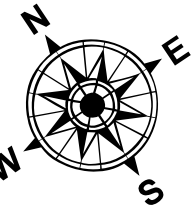


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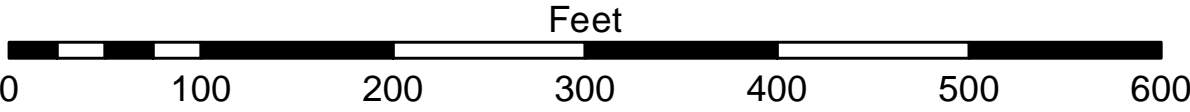
- Cable Submarine
- - Cable Overhead
- Placement Area
- ⊥ Beacon, General
- Contour Lines
- ▭ Channel Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
- PROJECT DEPTH +1'
- PROJECT DEPTH +2'
- PROJECT DEPTH +3'
- PROJECT DEPTH +4'
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1 inch = 100 feet



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EQUIPMENT: ODOM CV 100 SINGLE BEAM SOUNDER
SOFTWARE: HYDRACK
VESSEL: 3064
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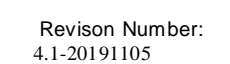
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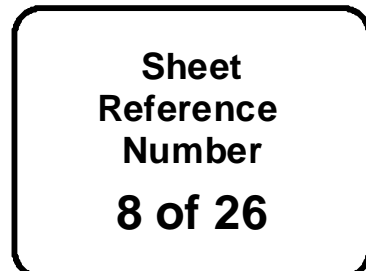
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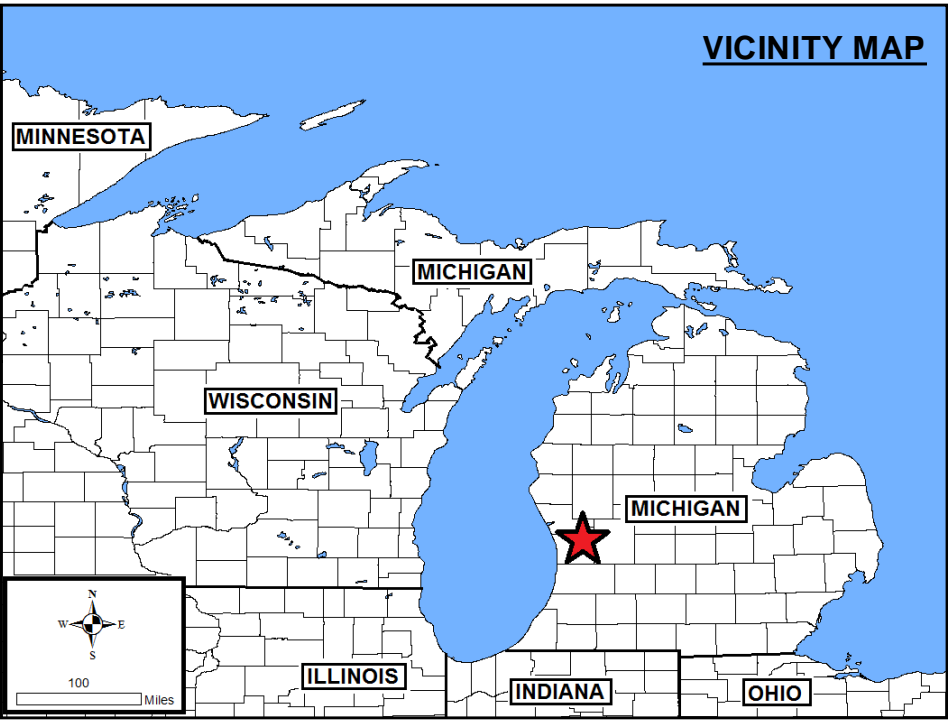
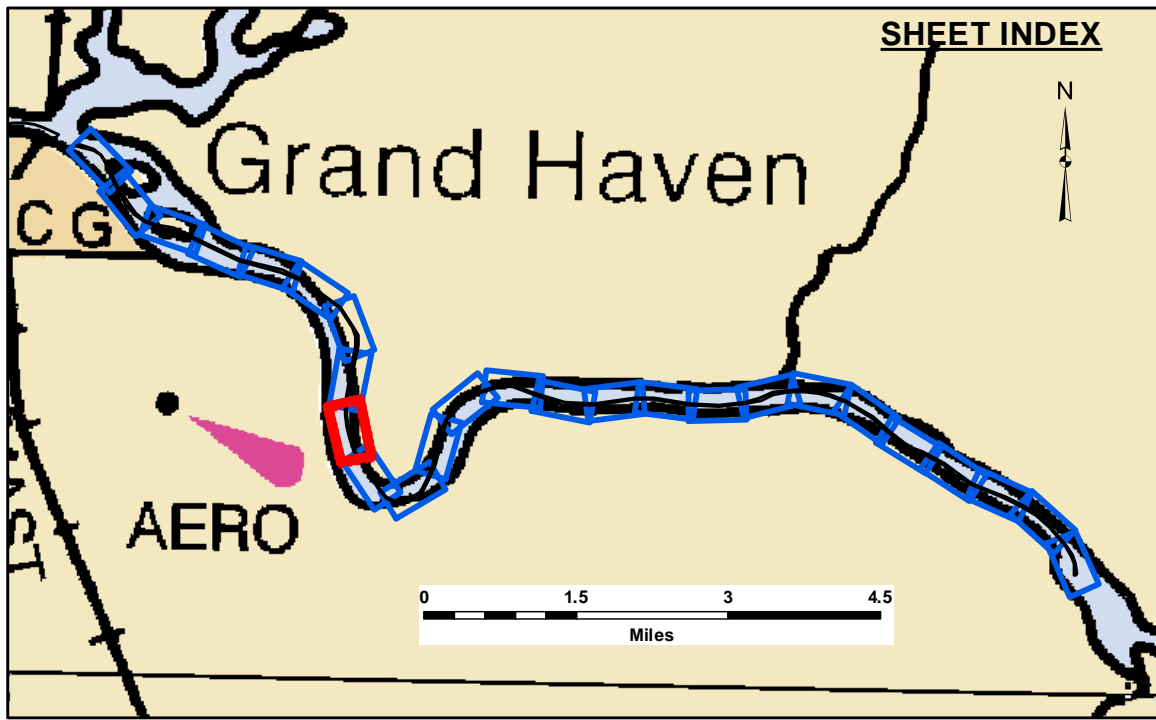
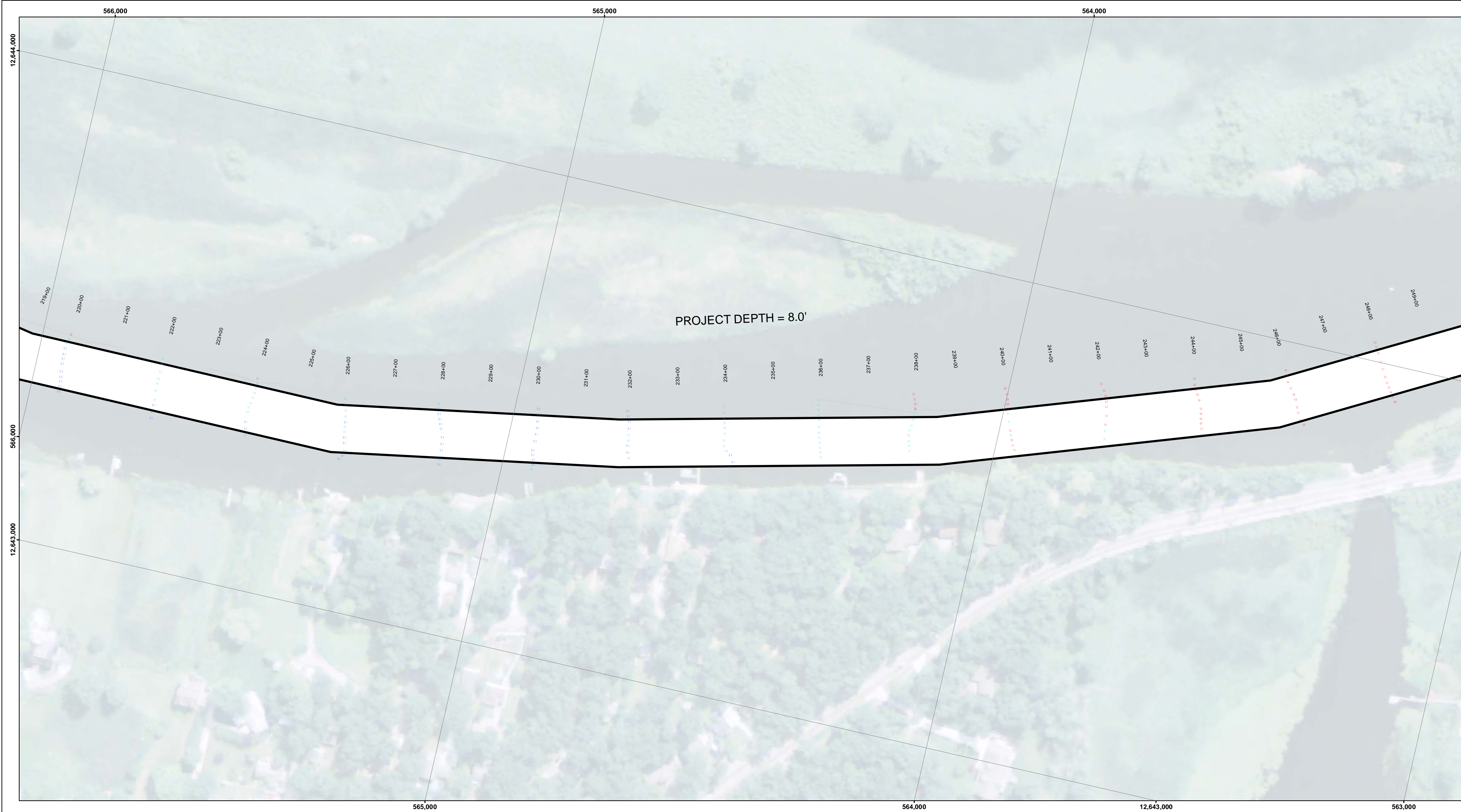
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Submitted:	Surveyed By:	
Recommended:	Plotted By:	
Approved:	Checked By:	

