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Submitted: \_\_\_\_\_

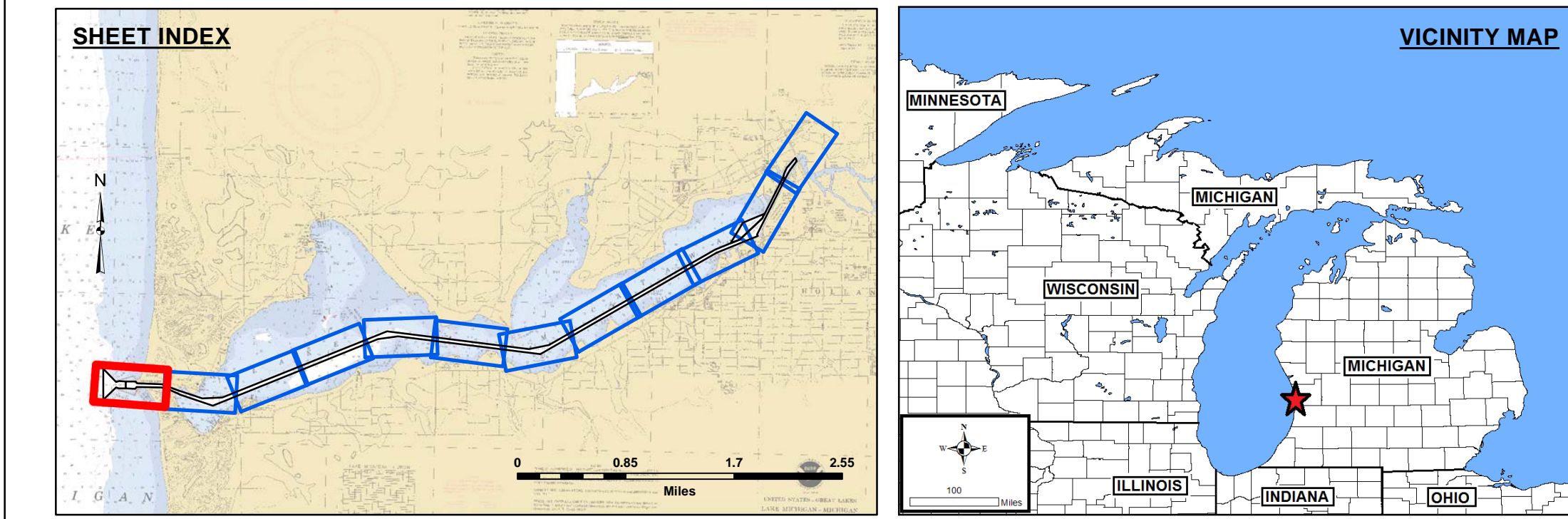
Recommended: \_\_\_\_\_

Approved: \_\_\_\_\_

HOLLAND HARBOR, MI  
Holland Harbor  
HO\_01\_LND\_20230517\_AD  
17 May 2023

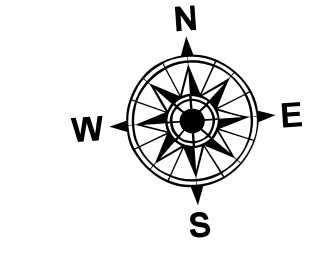
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Revision Number:  
4.2-20080420

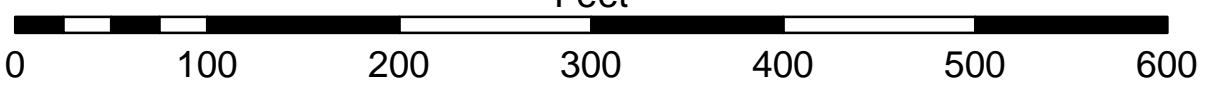


- LEGEND**
- Cable Submarine
  - - - Cable Overhead
  - Placement Area
  - ⊥ Beacon, General
  - Contour Lines
  - Channel Limits

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



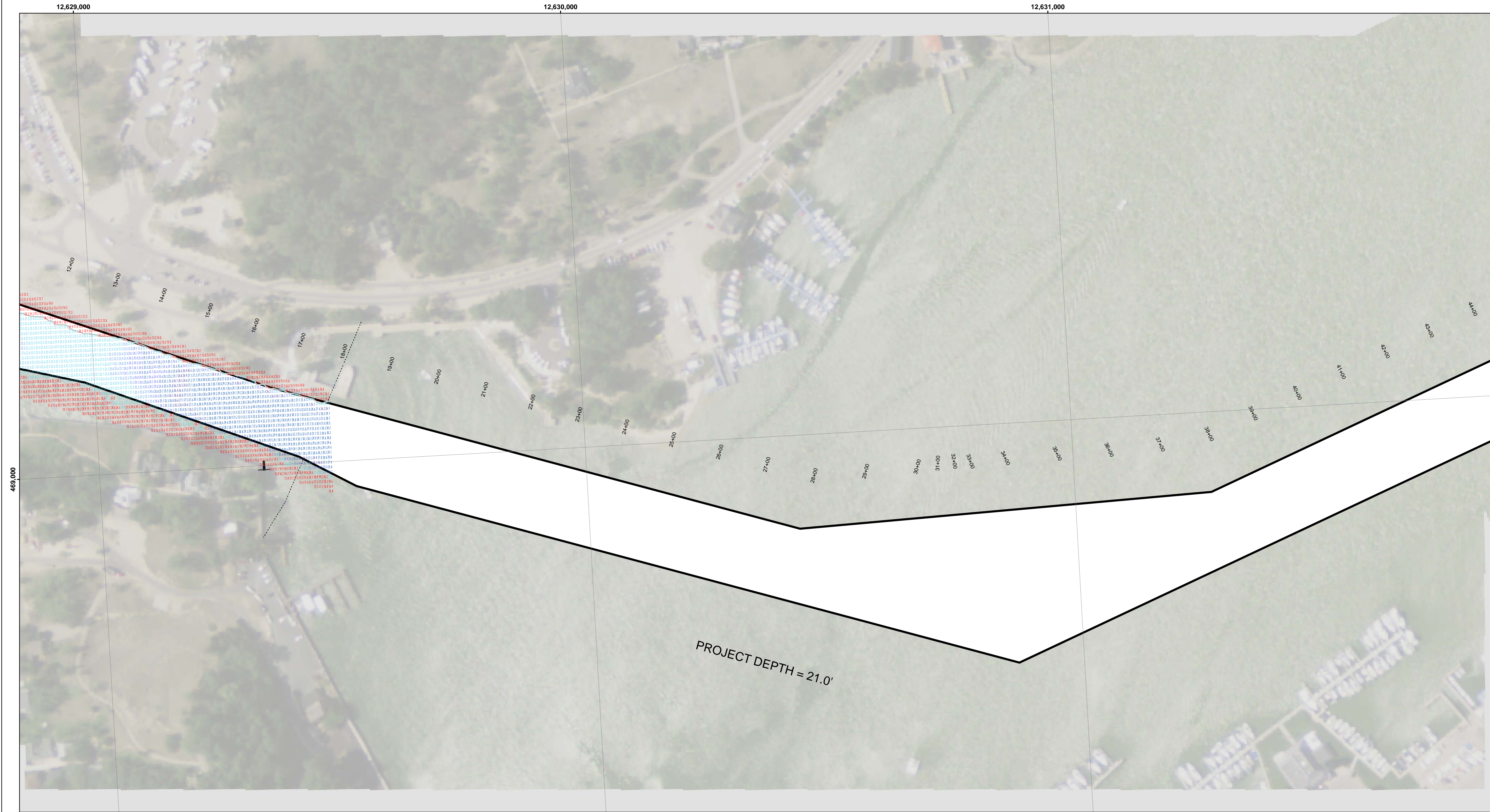
1 inch = 100 feet



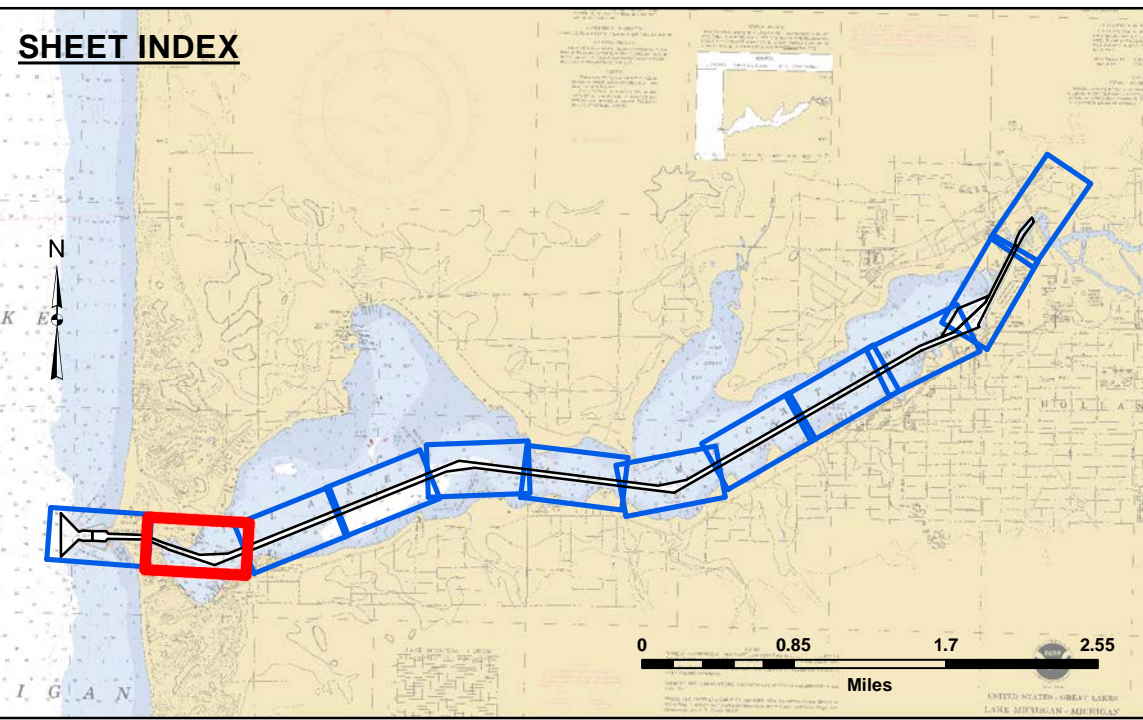
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SOFTWARE: HYPACK 2021  
VESSEL: LAUNCH 3058

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS  
\*\* SHORLEST SOUNDING PER QUARTER PER REACH.





