

LEGEND

- Cable Submarine
- - - Cable Overhead
- ⊥ Beacon, General
- ▭ Channel Limits
- Contour Lines

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

Feet

0 100 200 300 400 500 600

NOTES:

1) THE SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.

2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS:
HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM,
MICHIGAN CENTRAL ZONE #2112, NORTH AMERICAN DATUM (NAD) OF 1983.
VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.

3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS:
POSITIONING: APPLANIX POS-MV4 WIMARINERSTAR GPS CORRECTIONS.
MOTION COMPENSATION: APPLANIX POS-MV4
SONAR: ODOM CV-300 (SINGLEBEAM TRANSDUCER)
SOFTWARE: HYPACK 2018

4) WATER LEVEL ELEVATIONS WERE OBTAINED FROM TBM STEEL CORNER WHICH WAS ESTABLISHED FROM NGS VERTICAL CONTROL POINT BM RANGE (PID QK0021).

5) THE EDITED SINGLEBEAM DATA WAS SORTED INTO A 10 FT. DATA SET WITH THE RESULTING POINTS POSTED.

CHEBOYGAN HARBOR, MI
Cheboygan Harbor
CH_01_BOY_20200923_CS
23 September 2020

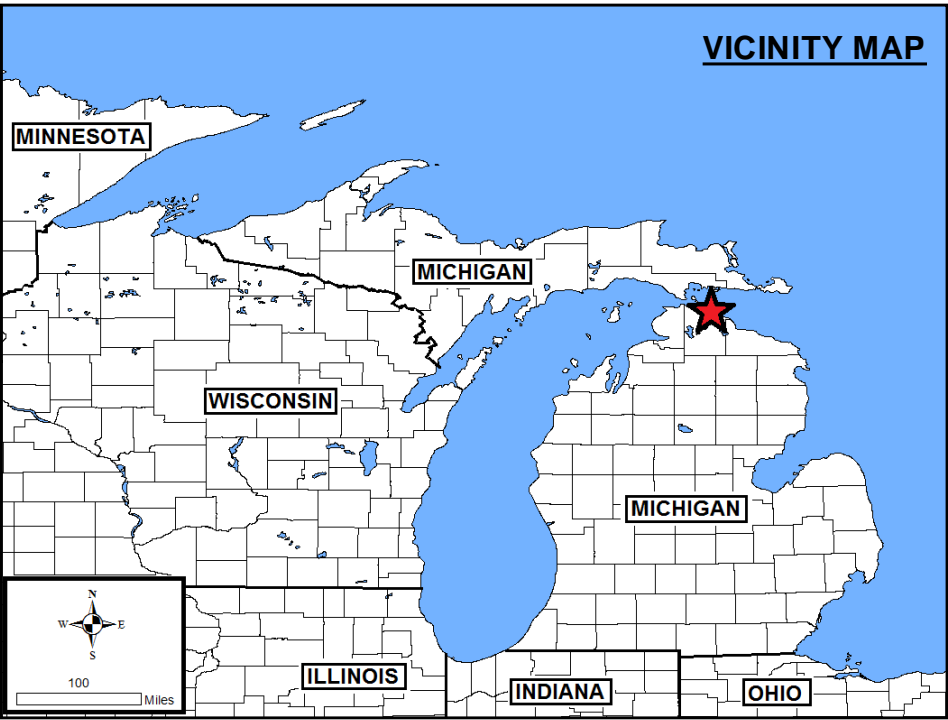
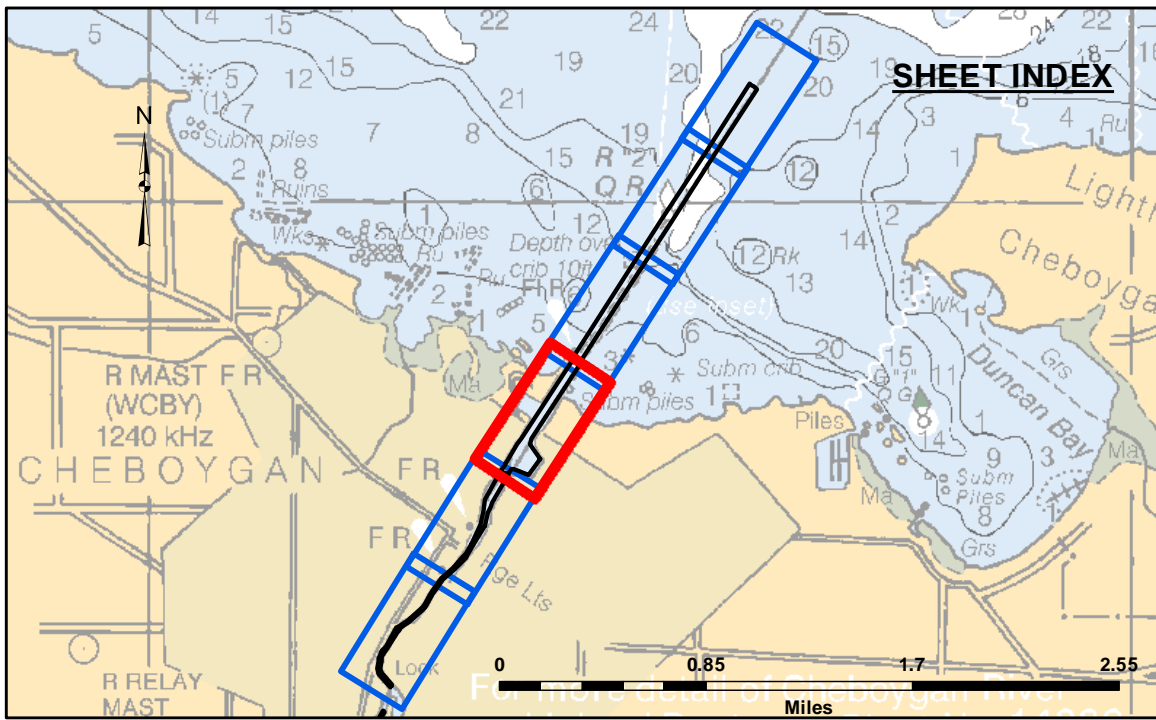
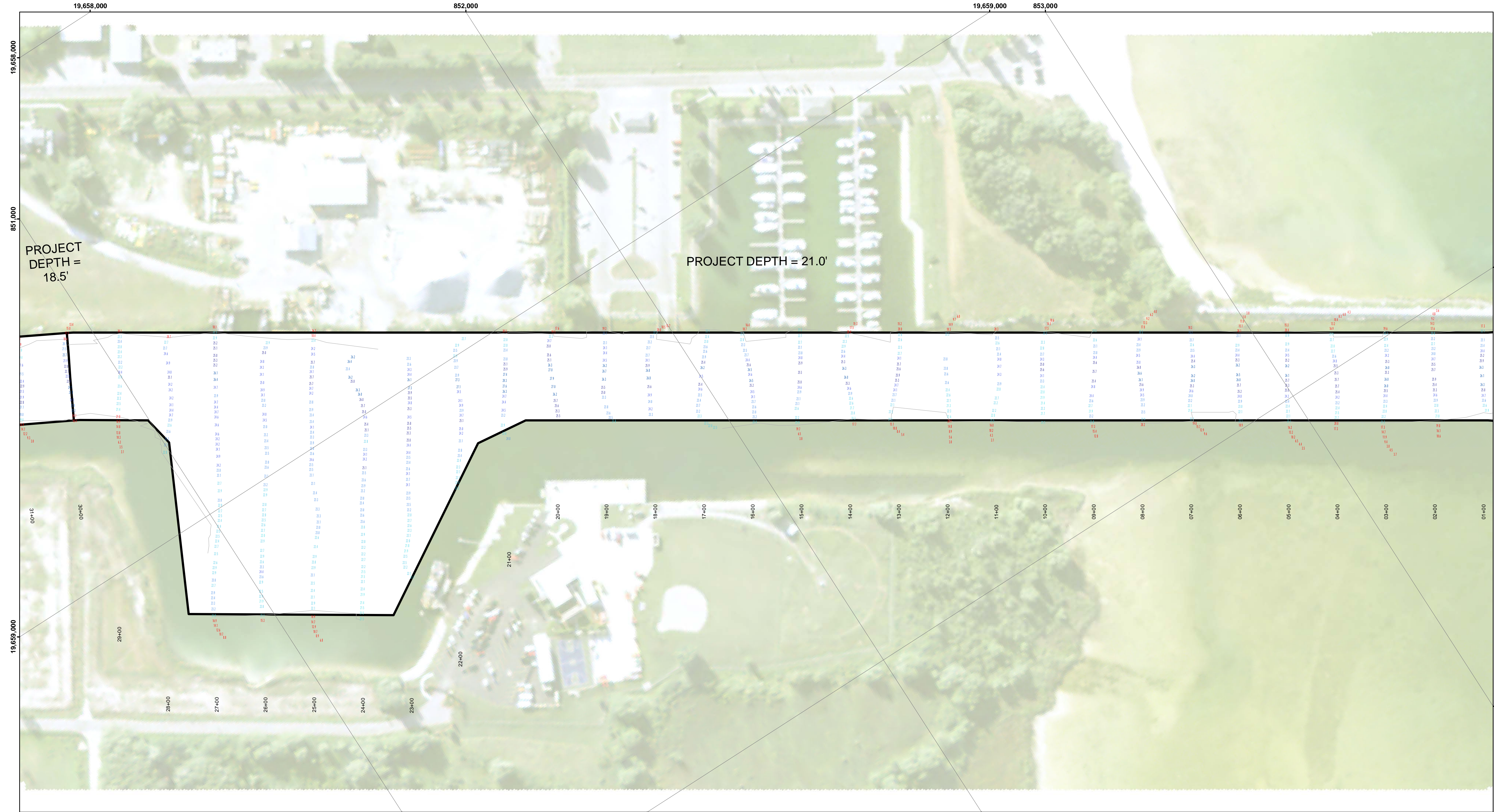
Sheet
Reference
Number
2 of 6

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

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 user is responsible for the results of any application of the data for other than its intended purpose.

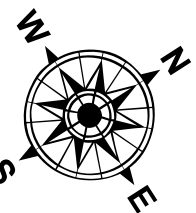
ACCESS CONSTRAINTS: The United States Government furnishes these data and the recipient accepts and uses them with the express understanding that the data are not to be distributed, reproduced, expressed, or implied concerning the accuracy, completeness, readability, usability or suitability for any particular purpose of the recipient. These data are not to be used in any way that would subject the recipient to liability whatsoever to any person by reason of any use made thereof. These data belong to the Government. Therefore, the recipient may not transfer these data to others without transferring this Disclaimer.