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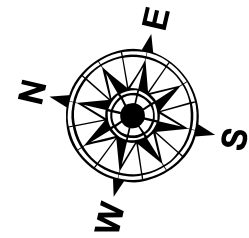


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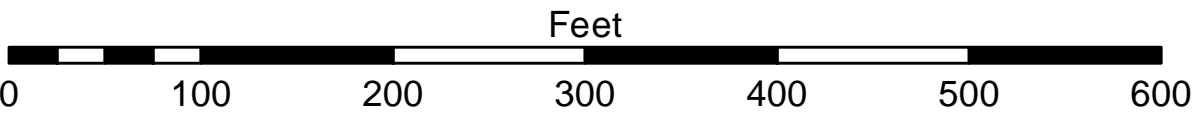
- Cable Submarine
- - Cable Overhead
- Placement Area
- └ Beacon, General
- Contour Lines
- ▭ Channel Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
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VESSEL: 3064
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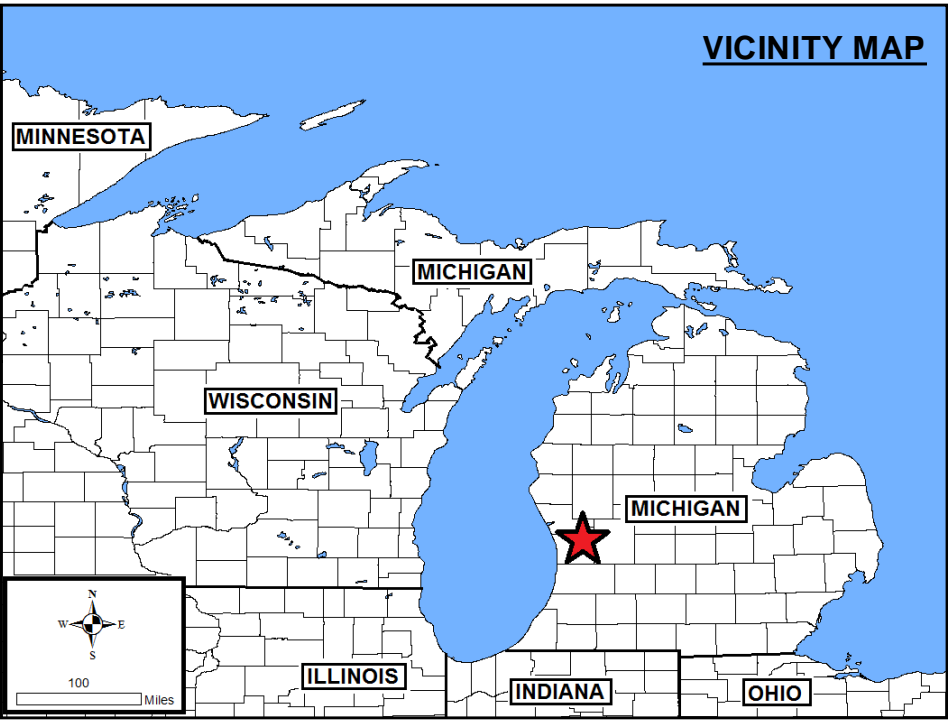
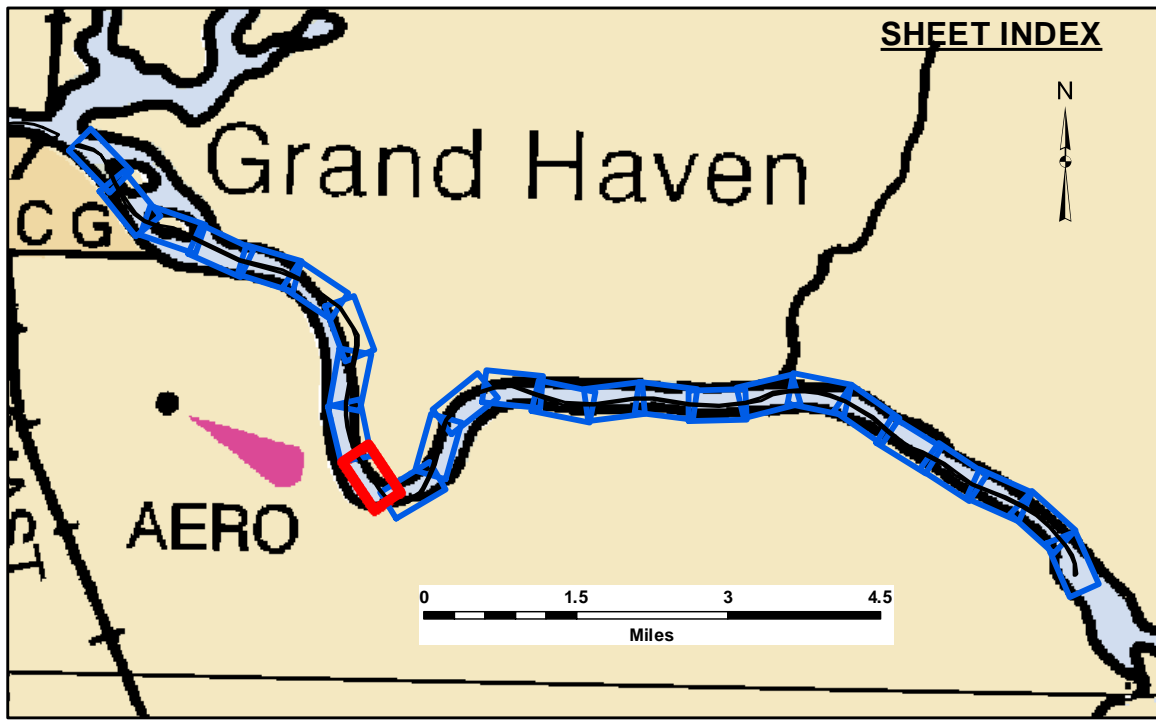
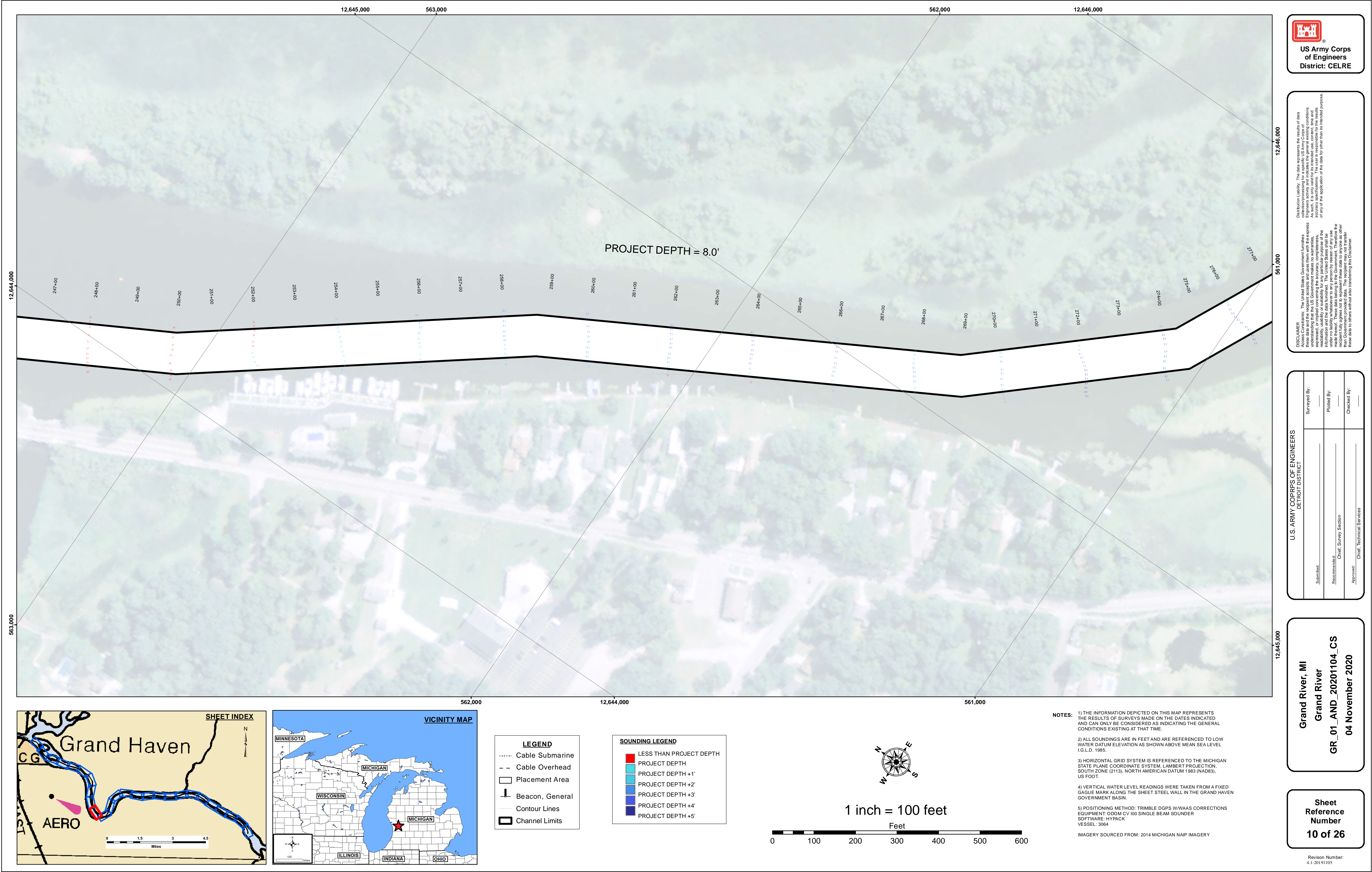