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VICINITY MAP

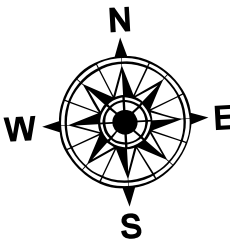


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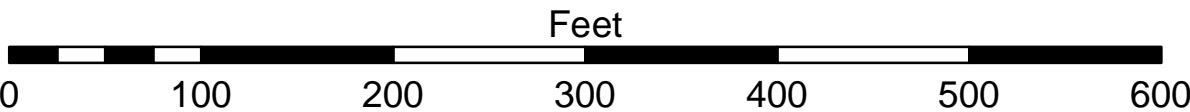
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- ┆ Beacon, General
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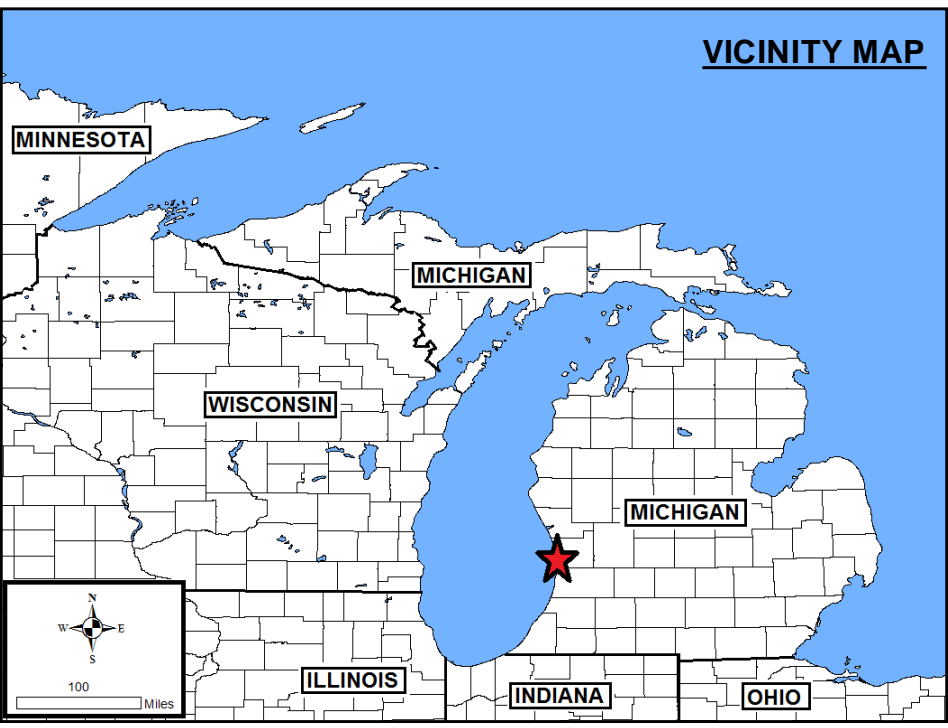
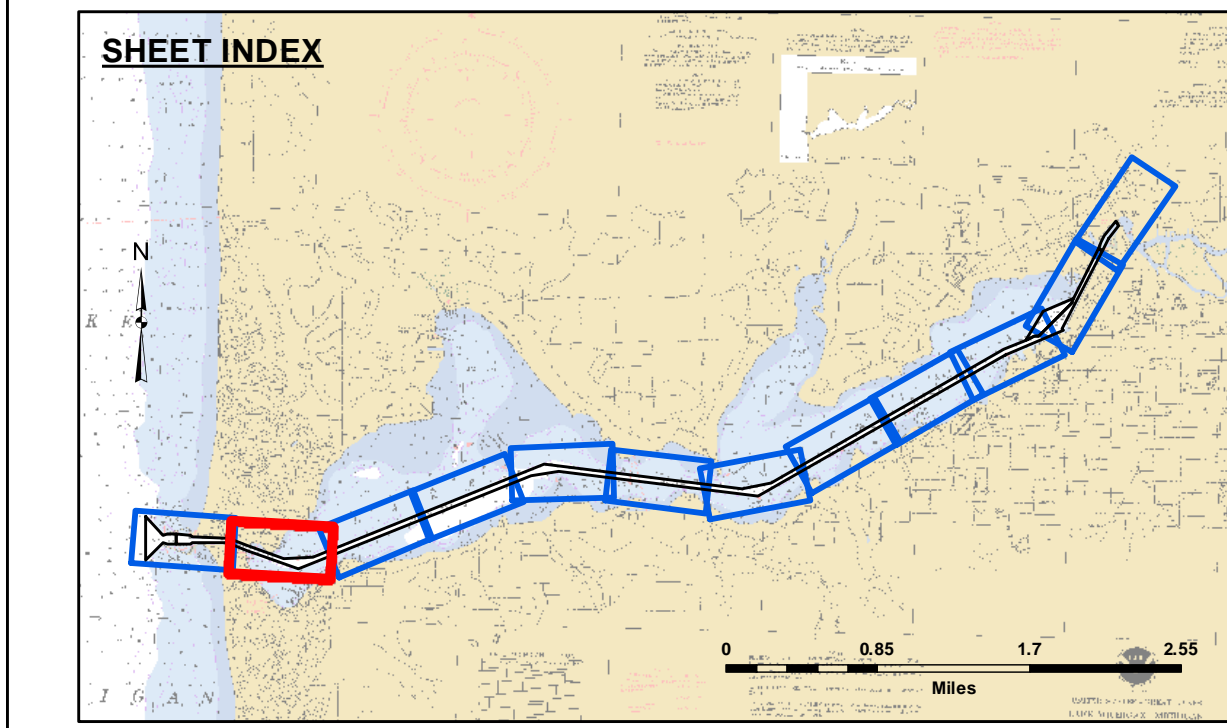
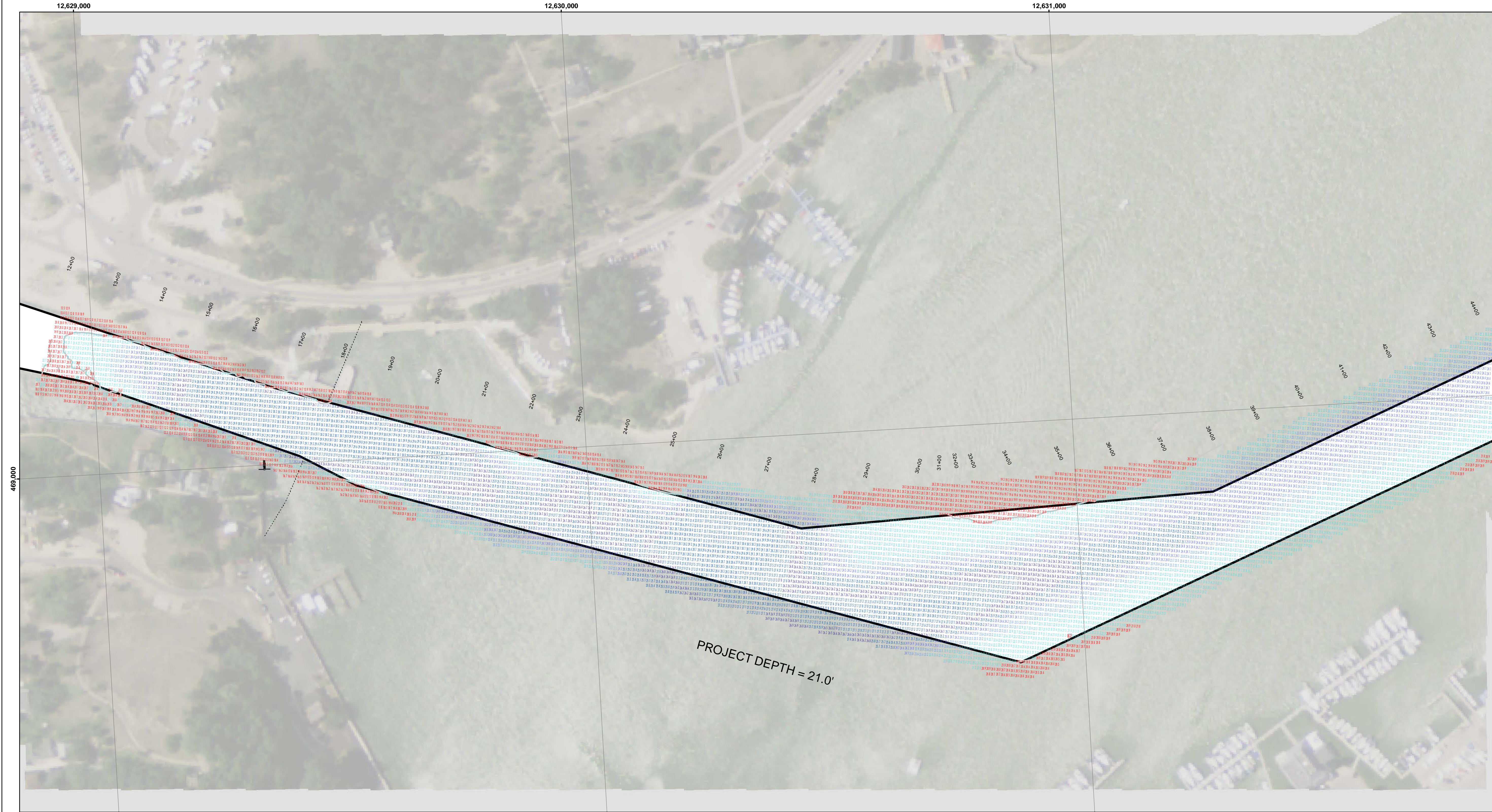
U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT			
Submitted:	Surveyed By:	Plotted By:	Checked By:
Recommended:	Chief, Survey Section		
Approved:	Chief, Technical Services		

