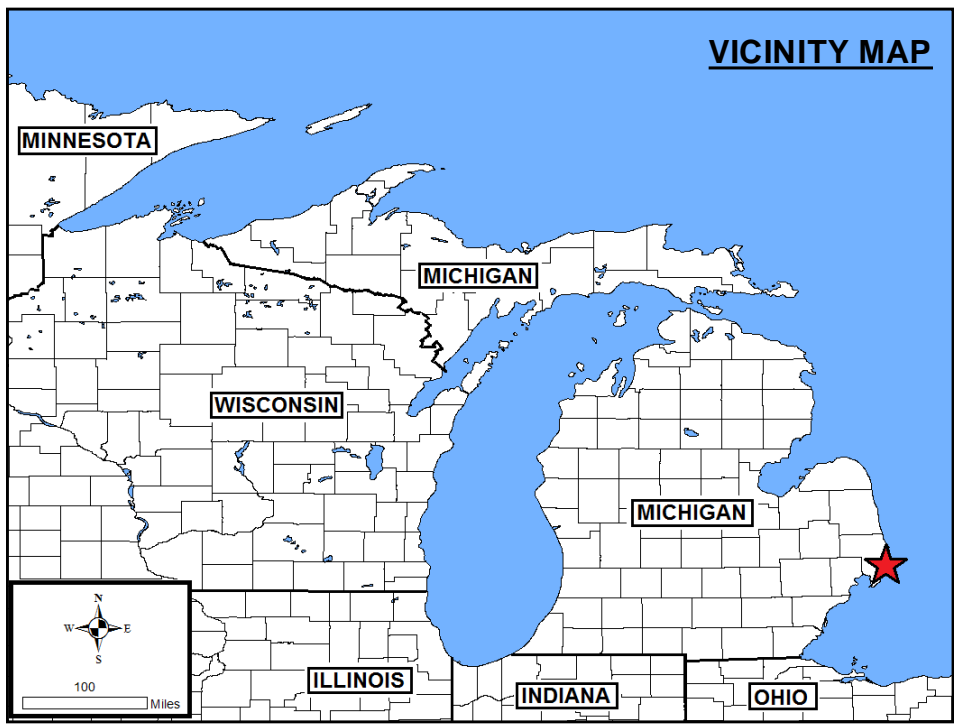
Access Constraints: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be used for any purpose other than that for which they were provided, and that the data are not to be used for any purpose other than that for which they were provided, and that the data are not to be used for any purpose other than that for which they were provided.

U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT			
Submitted:	Surveyed By:	Filled By:	Checked By:
Recommended:	Chief, Survey Section		
Approved:	Chief, Technical Services		