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Recommended:	Chief, Survey Section		
Approved:	Chief, Technical Services		

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LEGEND

- Cable Submarine
- - - Cable Overhead
- Placement Area
- └ Beacon, General
- Contour Lines
- ▭ Channel Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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Recommended:	Plotted By:
Approved:	Checked By:

Chief, Survey Section
Chief, Technical Services

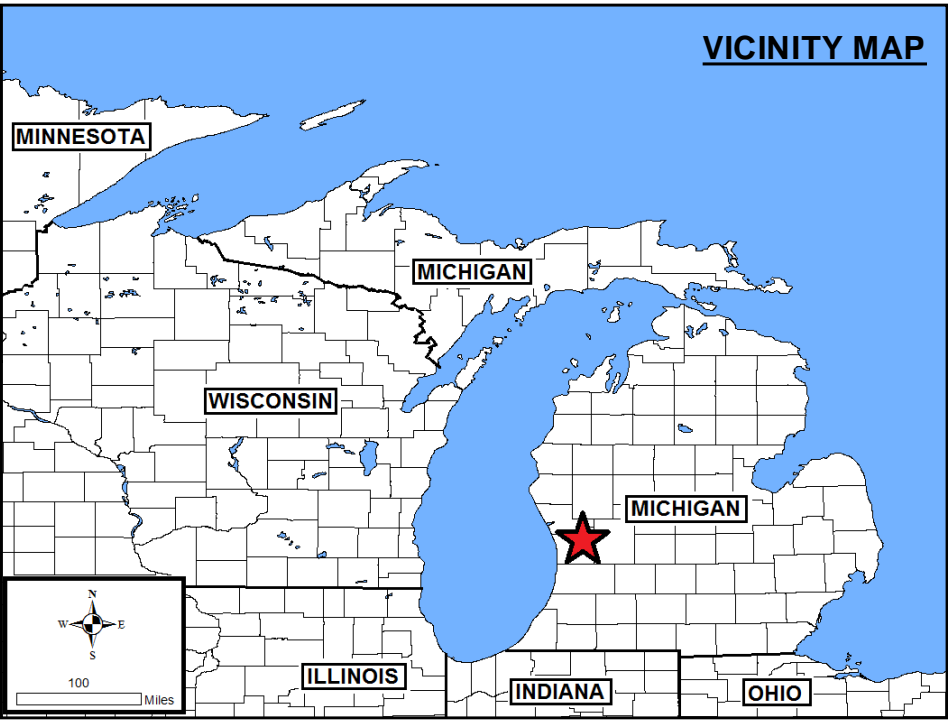
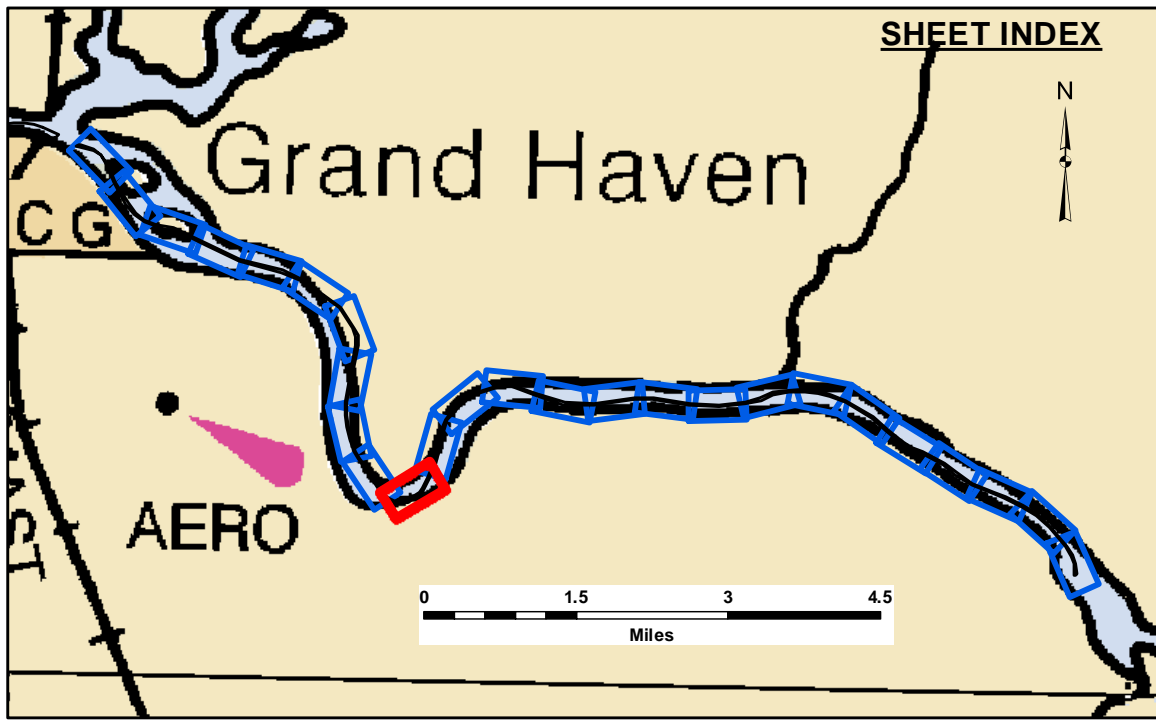
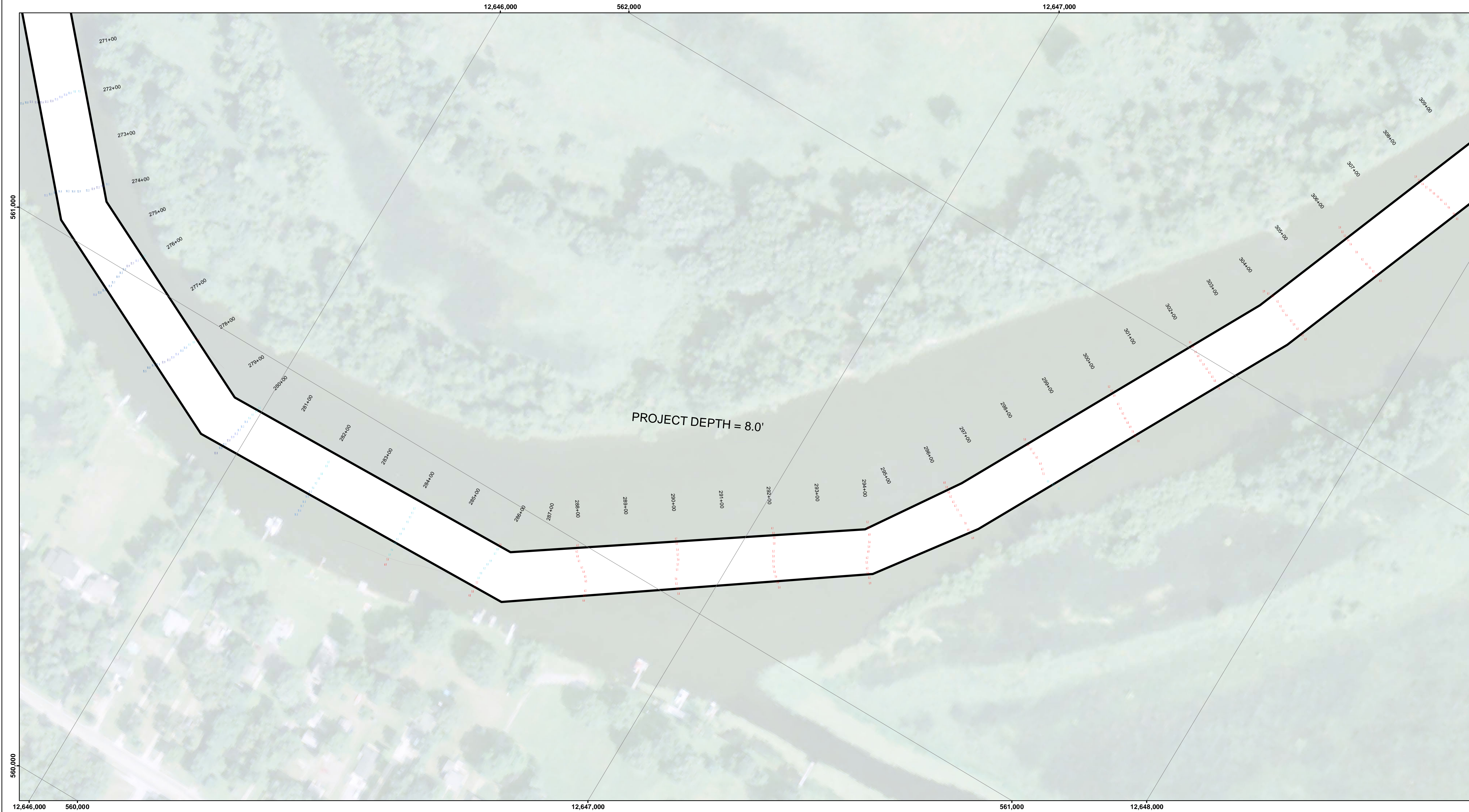
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LEGEND