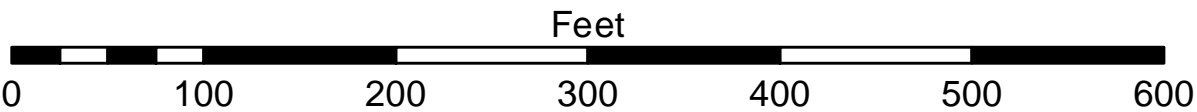


- LEGEND**
- Cable Submarine
 - Cable Overhead
 - ⊥ Beacon, General
 - ▭ Channel Limits
 - Contour Lines

- 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 AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.
 - 2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS: HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN CENTRAL ZONE #2112, NORTH AMERICAN DATUM (NAD) OF 1983. VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.
 - 3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS: POSITIONING: APPLANIX POS-MV4 WIMARINESTAR GPS CORRECTIONS. MOTION COMPENSATION: APPLANIX POS-MV4. SONAR: ODOM CV-300 (SINGLEBEAM TRANSDUCER). SOFTWARE: HYPACK 2018.
 - 4) WATER LEVEL ELEVATIONS WERE OBTAINED FROM TBM STEEL CORNER WHICH WAS ESTABLISHED FROM NGS VERTICAL CONTROL POINT BM RANGE (PID QK0021).
 - 5) THE EDITED SINGLEBEAM DATA WAS SORTED INTO A 10 FT. DATA SET WITH THE RESULTING POINTS POSTED.

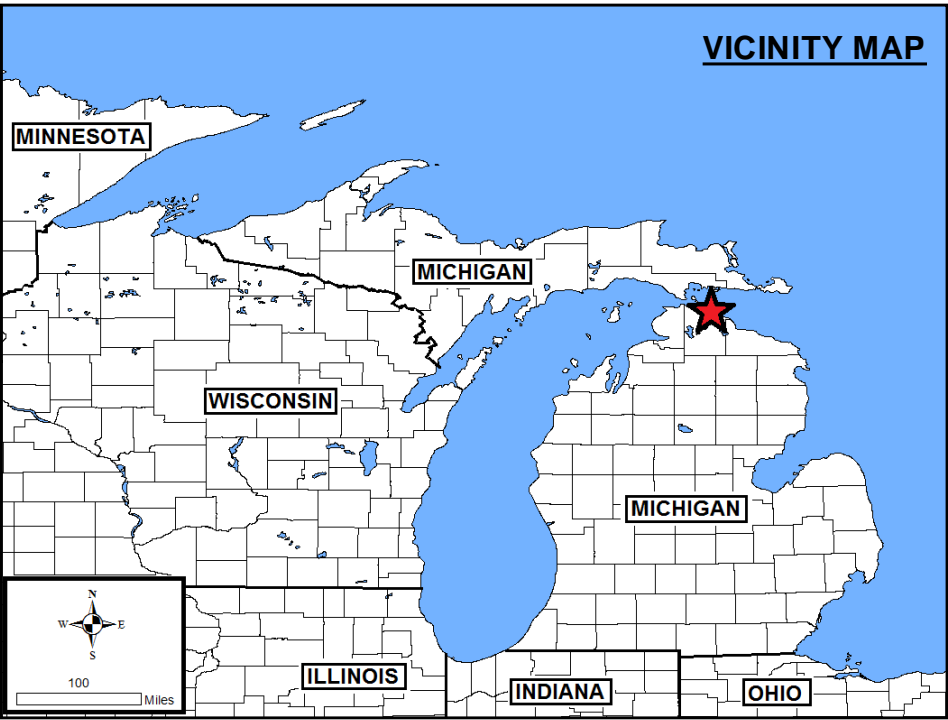
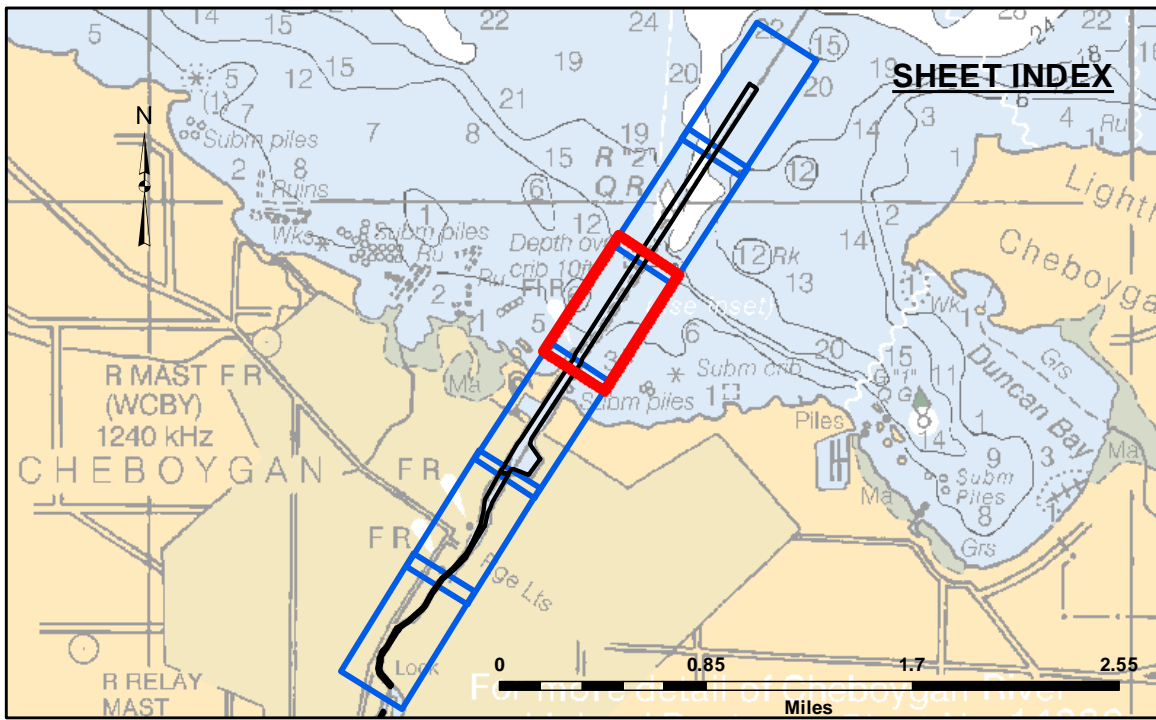
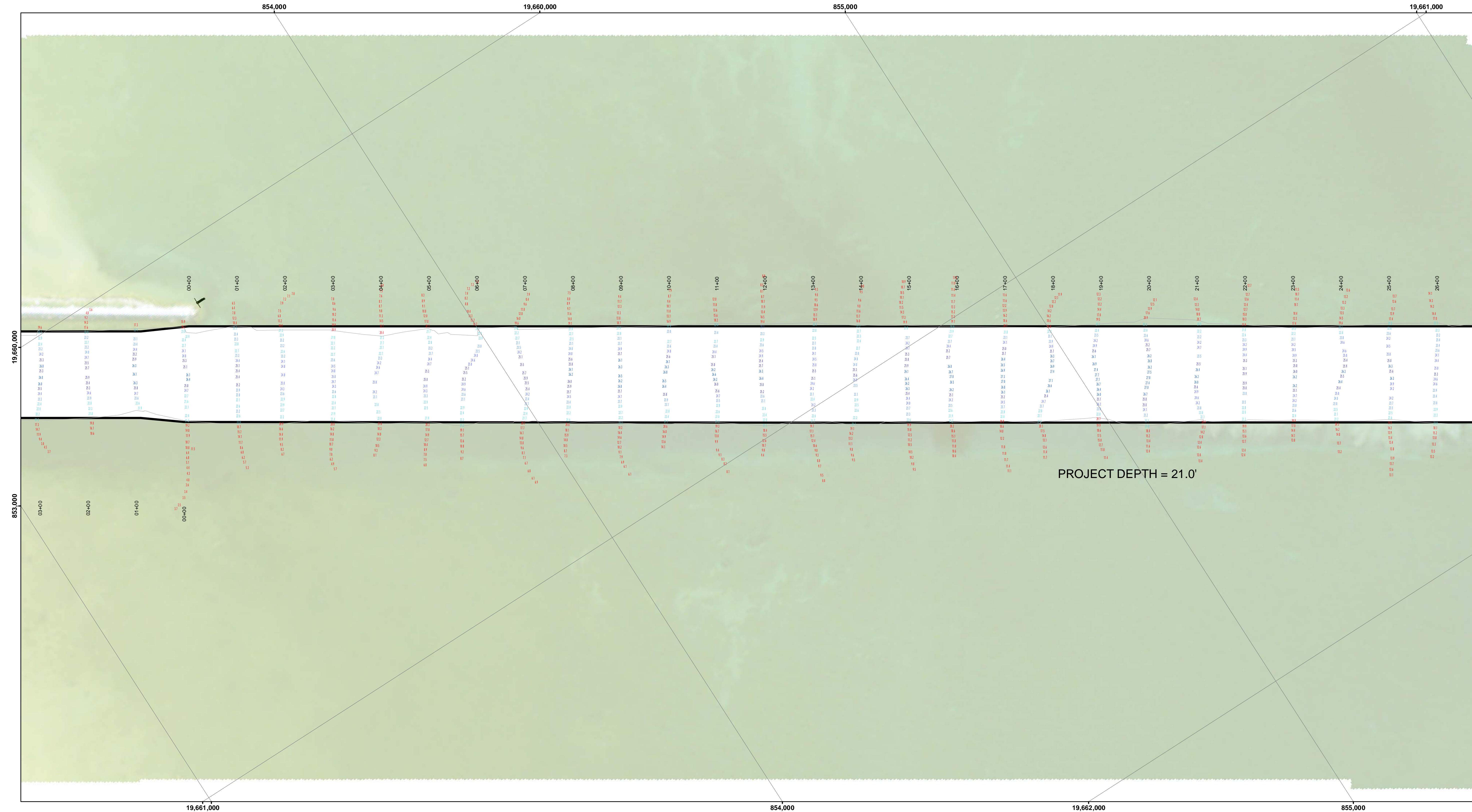
CHEBOYGAN HARBOR, MI
Cheboygan Harbor
CH_01_BOY_20200923_CS
23 September 2020