HOLLAND HARBOR, MI  
Holland Harbor  
HO\_01\_LND\_20230517\_AD  
17 May 2023

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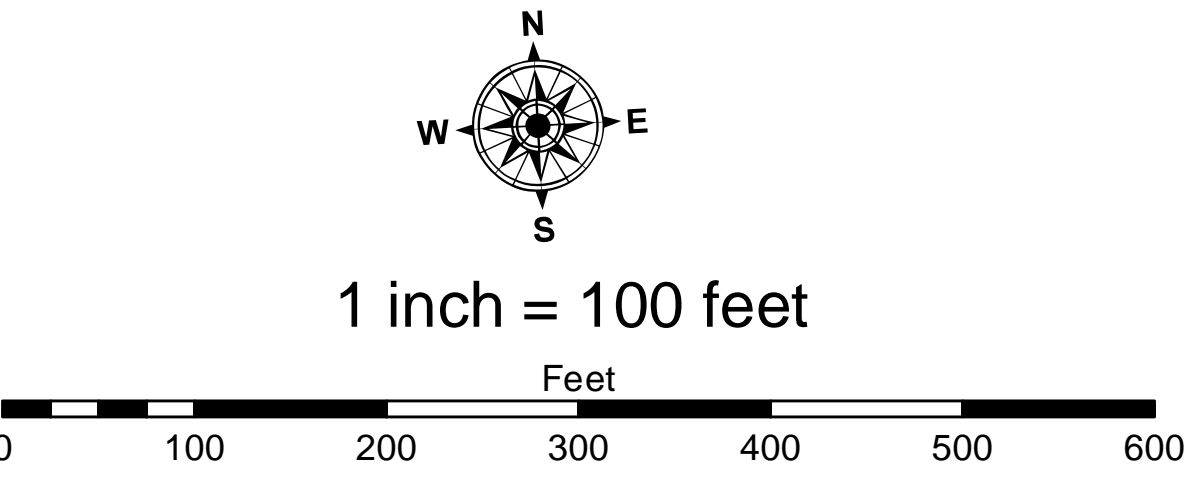
Revision Number:  
4.2-2023060120





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VESSEL LAUNCH 3058
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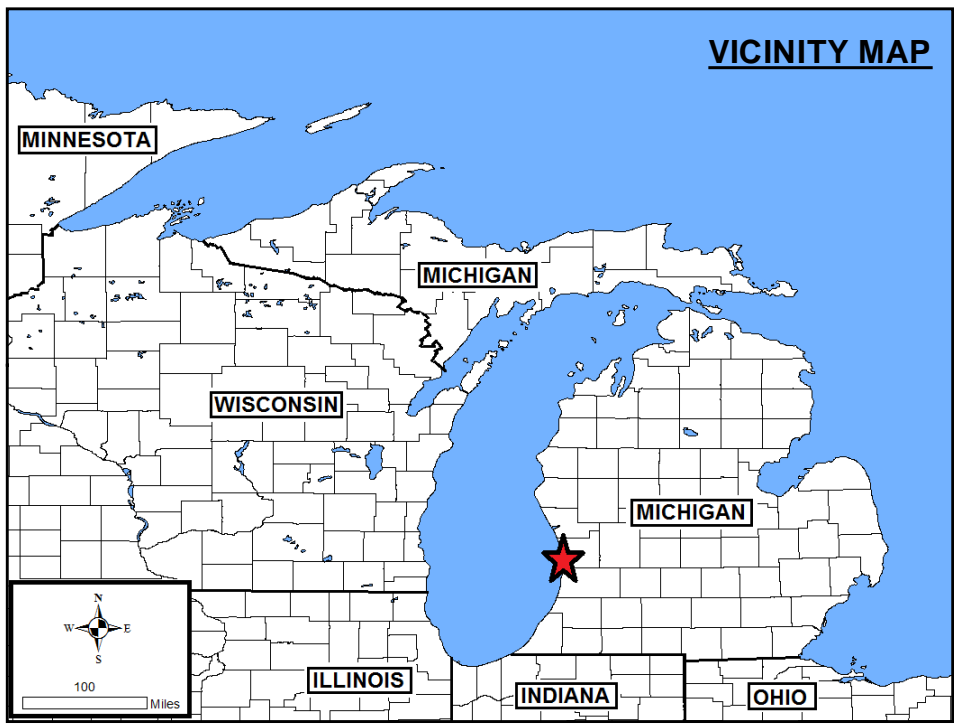
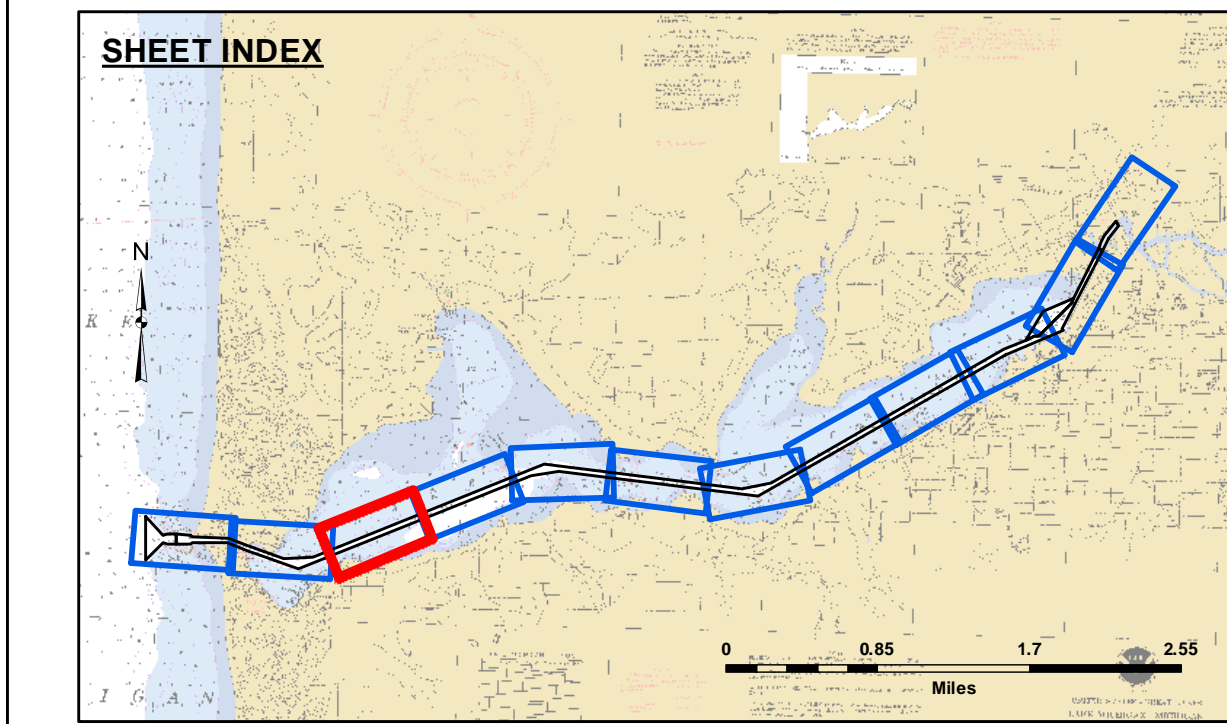
Submitted:	Surveyed By:
Recommended:	Plotted By:
Approved:	Checked By:
Chief, Survey Section	
Chief, Technical Services	

HOLLAND HARBOR, MI  
Holland Harbor  
HO\_01\_LND\_20230414\_CS  
14 April 2023

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Revision Number:  
4.2-20240420





**LEGEND**

- ..... Cable Submarine
- Cable Overhead
- Placement Area
- ⊥ Beacon, General
- Contour Lines
- ▭ Channel\_Limits