- 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'
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- PROJECT DEPTH +5'

1 inch = 100 feet

Feet

0 100 200 300 400 500 600

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SOFTWARE: HYDRACK
VESSEL: 3064
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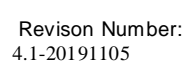
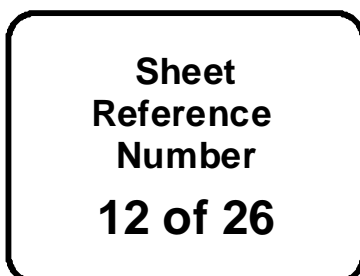

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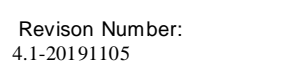
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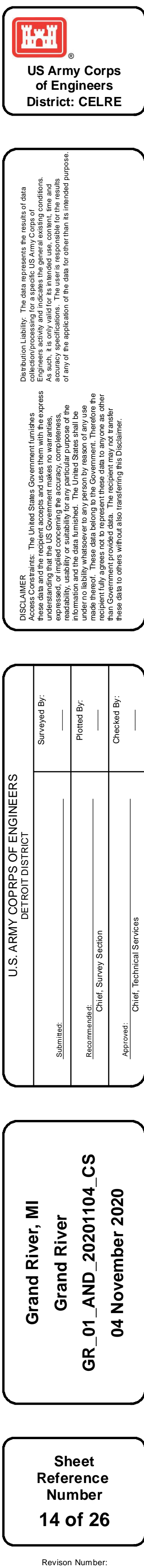
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Approved:	Checked By:	

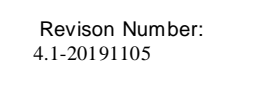
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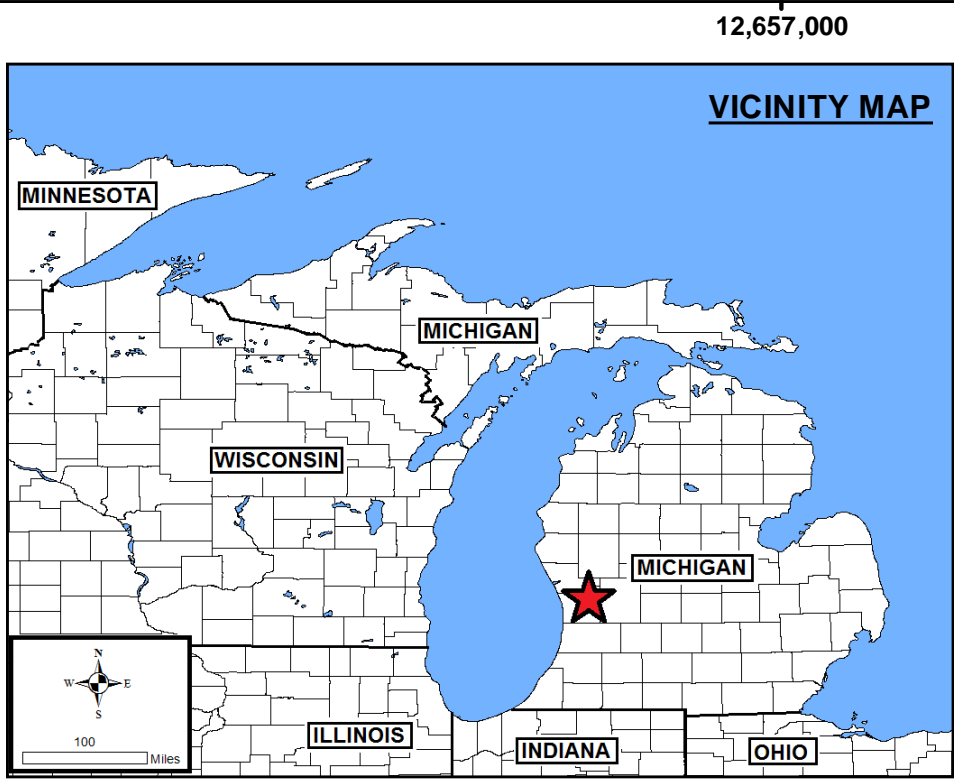
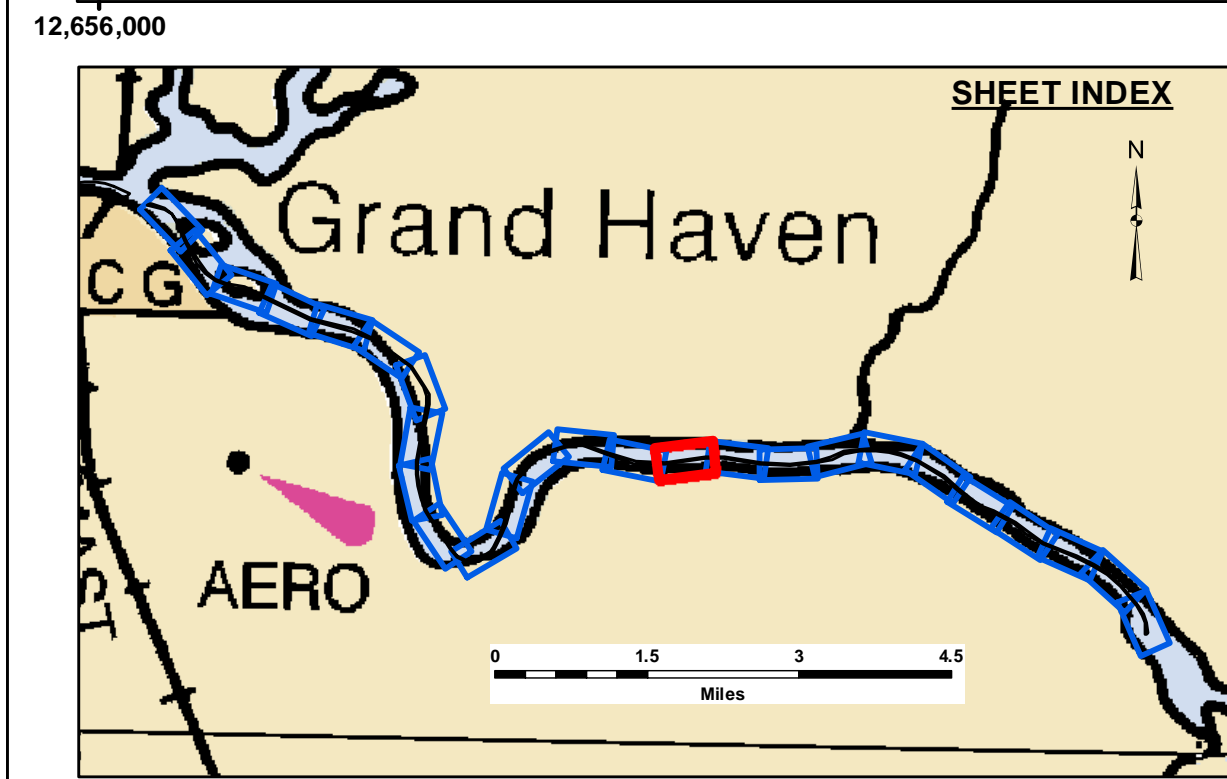
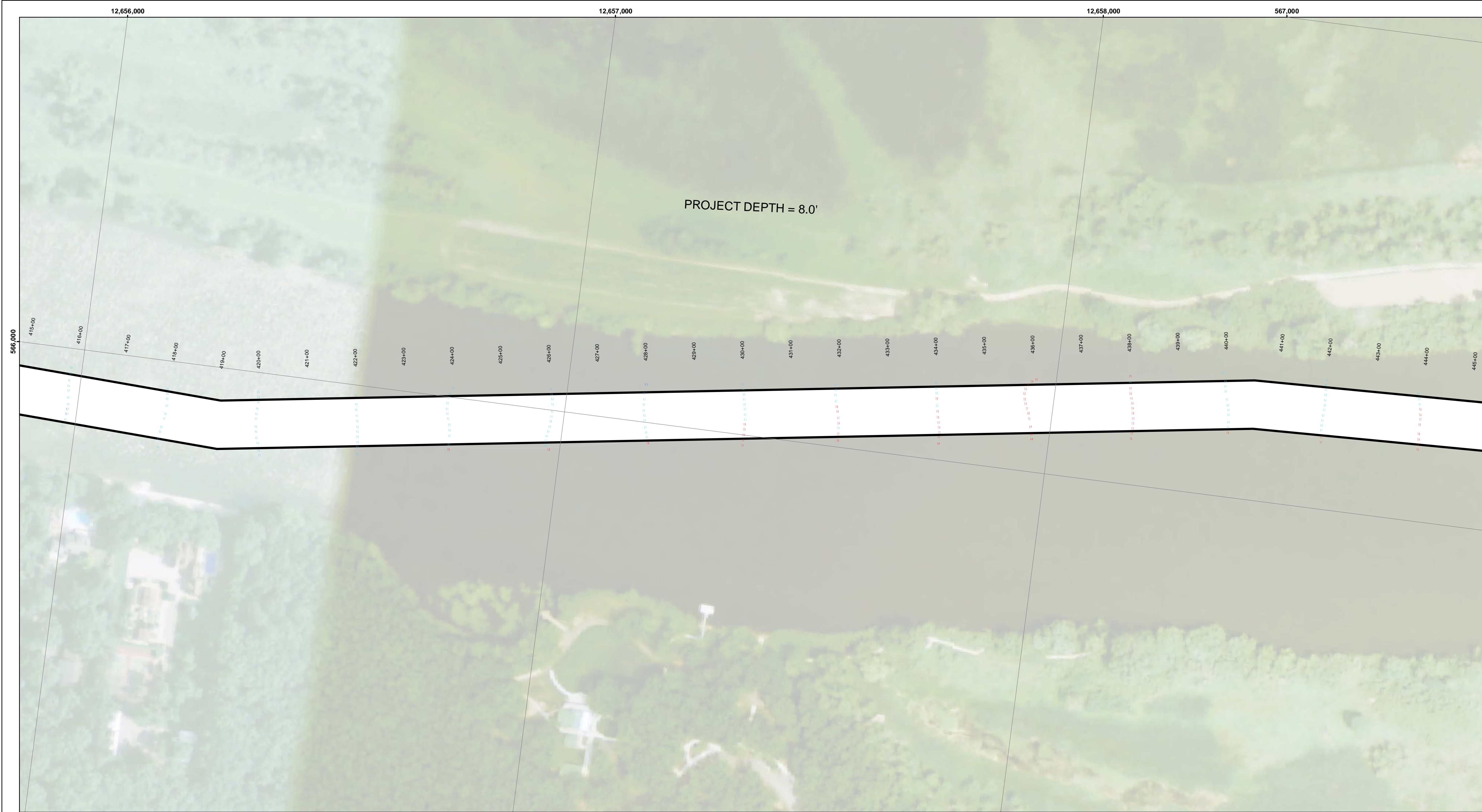
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LEGEND