Sheet Reference Number
3 of 6

U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT		
Submitted:	Surveyed By:	
Recommended:	Plotted By:	
Approved:	Chief, Technical Services	

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 user is responsible for the results of any application of the data for other than its intended purpose. The data is not to be used for any other purpose without the express written consent of the U.S. Army Corps of Engineers. The user is responsible for the results of any application of the data for other than its intended purpose. The data is not to be used for any other purpose without the express written consent of the U.S. Army Corps of Engineers.





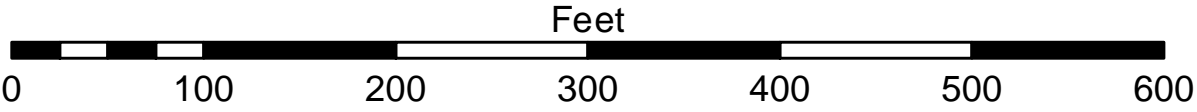
LEGEND

- Cable Submarine
- Cable Overhead
- ⊥ Beacon, General
- ▭ Channel Limits
- Contour Lines

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 AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.

2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS: HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN CENTRAL ZONE #2112, NORTH AMERICAN DATUM (NAD) OF 1983. VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.

3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS: POSITIONING: APPLANIX POS-MV4 WIMARINERSTAR GPS CORRECTIONS. MOTION COMPENSATION: APPLANIX POS-MV4. SONAR: ODOM CV-300 (SINGLEBEAM TRANSDUCER) SOFTWARE: HYPACK 2018

4) WATER LEVEL ELEVATIONS WERE OBTAINED FROM TBM STEEL CORNER WHICH WAS ESTABLISHED FROM NGS VERTICAL CONTROL POINT BM RANGE (PID QK0021).

5) THE EDITED SINGLEBEAM DATA WAS SORTED INTO A 10 FT. DATA SET WITH THE RESULTING POINTS POSTED.

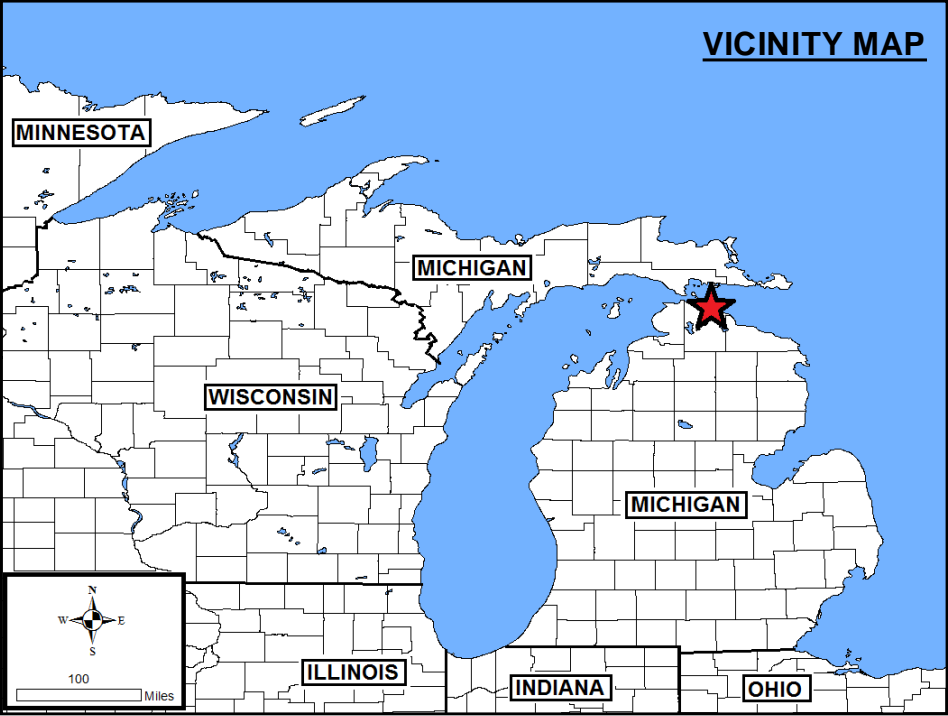
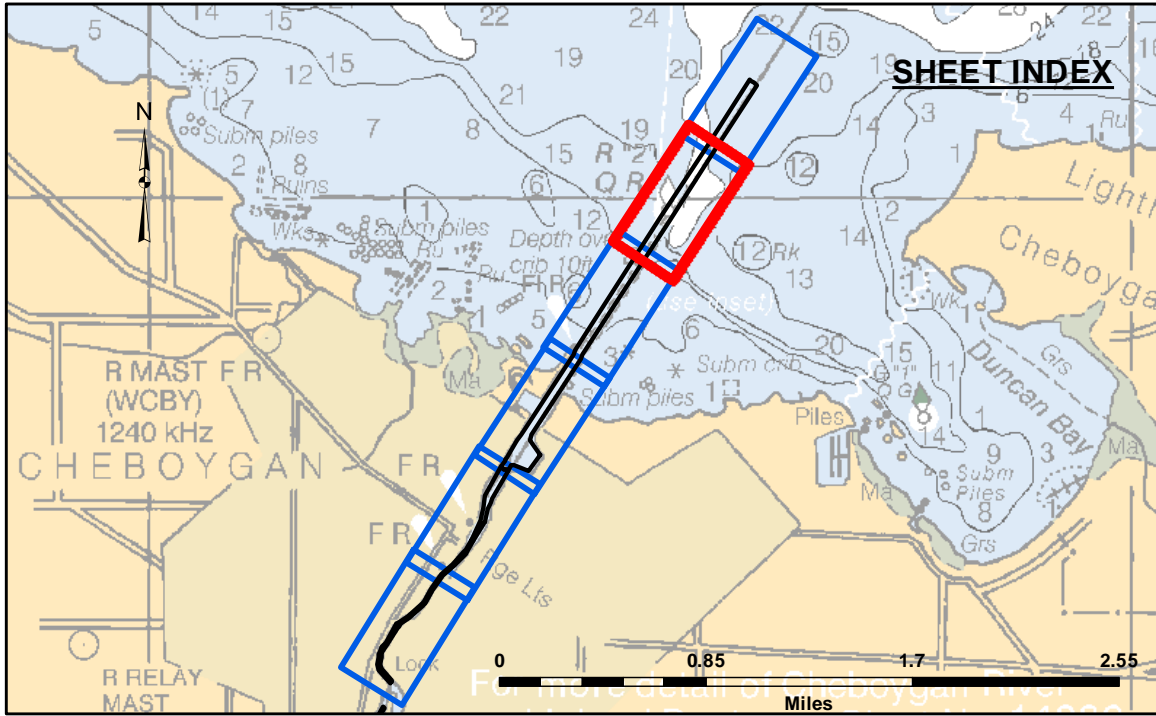
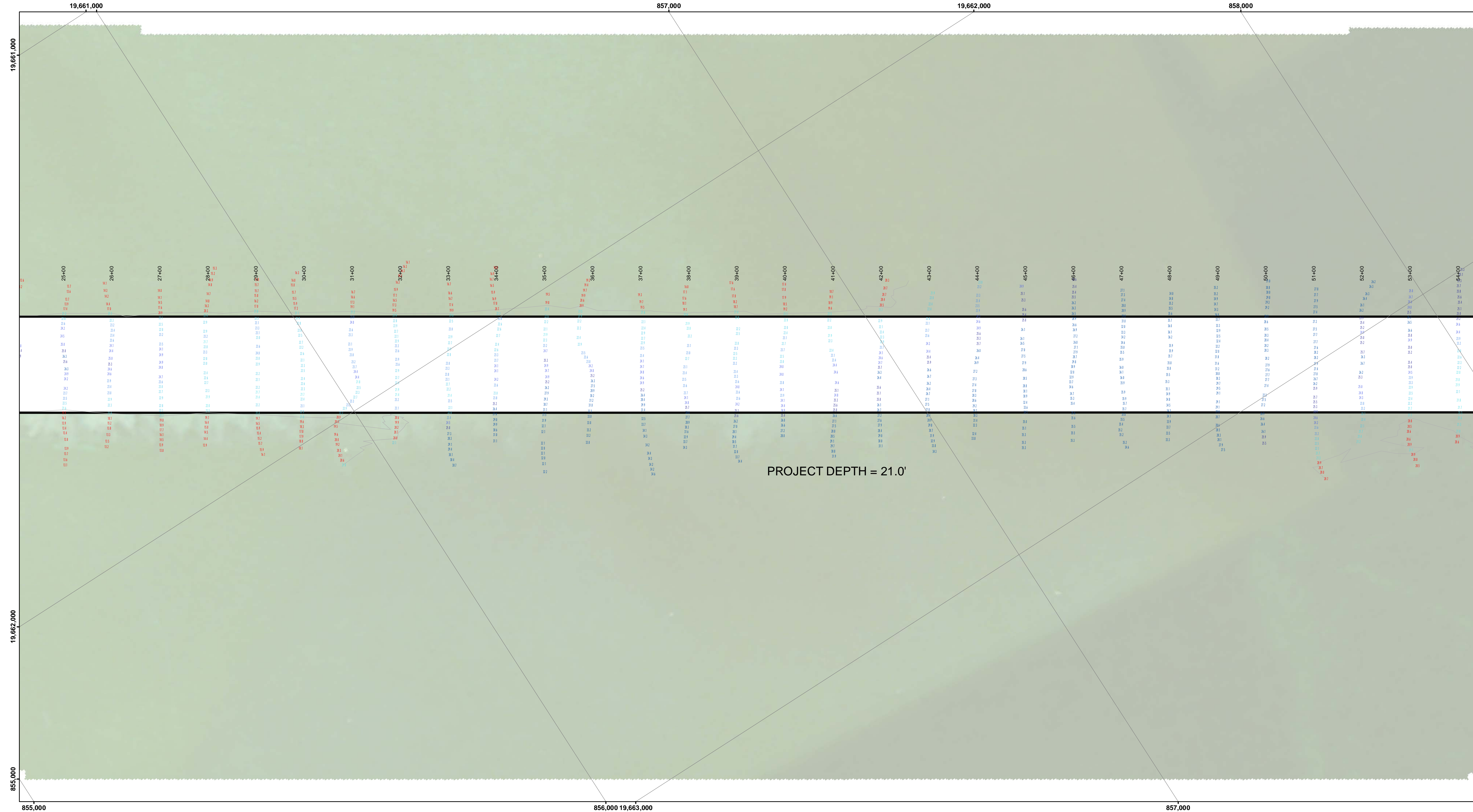
CHEBOYGAN HARBOR, MI
Cheboygan Harbor
CH_01_BOY_20200923_CS
23 September 2020