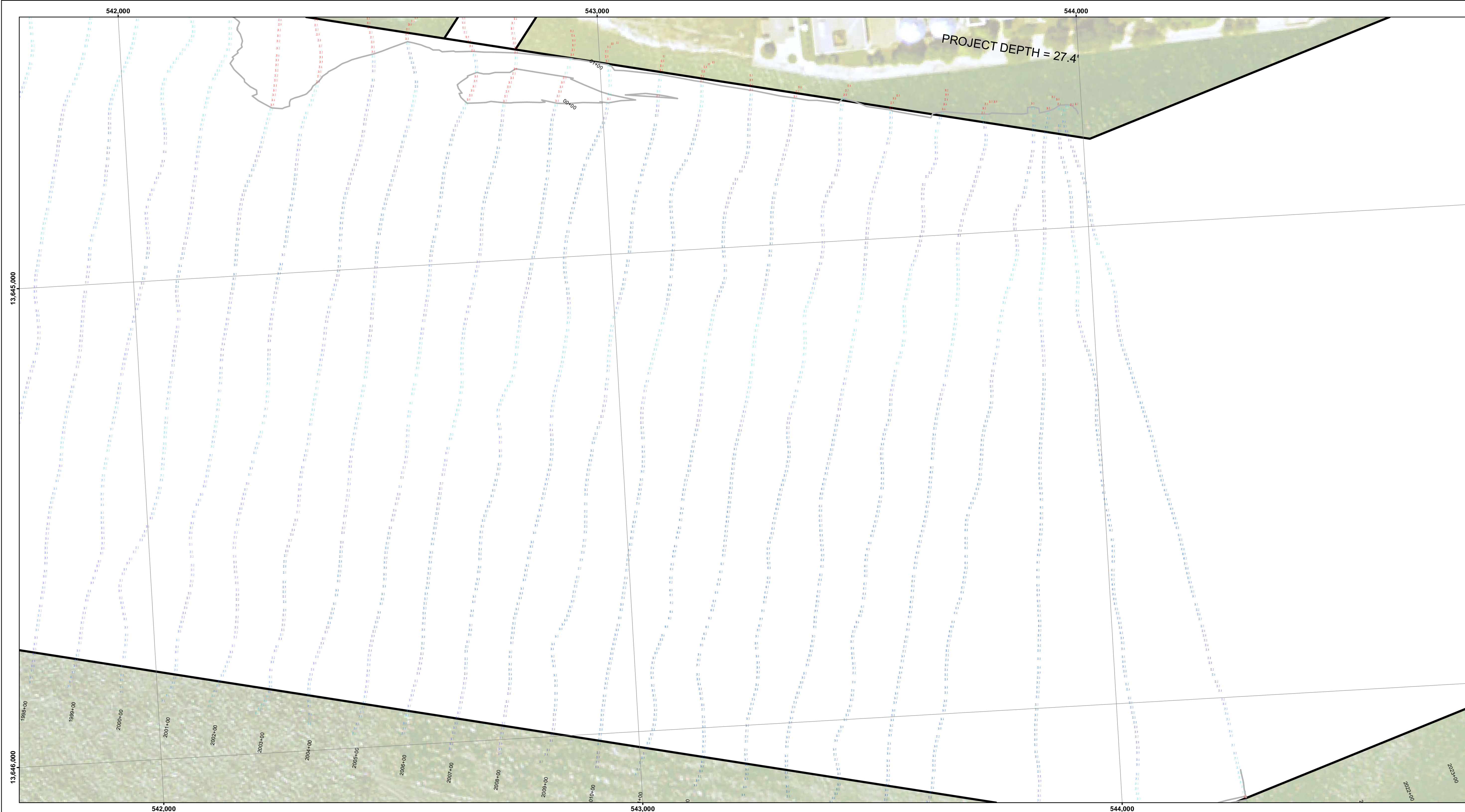
St. Clair River, MI  
St Clair River  
CR\_01\_SCR\_20211123\_CS  
23 November 2021

Sheet  
Reference  
Number  
43 of 69









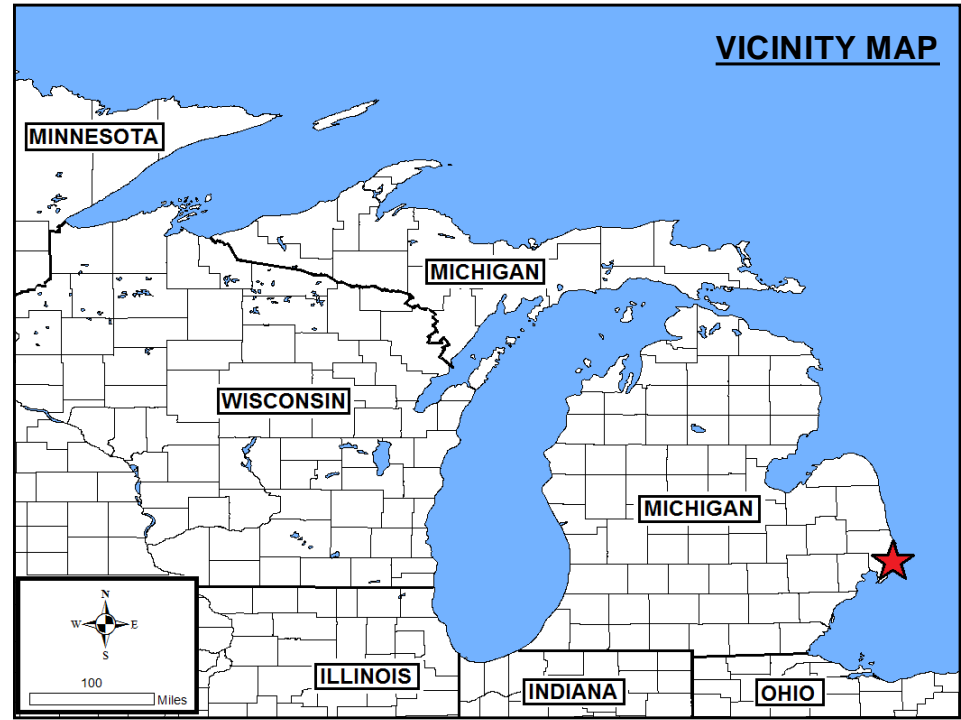
This data is publicly available. The data represents the results of data collection and processing for a specific US Army Corps of Engineers activity and indicates the general existing conditions. The data is not intended for use in any other application or for any other purpose than the intended purpose of the application 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 the data are not intended for use in any other application, expressed, or implied concerning the accuracy, completeness, readability, usability or suitability for any particular purpose of the recipient. The data are provided for the recipient's use under no liability whatsoever to any person by reason of any use made thereof. These data belong to the Government. Therefore, the recipient may not transfer, copy, reproduce, or otherwise use these data to others without also transferring the Disclaimer.