- Cable Submarine
- - Cable Overhead
- Placement Area
- └ Beacon, General
- Contour Lines
- ▭ Channel Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
- PROJECT DEPTH +1'
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Feet

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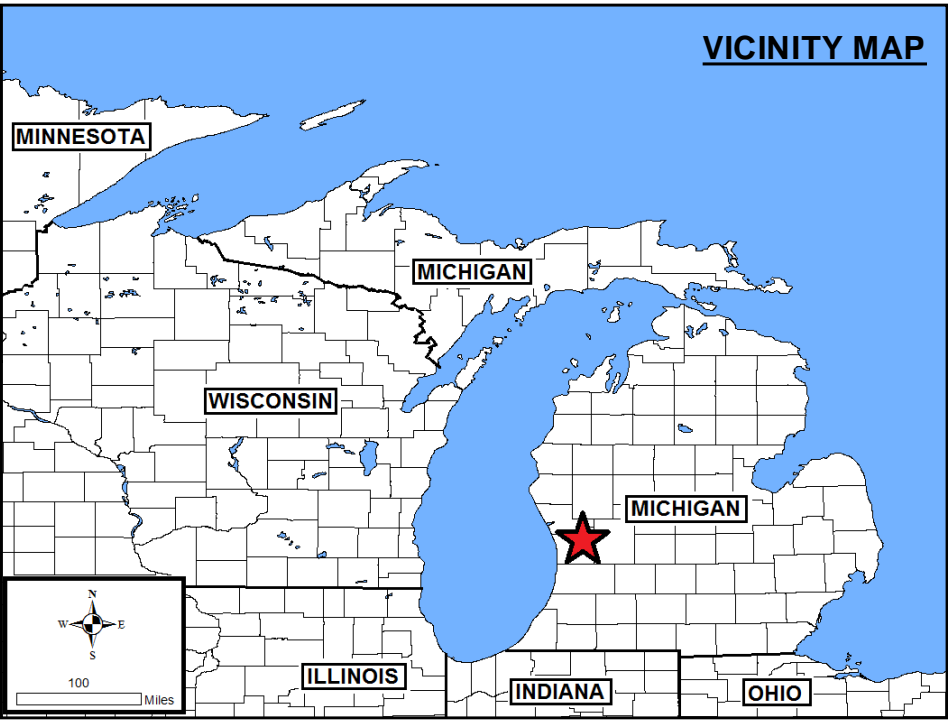
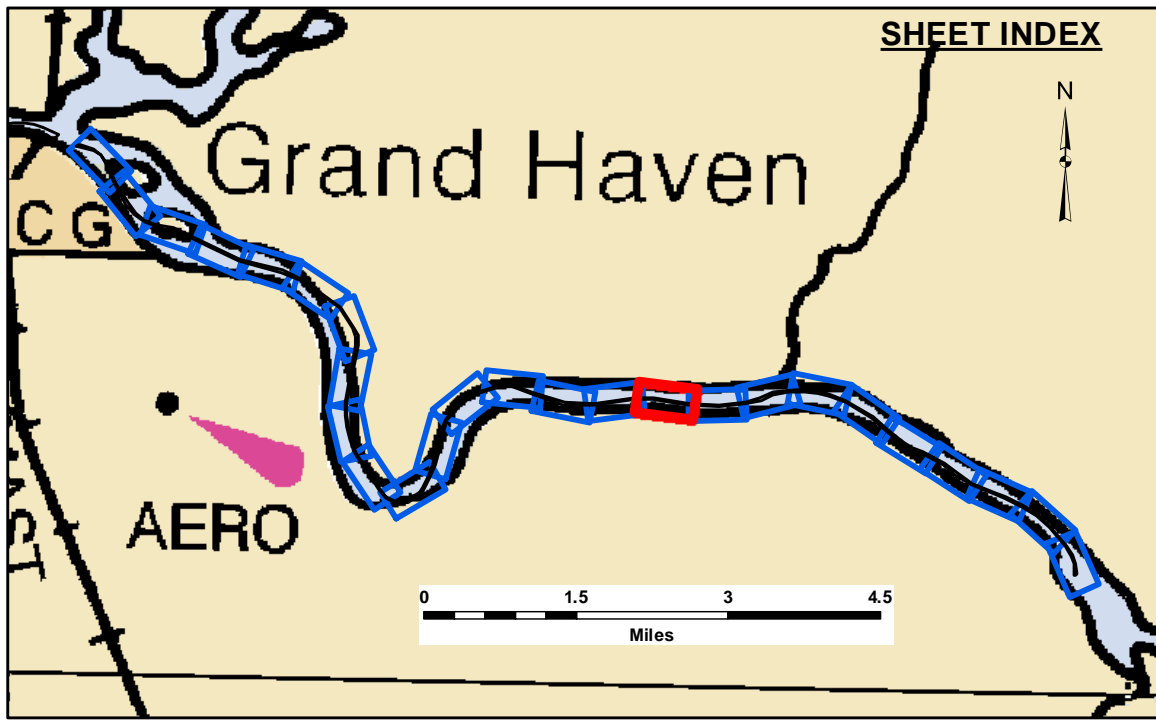
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LEGEND

- Cable Submarine
- - Cable Overhead
- Placement Area
- └ Beacon, General
- Contour Lines
- ▭ Channel Limits

SOUNDING LEGEND

- LESS THAN PROJECT DEPTH
- PROJECT DEPTH
- PROJECT DEPTH +1'
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Feet