**SOUNDING LEGEND**

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1 inch = 100 feet

Feet

0 100 200 300 400 500 600

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VESSEL: LAUNCH 3058

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

  
**US Army Corps  
of Engineers**  
District: CELRE

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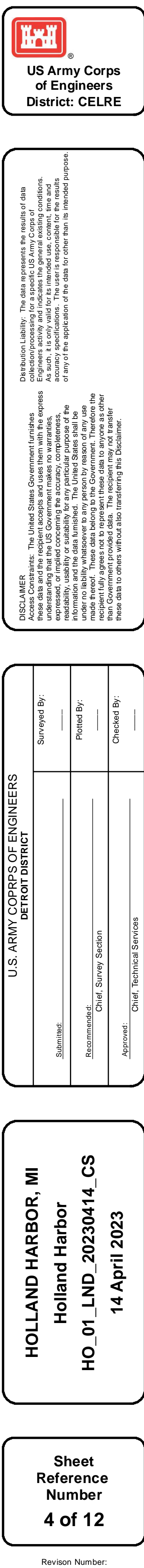
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U.S. ARMY CORPS OF ENGINEERS DETROIT DISTRICT			
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Recommended:	Plotted By:		
Approved:	Chief, Survey Section	Checked By:	
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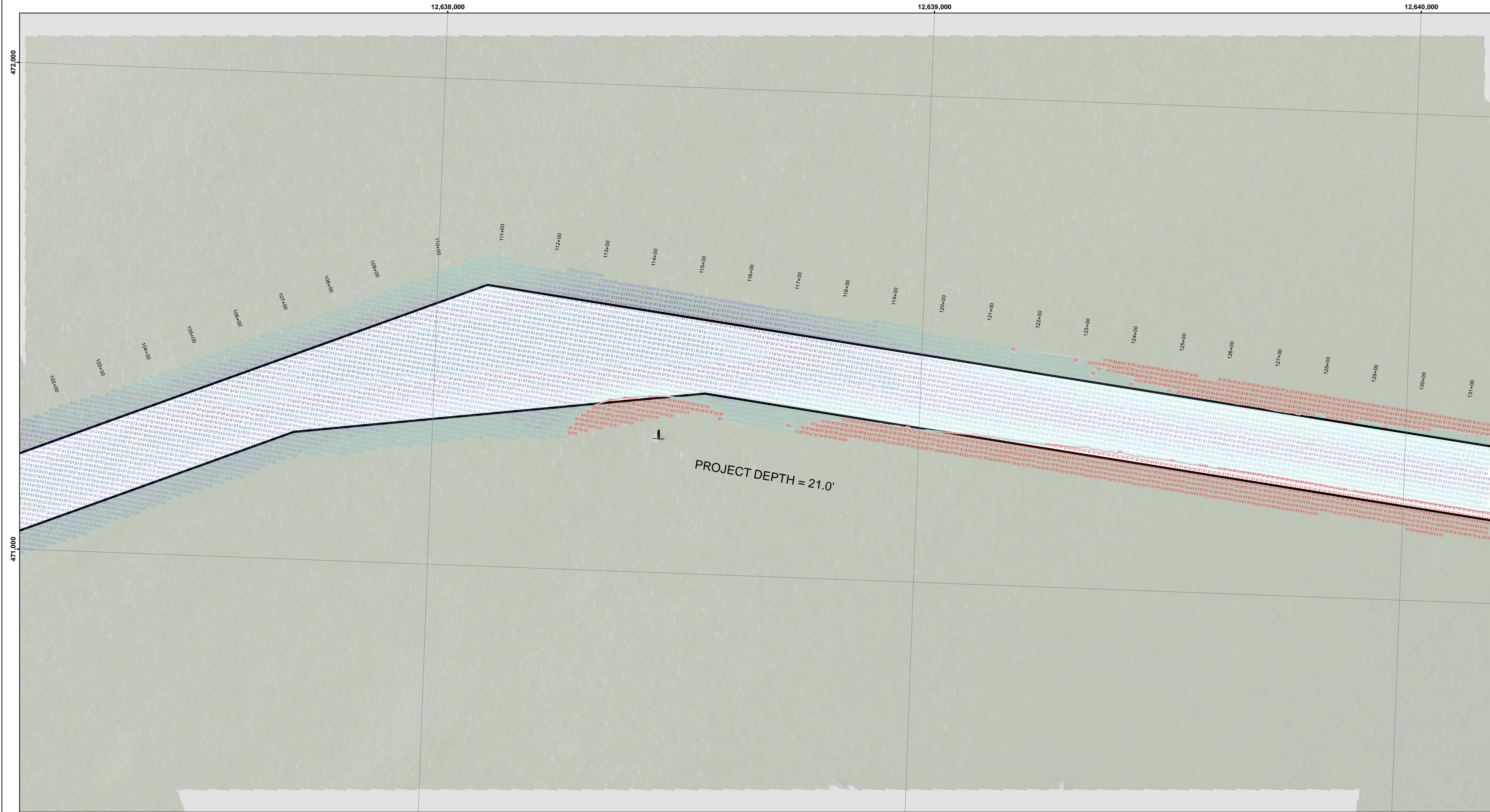
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Holland Harbor  
HO\_01\_LND\_20230414\_CS  
14 April 2023

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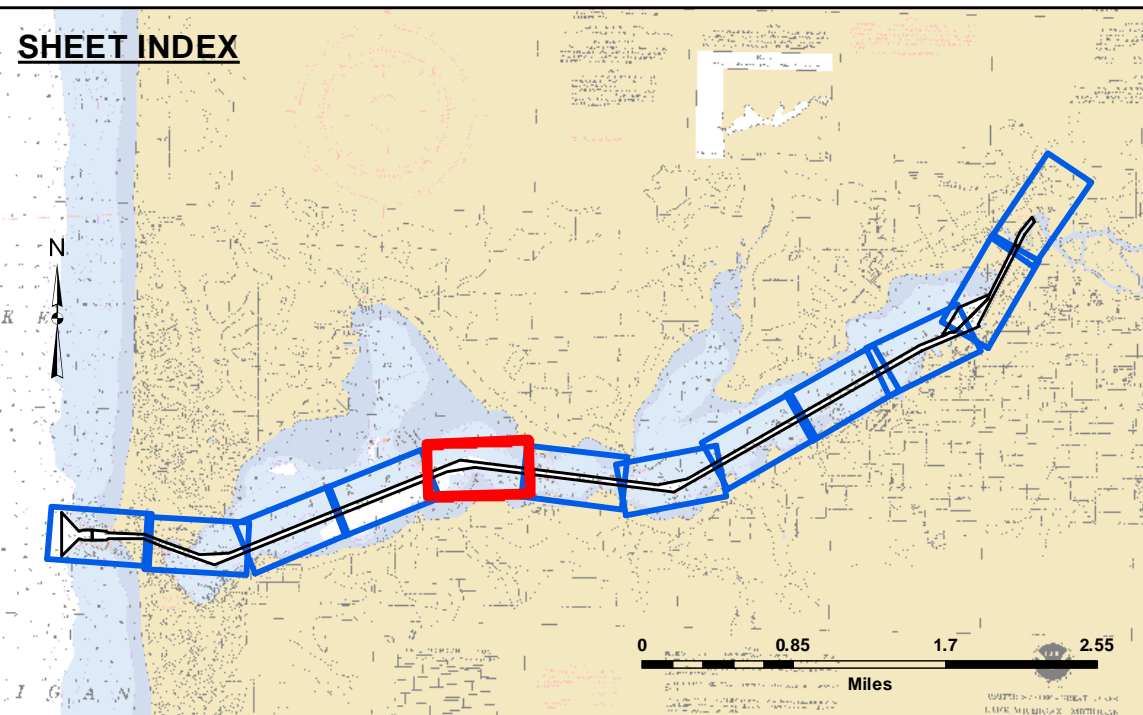