Sheet Reference Number
4 of 6

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

DISCLAIMER: The data represented by the symbols of data collection, including, but not limited to, the symbols of data collection, are the property of the U.S. Army Corps of Engineers and are not to be used for any purpose other than that for which they were collected. The data are not to be used for any purpose other than that for which they were collected. The data are not to be used for any purpose other than that for which they were collected. The data are not to be used for any purpose other than that for which they were collected.





LEGEND

- Cable Submarine
- - - Cable Overhead
- ⊥ Beacon, General
- ▭ Channel Limits
- Contour Lines

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

Feet

0 100 200 300 400 500 600

NOTES:

1) THE SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.

2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS: HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN CENTRAL ZONE #2112, NORTH AMERICAN DATUM (NAD) OF 1983. VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.

3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS: POSITIONING: APPLANIX POS-MV4 WIMARINESTAR GPS CORRECTIONS. MOTION COMPENSATION: APPLANIX POS-MV4 SONAR: ODOM CV-300 (SINGLEBEAM TRANSDUCER) SOFTWARE: HYPACK 2018

4) WATER LEVEL ELEVATIONS WERE OBTAINED FROM TBM STEEL CORNER WHICH WAS ESTABLISHED FROM NGS VERTICAL CONTROL POINT BM RANGE (PID QK0021).

5) THE EDITED SINGLEBEAM DATA WAS SORTED INTO A 10 FT. DATA SET WITH THE RESULTING POINTS POSTED.