0 100 200 300 400 500 600

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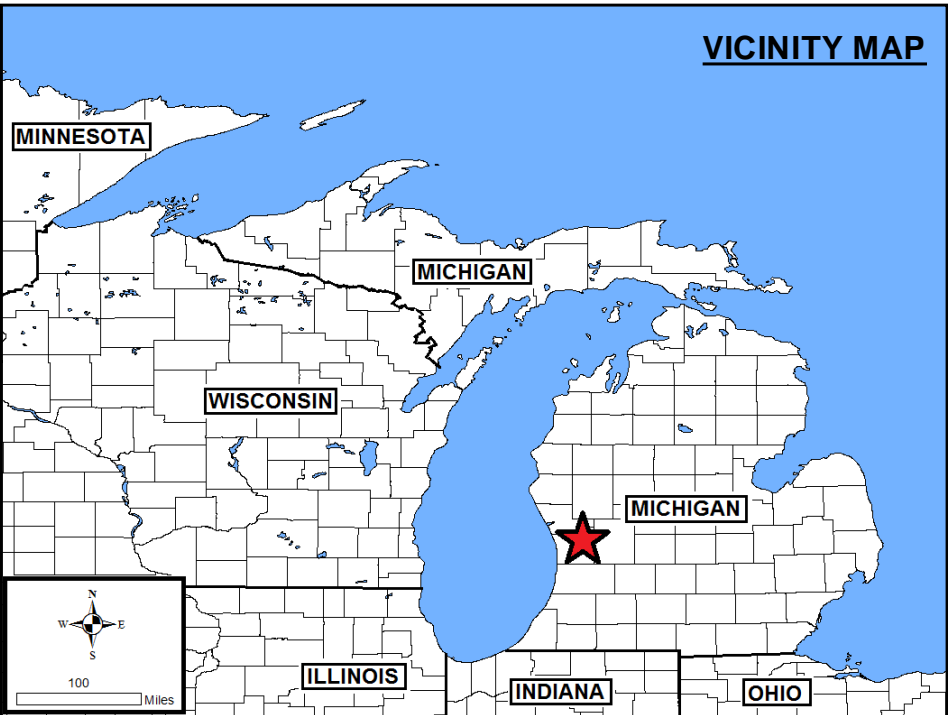
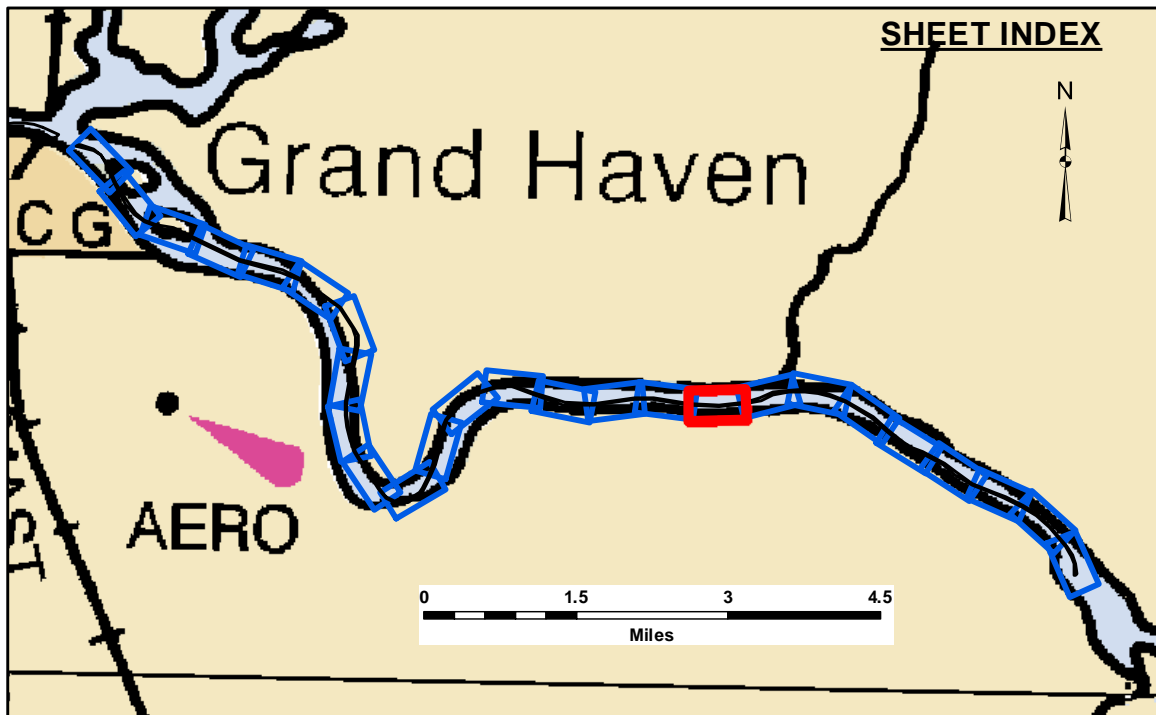
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LEGEND

- Cable Submarine
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SOUNDING LEGEND