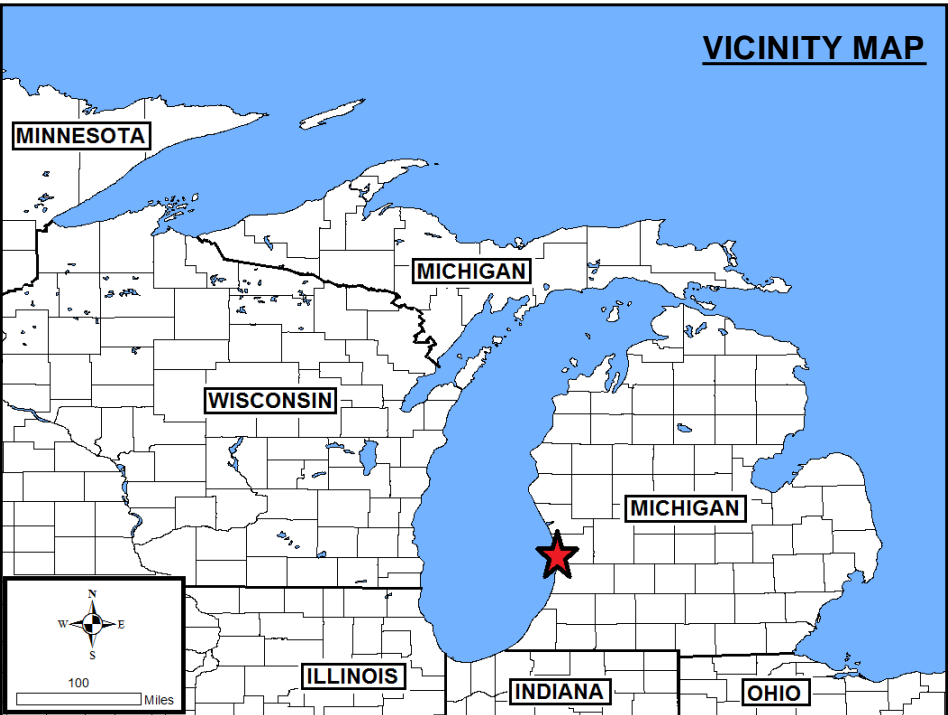




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VICINITY MAP

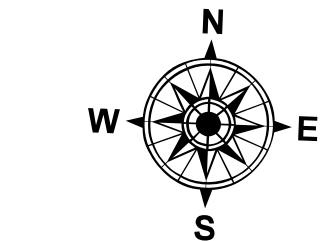


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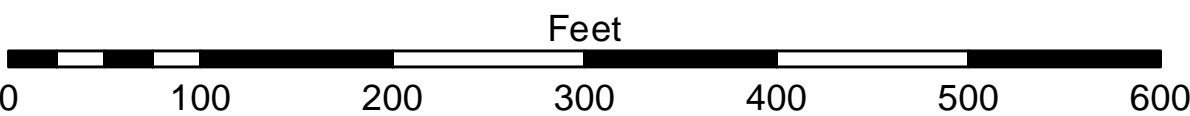
- ..... Cable Submarine
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SOUNDING LEGEND

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VESSEL LAUNCH 3058

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US Army Corps  
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District: CELRE

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DETROIT DISTRICT

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Recommended:

Approved:

Chief, Survey Section

Chief, Technical Services

HOLLAND HARBOR, MI

Holland Harbor

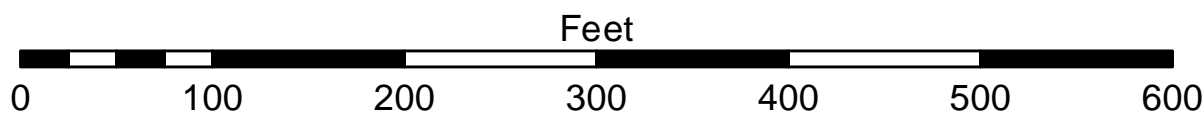
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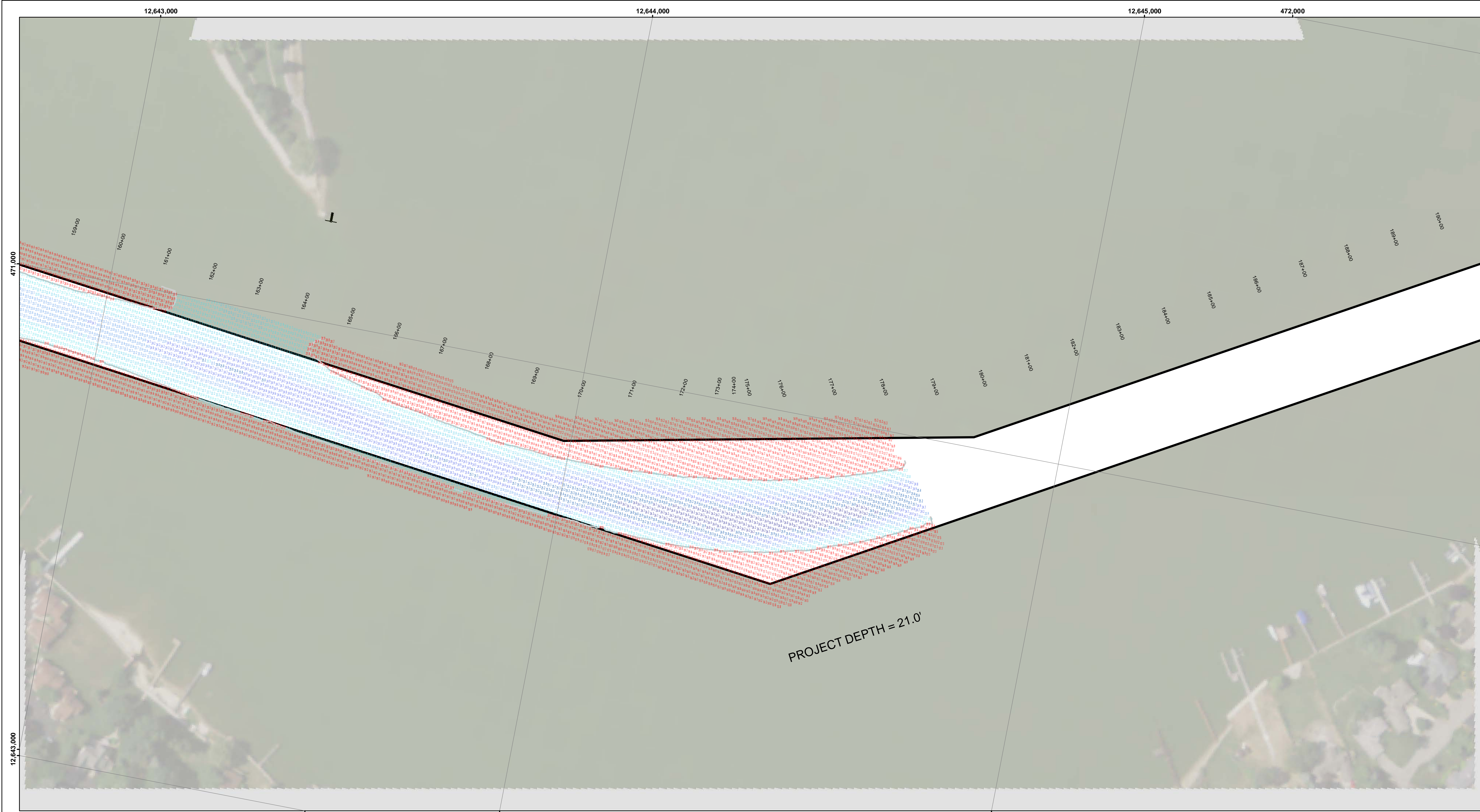
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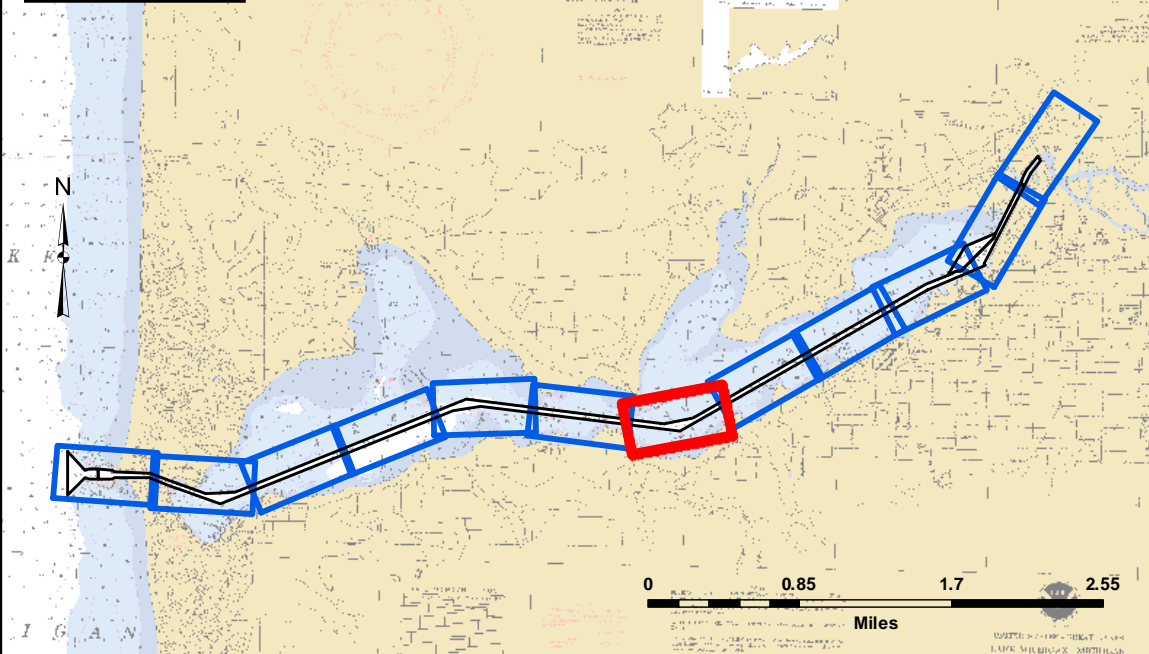


HOLLAND HARBOR, MI  
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VICINITY MAP

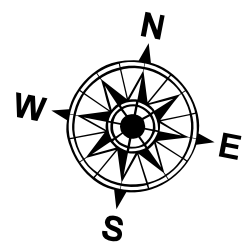


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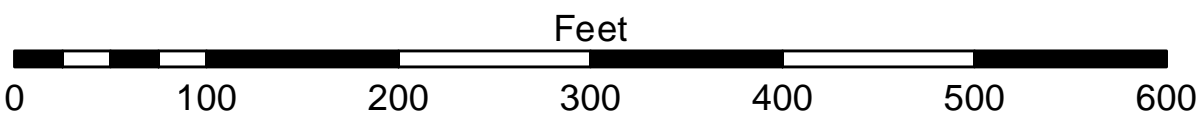
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U.S. ARMY CORPS OF ENGINEERS  
DETROIT DISTRICT