CHEBOYGAN HARBOR, MI
Cheboygan Harbor
CH_01_BOY_20200923_CS
23 September 2020

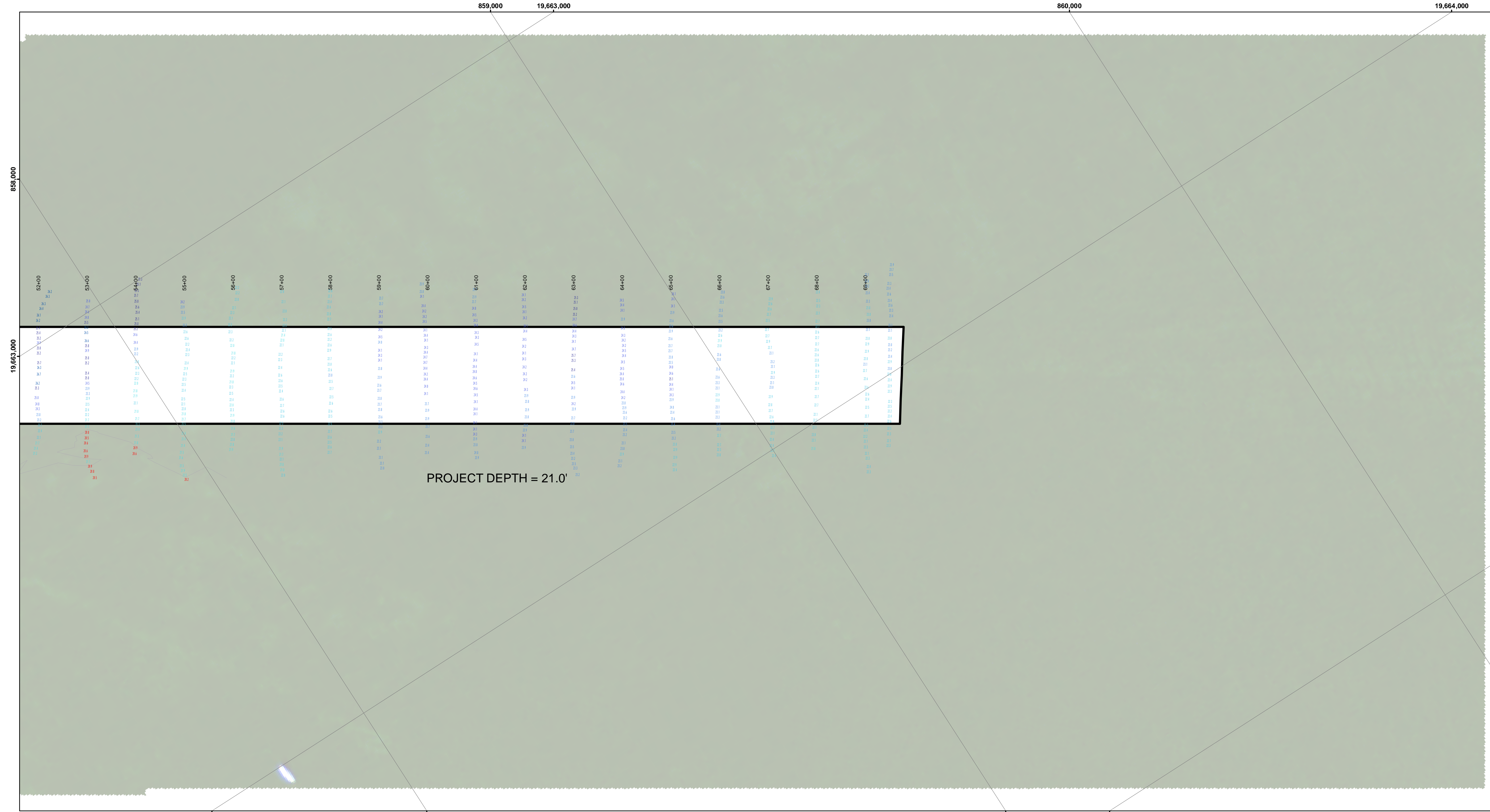
Sheet Reference Number
5 of 6

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

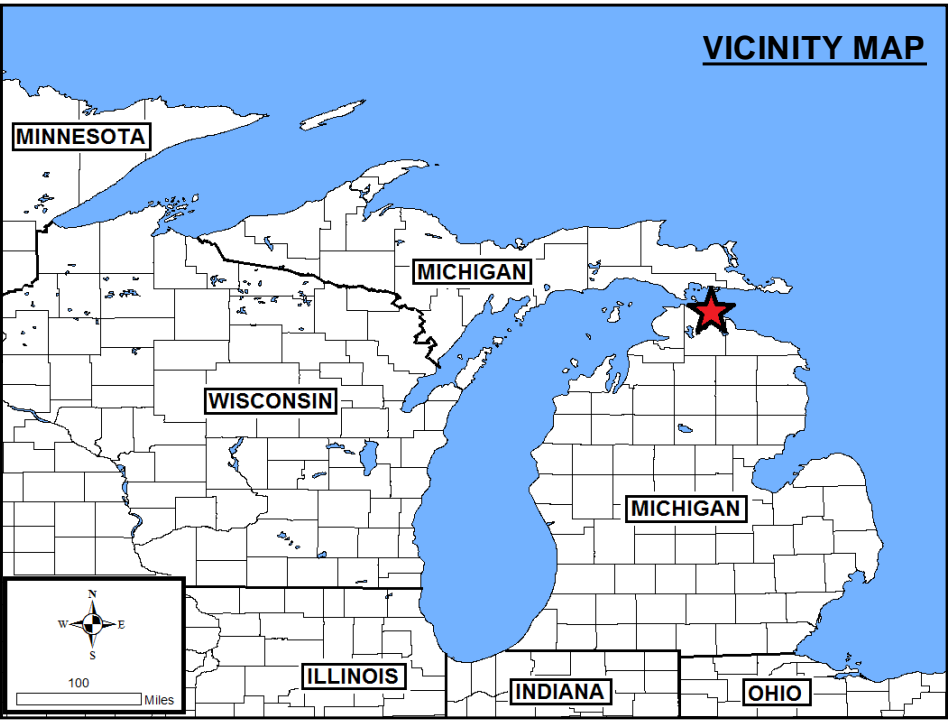
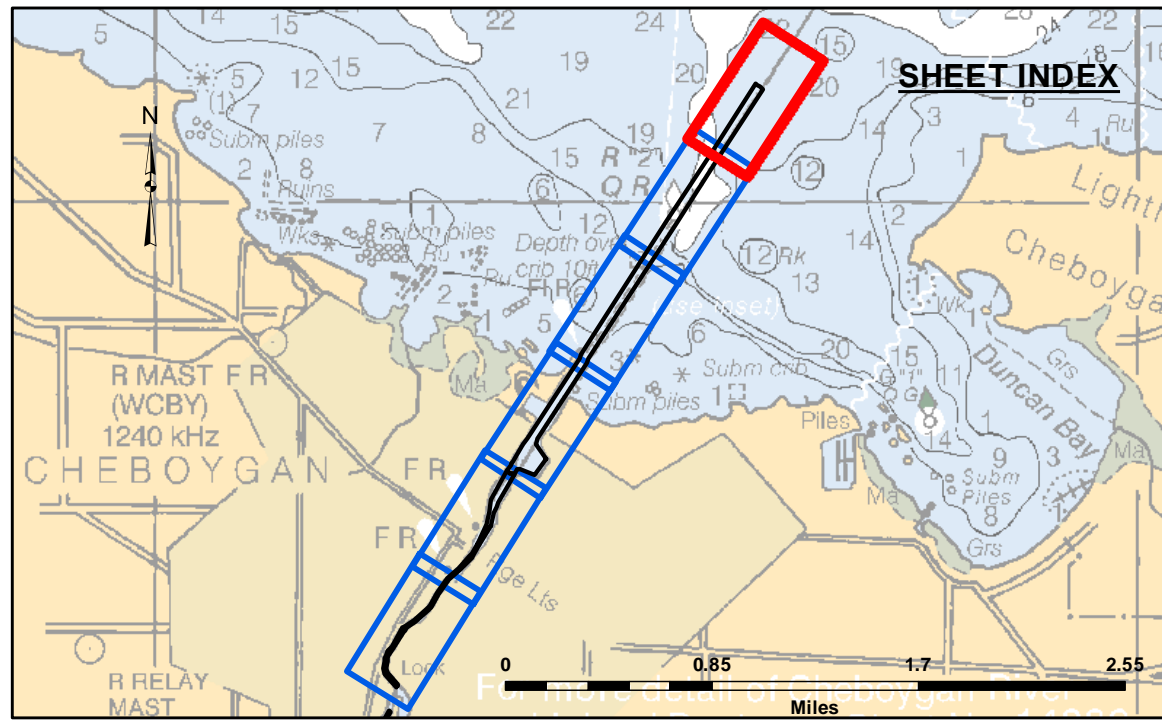
DISCLAIMER: The data represents the results of data collection operations for a specific US Army Corps of Engineers activity and indicates the general existing conditions. The data is not intended to be used for any purpose other than its intended purpose. The user is responsible for the results of any 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.



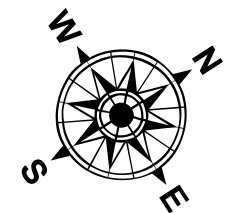


PROJECT DEPTH = 21.0'

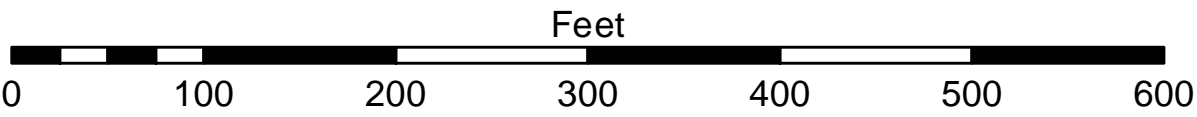


- LEGEND**
- Cable Submarine
 - - - Cable Overhead
 - ⊥ Beacon, General
 - ▭ Channel Limits
 - Contour Lines

- 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 AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.
 - 2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS: HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN CENTRAL ZONE #2112, NORTH AMERICAN DATUM (NAD) OF 1983. VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.