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

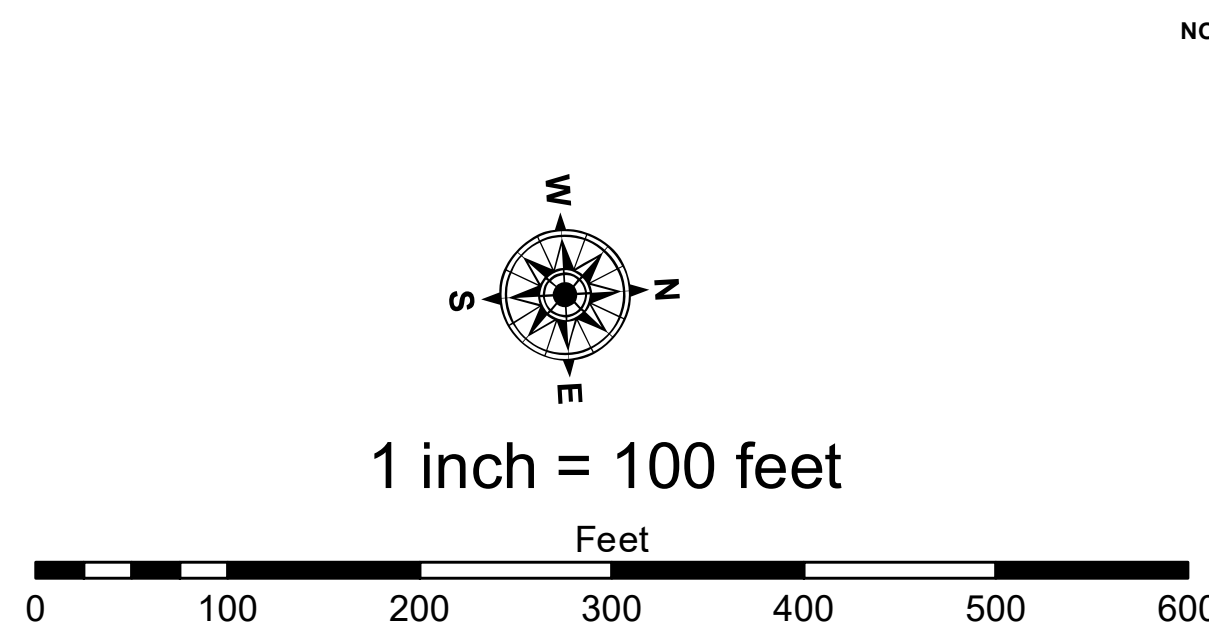
St. Clair River, MI  
St. Clair River  
CR\_01\_SCR\_20211123\_CS  
23 November 2021

Sheet  
Reference  
Number  
64 of 69



- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - ⊥ 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'



**NOTES:**

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

FOR MULTIBEAM SURVEYS: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 FOOT AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 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/SOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. SURVEY FOOT.

POSITIONING: APPLANIX POS-MV4 W/ VRS/RTK OR MARINESTAR GNSS.  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2SONIC 2024 (MULTIBEAM) OR ODOM CV-300 (SINGLEBEAM)  
SOFTWARE: HYPACK

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD85). L.W.D. AS INDICATED. PROJECT DEPTHS FOR THIS RIVER RANGE FROM 27.1' TO 30.0'

TIDE VALUES ARE DERIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

WATER LEVEL STATIONS:  
ST CLAIR SHORES (19034052)  
ALGONAC, MI (19014070)  
ST CLAIR POLICE, MI (19014080)  
BLACK RIVER, MI (19014090)  
DRY DOCK, MI (19014087)  
DUNN PAPER, MI (19014096)

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS. ALL COORDINATES ARE IN U.S. SURVEY FEET.