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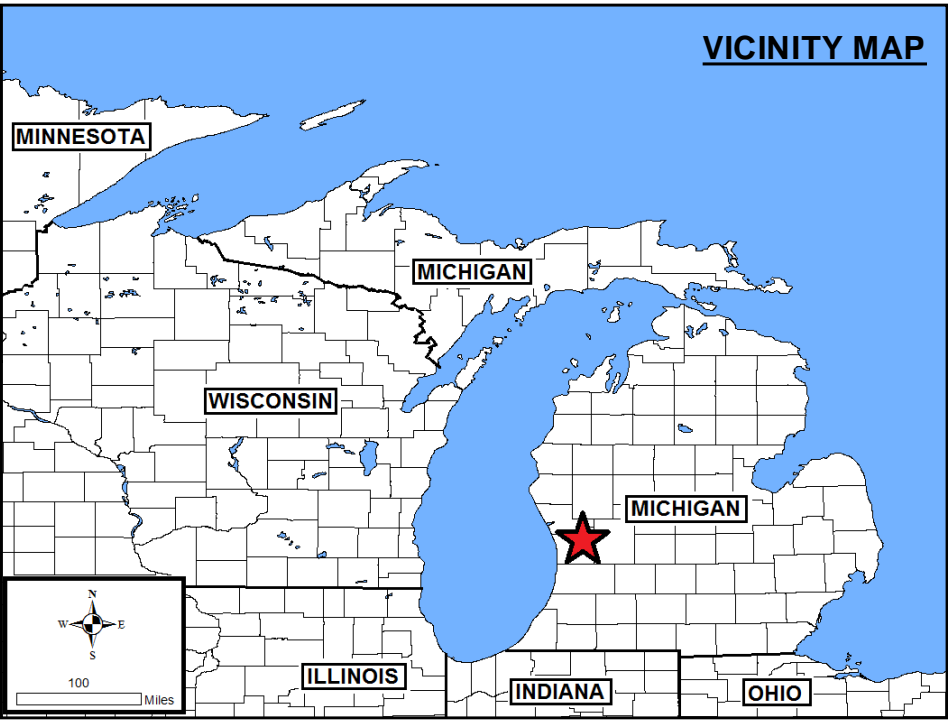
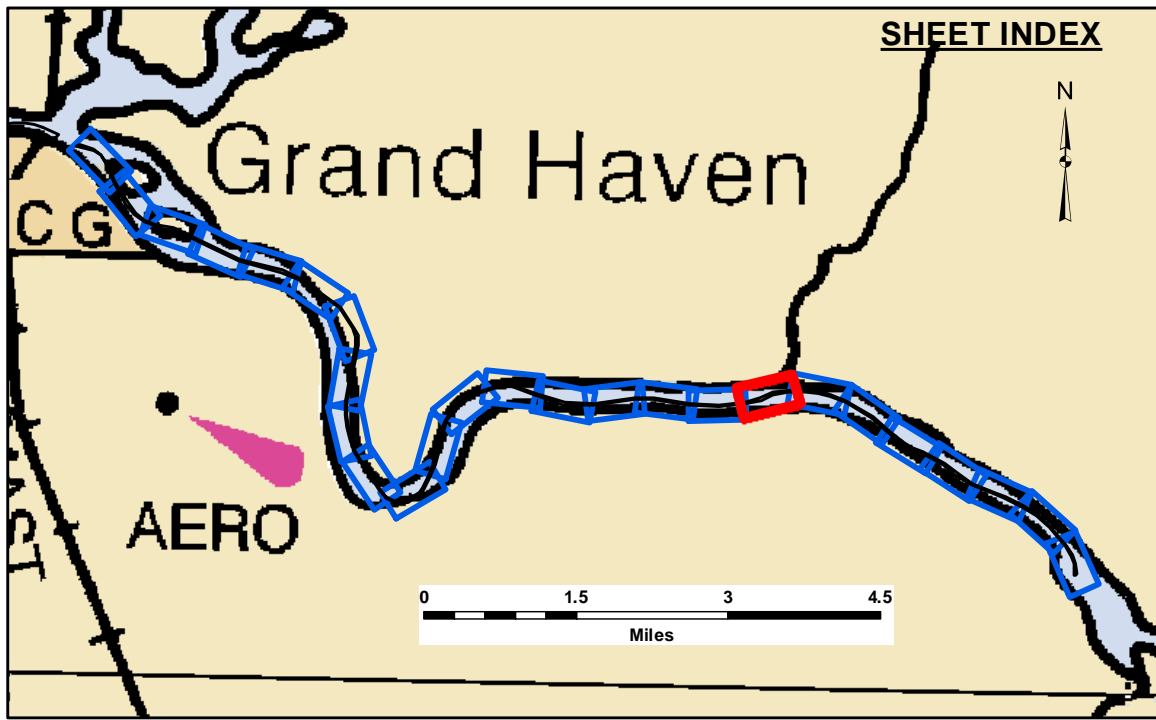
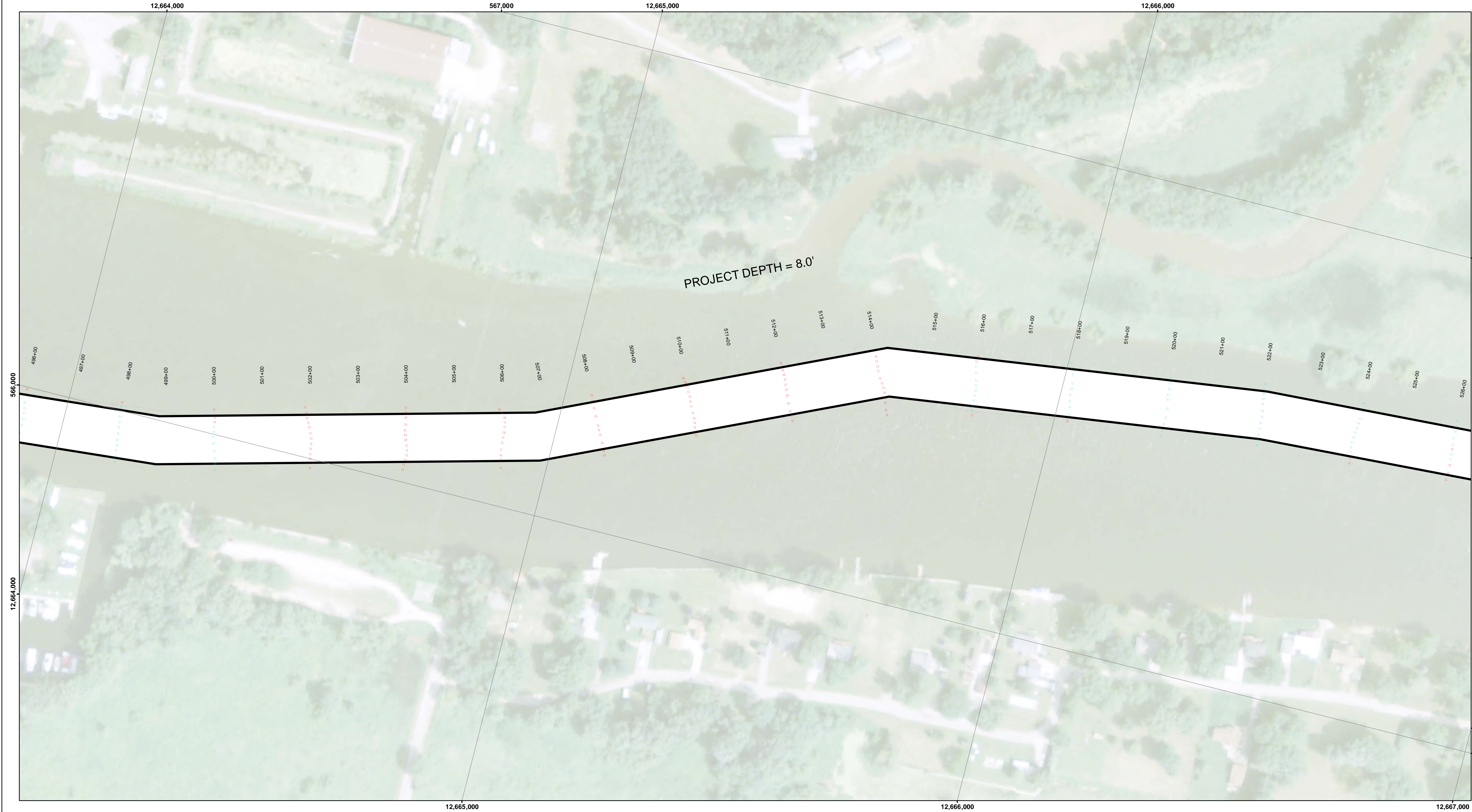
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Submitted: _____	Surveyed By: _____
Recommended: Chief, Survey Section	Plotted By: _____
Approved: Chief, Technical Services	Checked By: _____

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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
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District: CELRE

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

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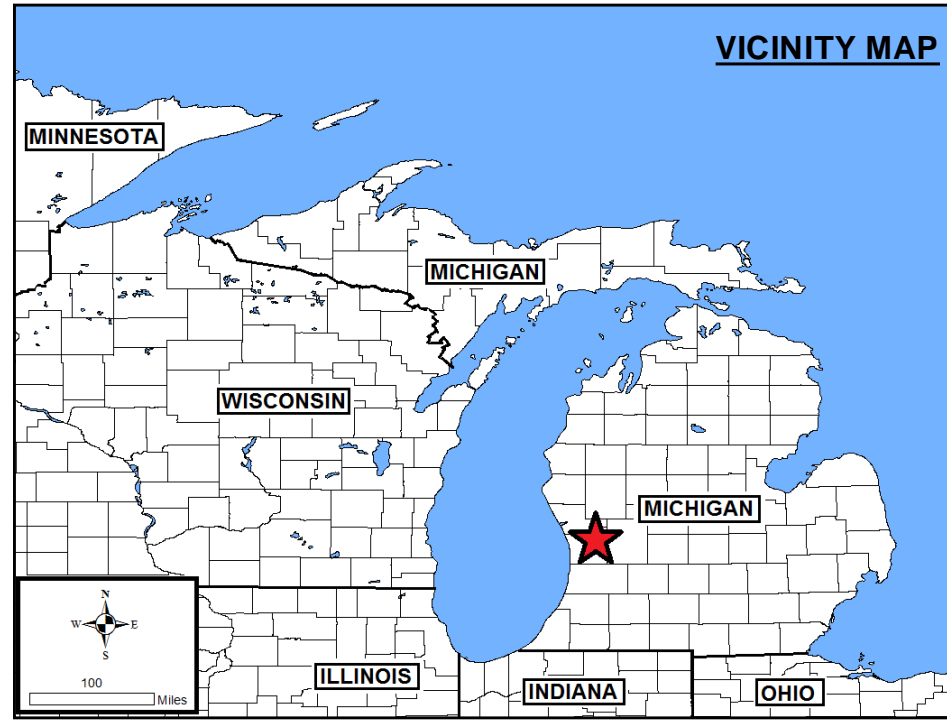
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Recommended: Chief, Survey Section	Plotted By: _____
Approved: Chief, Technical Services	Checked By: _____

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Grand River
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Number
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Revision Number:
4.1-20191105