Submitted:

Surveyed By:

Plotted By:

Checked By:

HOLLAND HARBOR, MI

Holland Harbor

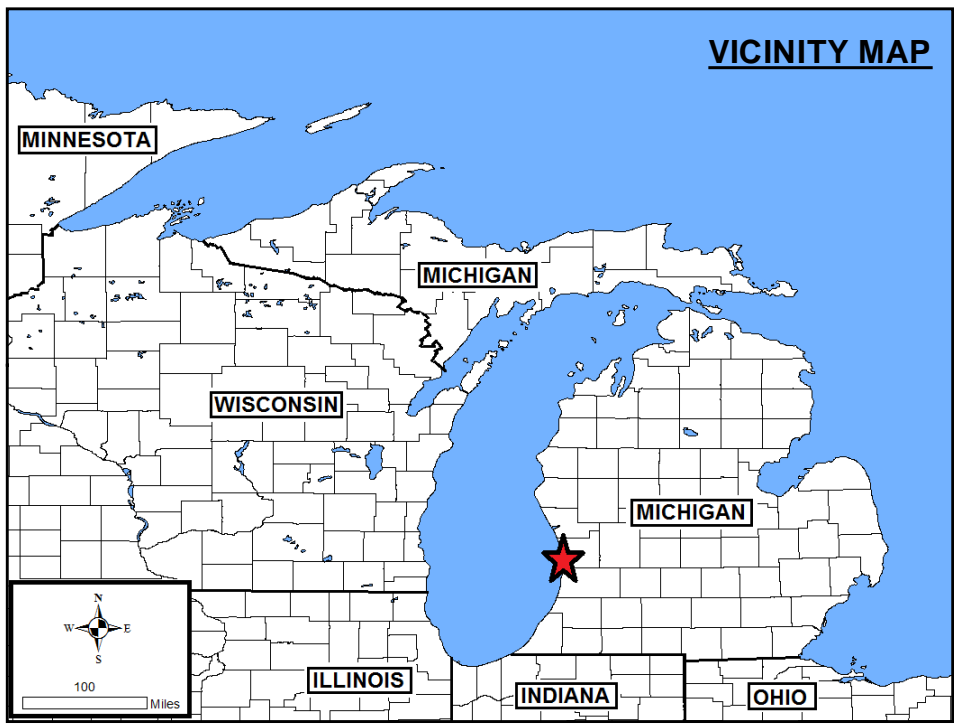
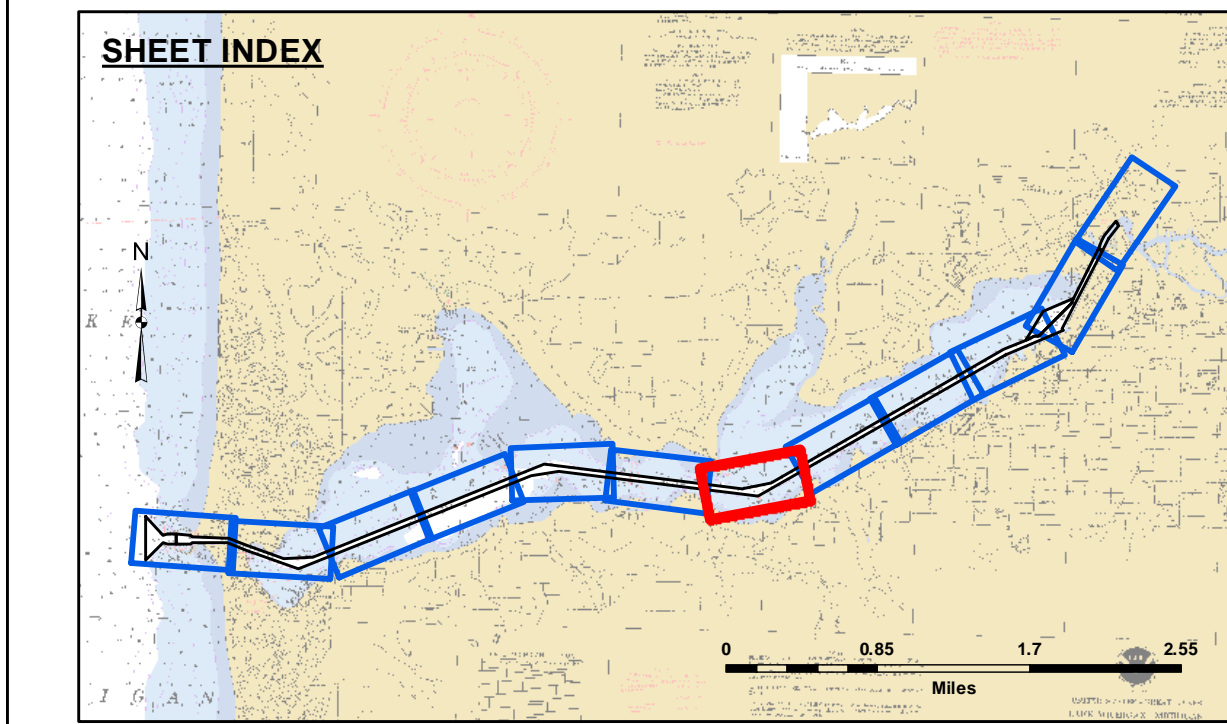
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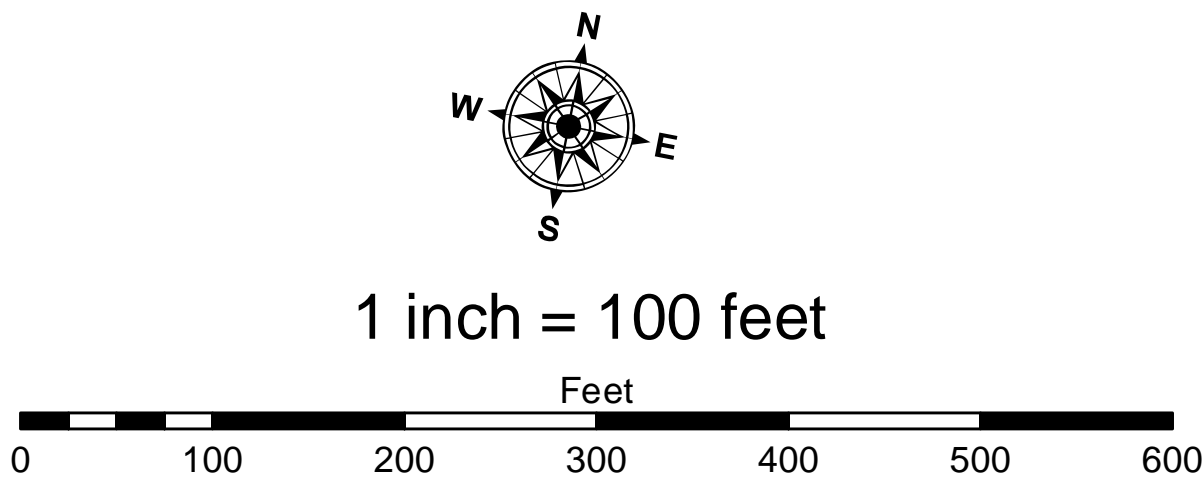
Revision Number:  
4.2-2023/04/20





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SONAR: R2SONIC 2024 MULTIBEAM ECHOSOUNDER  
SOFTWARE: HYPACK 2021  
VESSEL: LAUNCH 3058