 - 3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH 3053 EMPLOYING THE FOLLOWING COMPONENTS: POSITIONING: APPLANIX POS-MV4 WIMARINESTAR GPS CORRECTIONS. MOTION COMPENSATION: APPLANIX POS-MV4. SONAR: ODOM CV-300 (SINGLEBEAM TRANSDUCER) SOFTWARE: HYPACK 2018
 - 4) WATER LEVEL ELEVATIONS WERE OBTAINED FROM TBM STEEL CORNER WHICH WAS ESTABLISHED FROM NGS VERTICAL CONTROL POINT BM RANGE (PID QK0021).
 - 5) THE EDITED SINGLEBEAM DATA WAS SORTED INTO A 10 FT. DATA SET WITH THE RESULTING POINTS POSTED.

CHEBOYGAN HARBOR, MI
Cheboygan Harbor
CH_01_BOY_20200923_CS
23 September 2020

Sheet Reference Number
6 of 6

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

DISCLAIMER: The data represents the results of data collection operations for a specific US Army Corps of Engineers activity and indicates the general existing conditions. The data is not intended to be used for any purpose other than the intended purpose of the activity. The user is responsible for the results 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 the intended purpose of the activity. The data are not to be used for any purpose other than the intended purpose of the activity. The user is responsible for the results of any of the application of the data for other than its intended purpose.