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

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

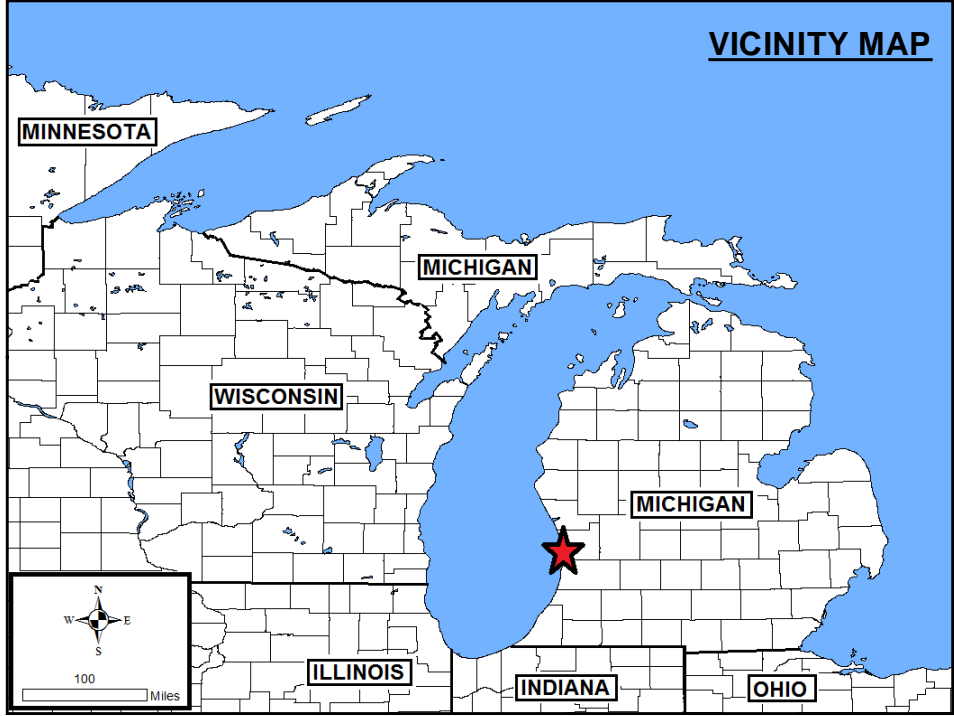
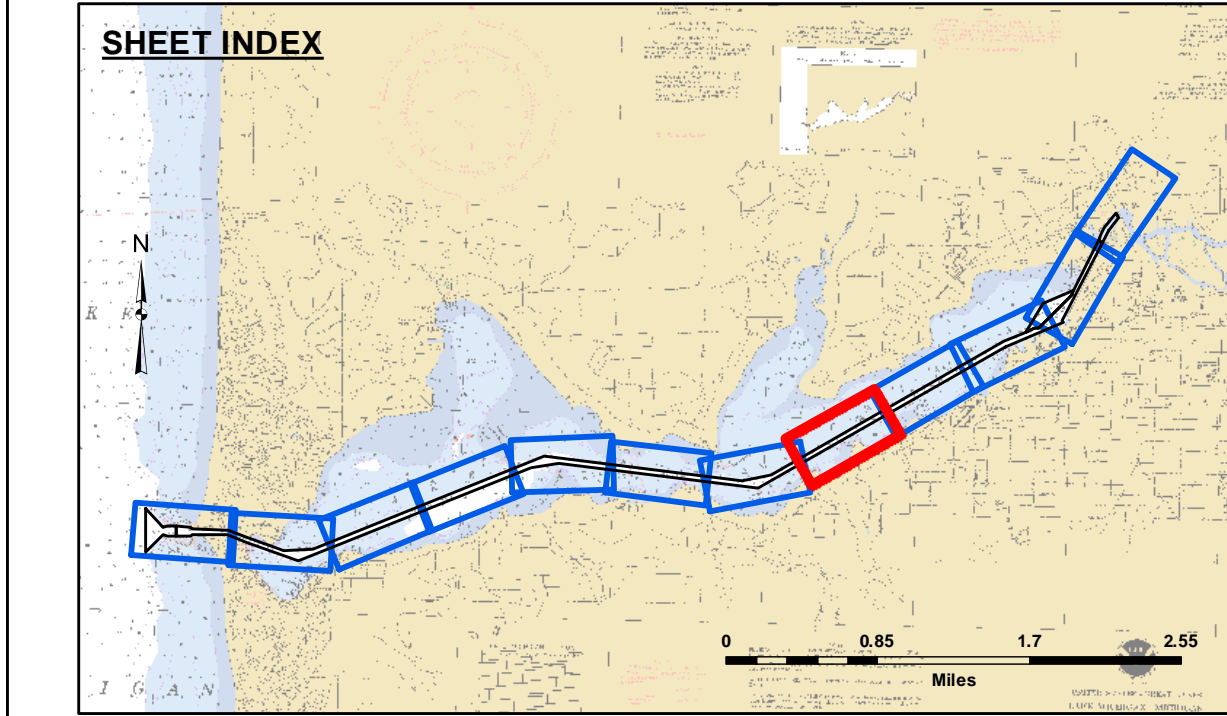
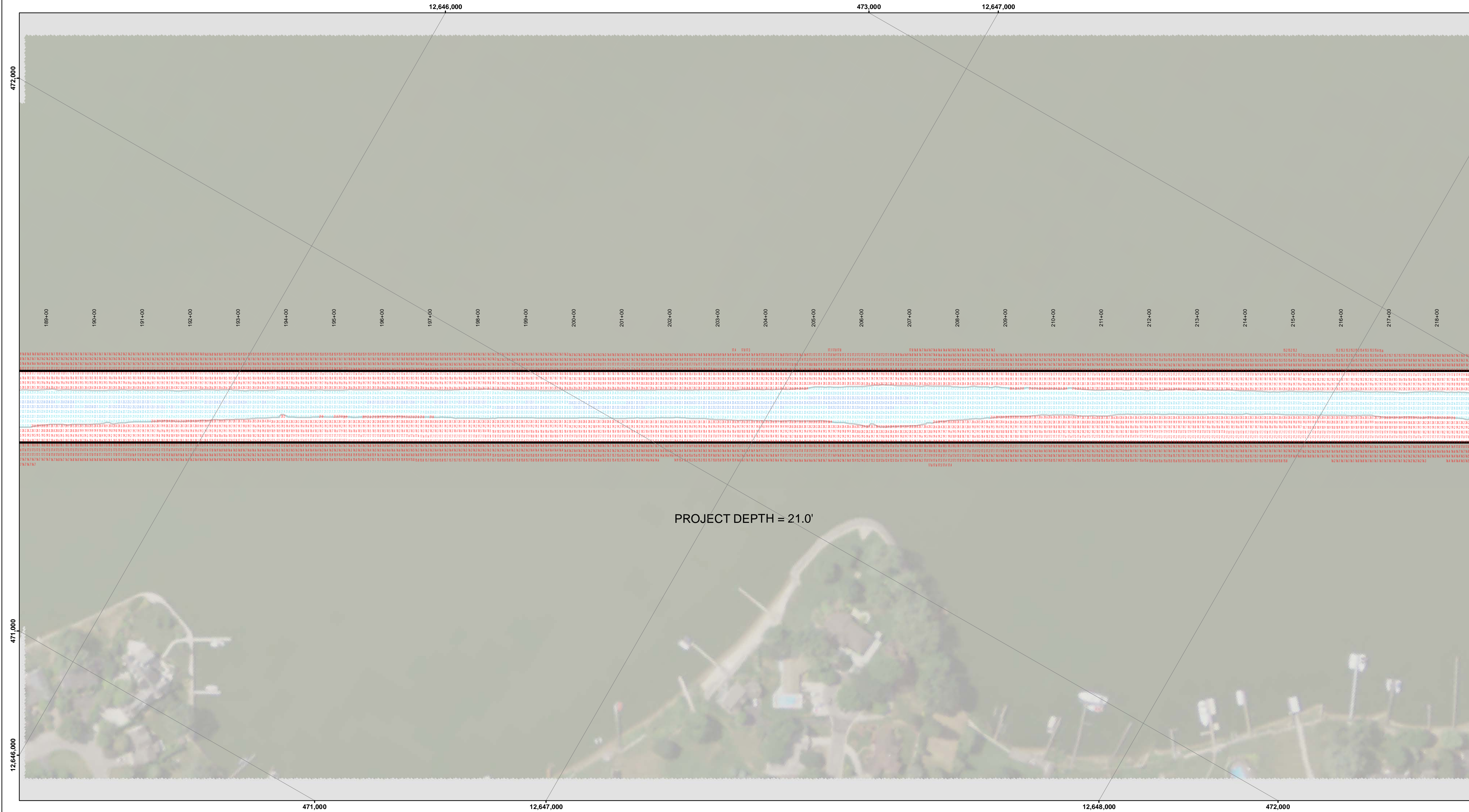
HOLLAND HARBOR, MI
Holland Harbor
HO_01_LND_20230426_CS
26 April 2023

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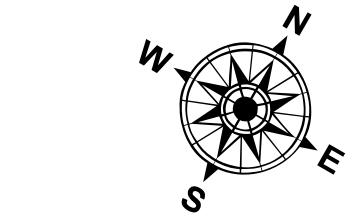
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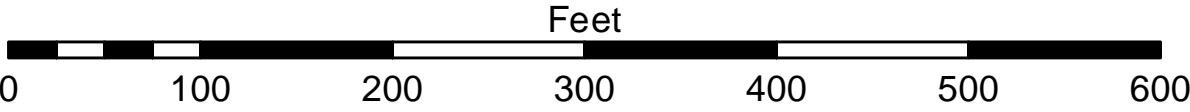


- LEGEND**
- ..... Cable Submarine
  - Cable Overhead
  - Placement Area
  - ⊥ Beacon, General
  - Contour Lines
  - Channel Limits

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



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 PROVIDED FOR STRIKE/SOHAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.
  2. GRIDS SHOWN ARE BASED ON THE NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, SOUTH ZONE (2118), 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 THE NOAA GAGE HOUSE LOCATED ON THE NORTH SIDE OF THE CHANNEL NEAR CROSS SECTION 1+00E IN HOLLAND HARBOR, MI.
  5. PROJECT DEPTH = 23.0-21.0 FEET
  6. POSITIONING: APPLANIX POS M/V CORRECTIONS: MARINESTAR GNSS G2+ SONAR: R2SONIC 2024 MULTIBEAM ECHOSOUNDER SOFTWARE: HYPACK 2021 VESSEL LAUNCH 3058
- 2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS



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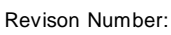
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Submitted:	Surveyed By:
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Chief, Survey Section	
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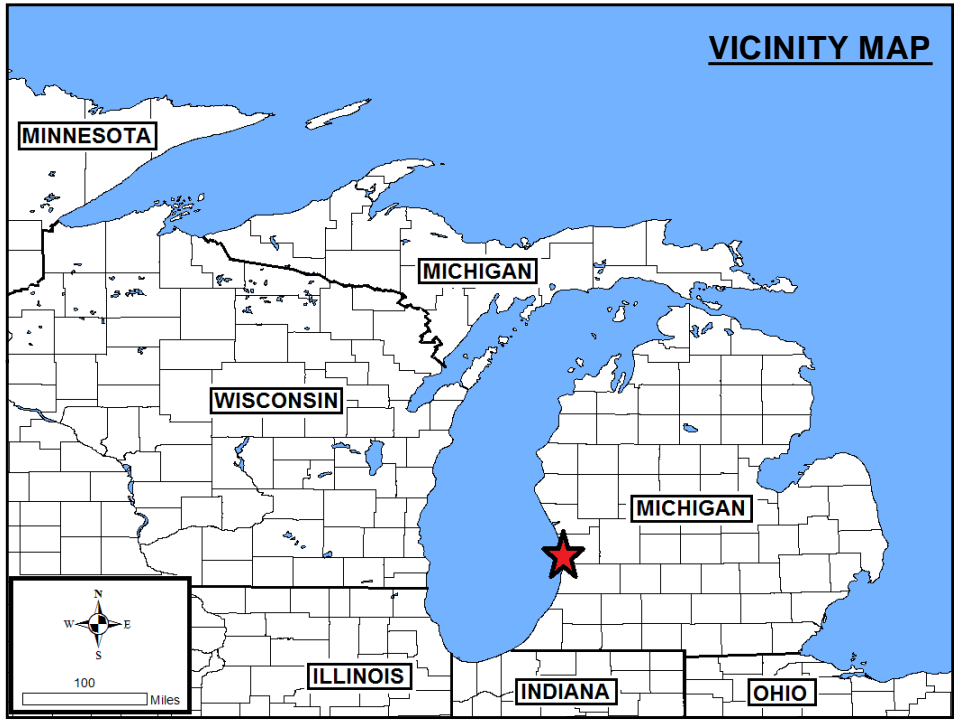
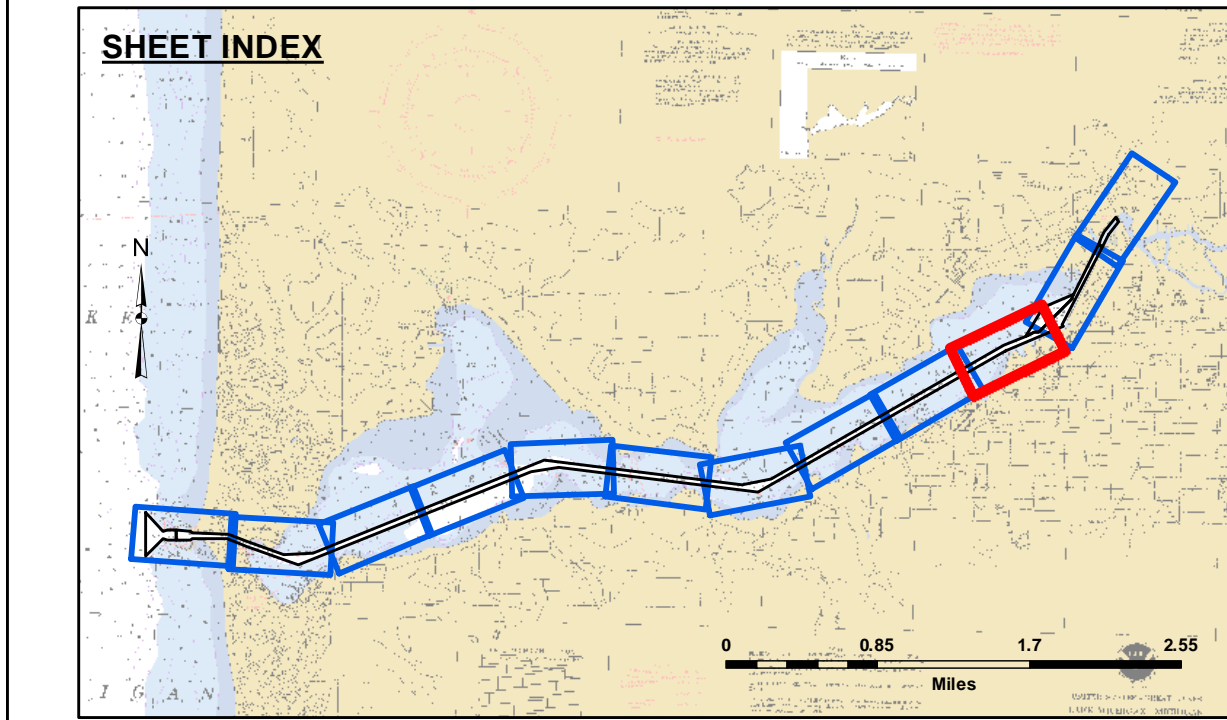
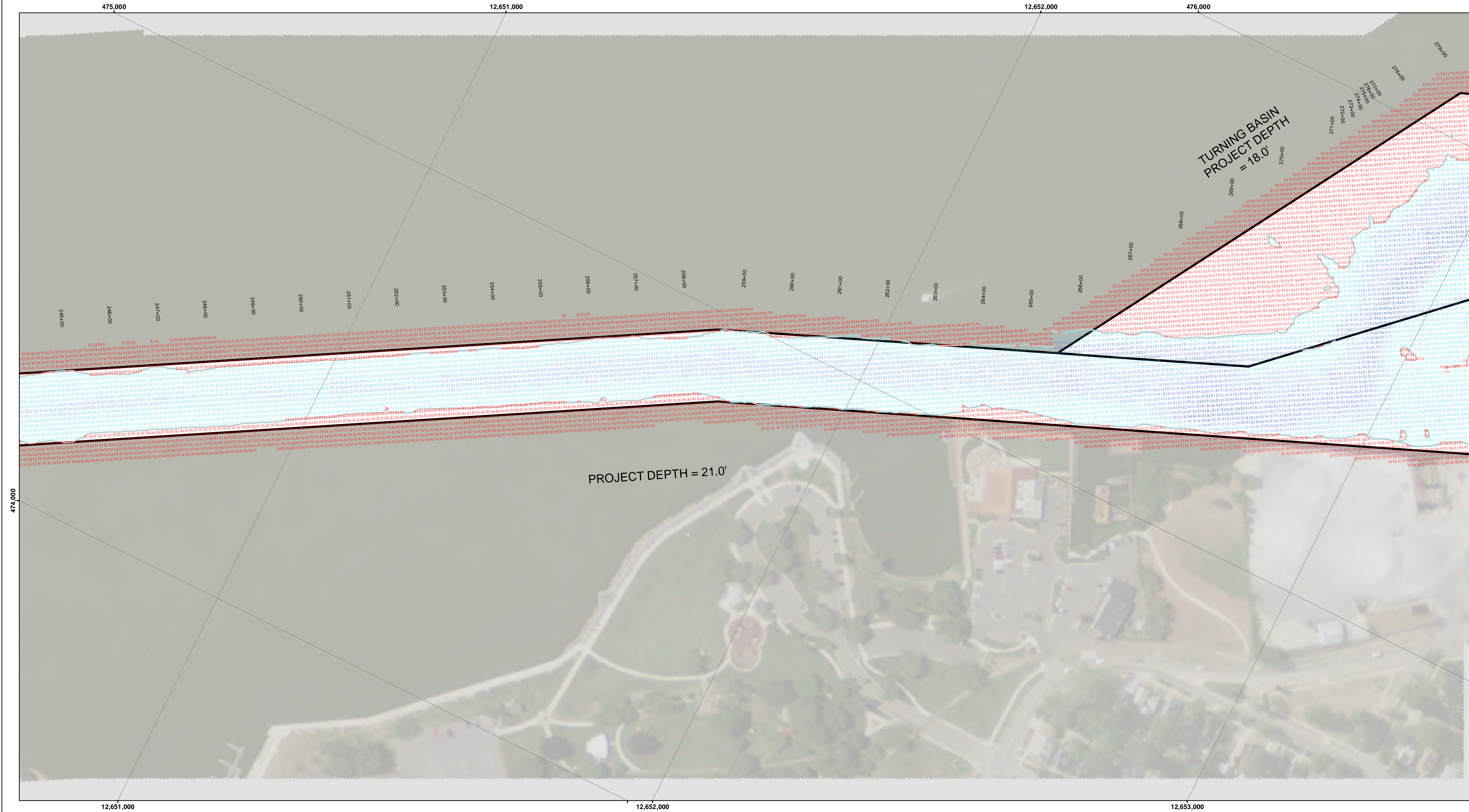
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Revision Number: 4.2-2023/04/20



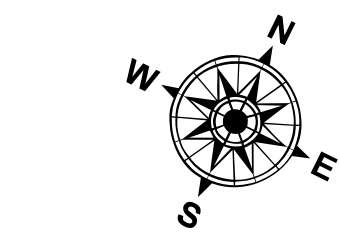




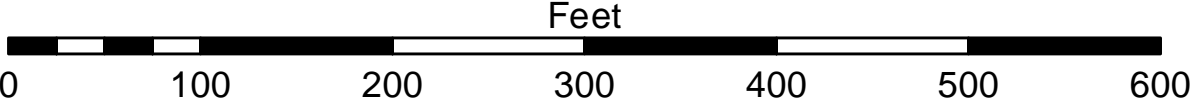


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	Submitted:
	Reviewed/Checked:
	Approved:

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**Holland Harbor**  
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