LEGEND

..... Cable Submarine

-- Cable Overhead

Placement Area

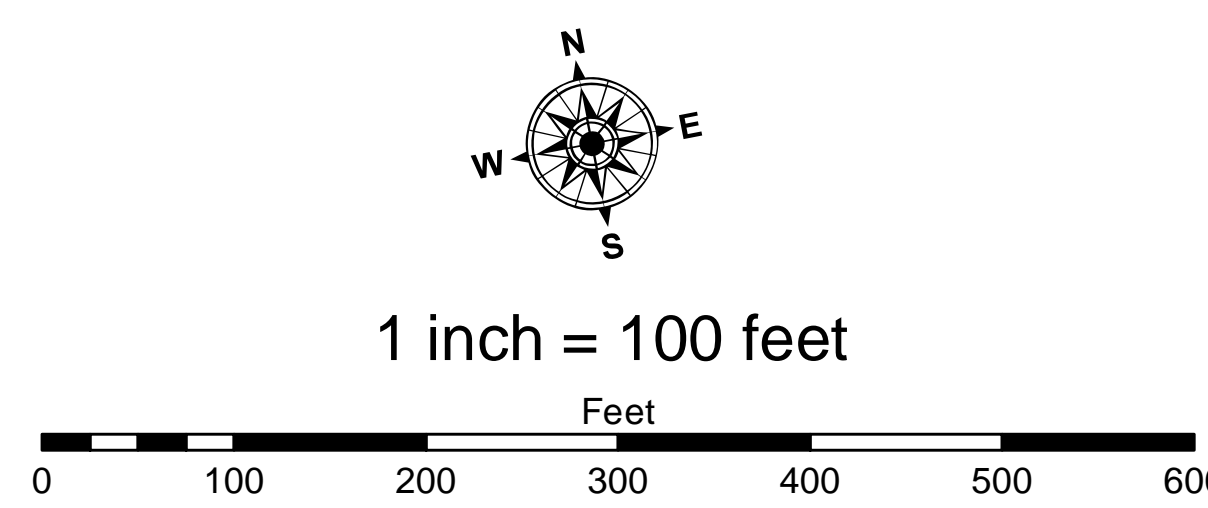
Beacon, General

— Contour Lines

Channel Limits

SOUNDING LEGEND

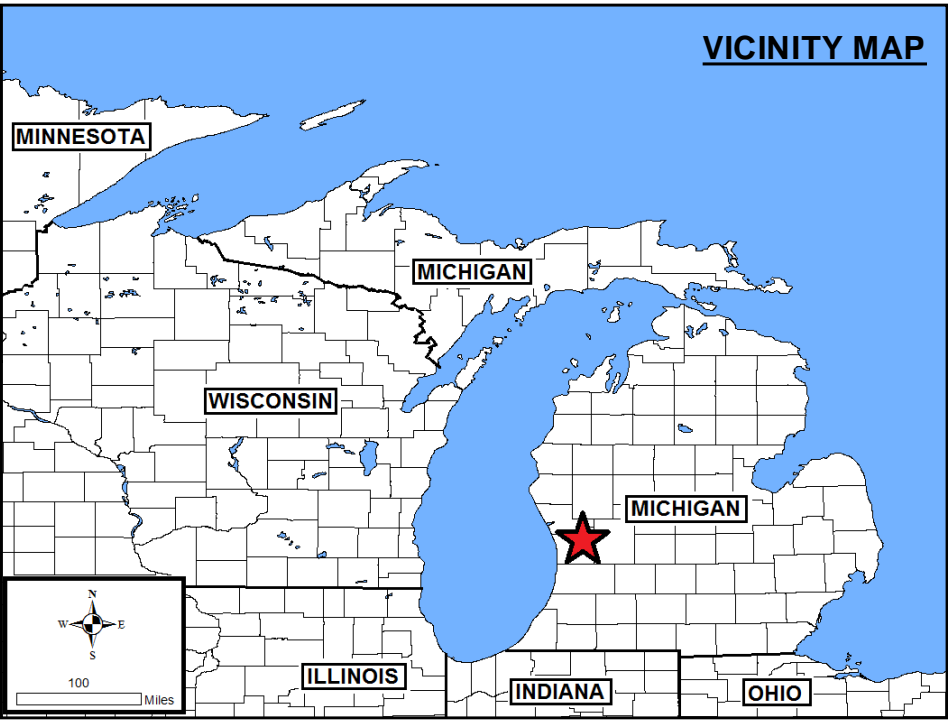
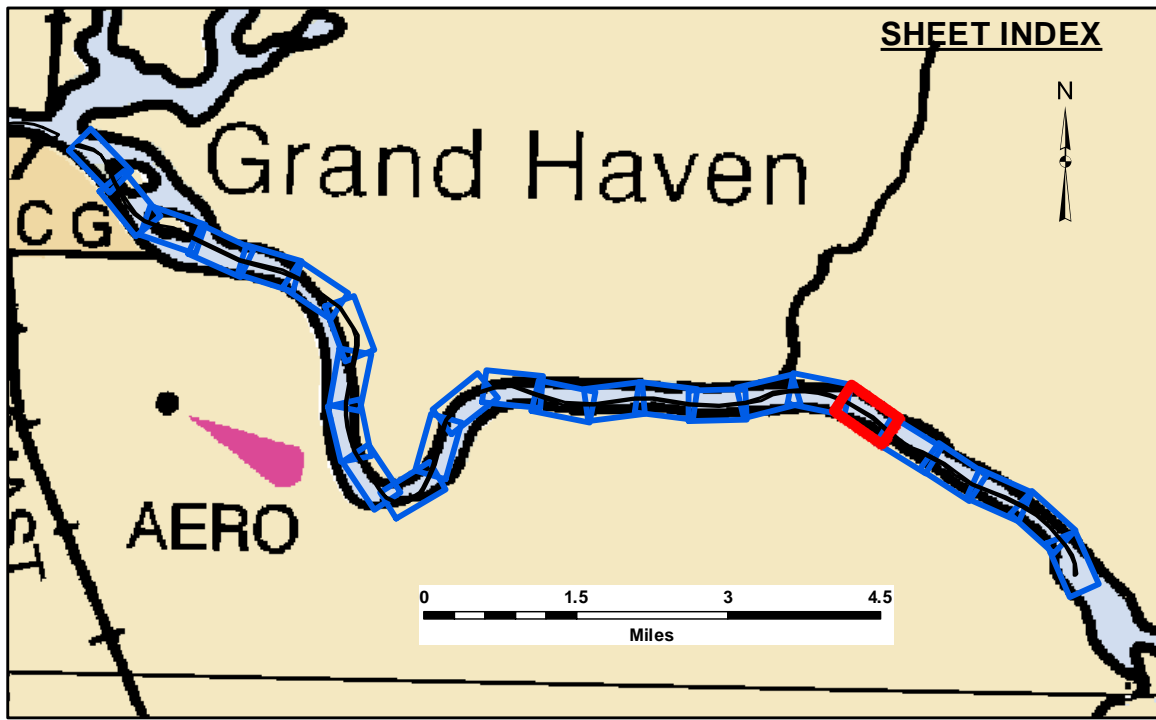
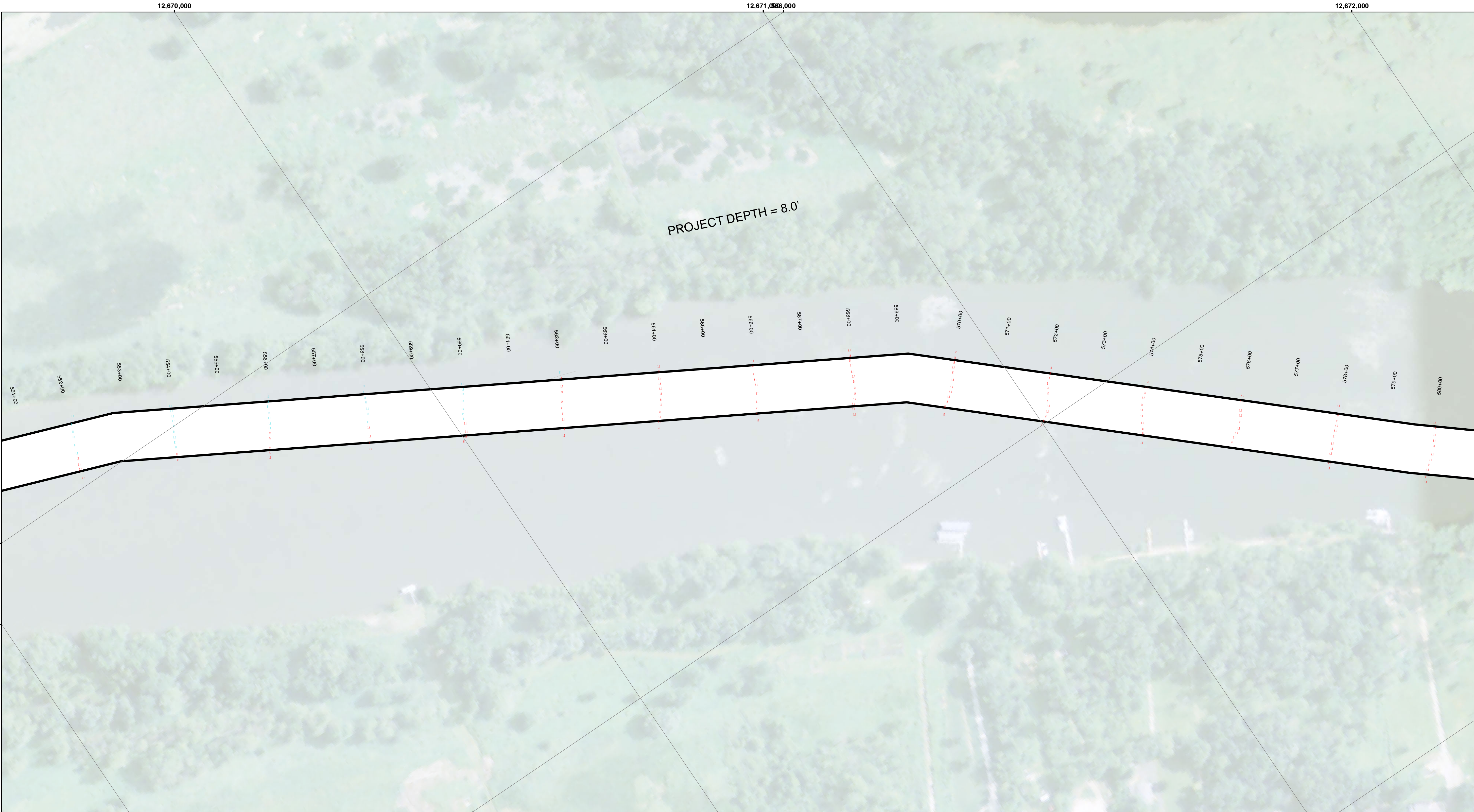
	LESS THAN PROJECT DEPTH
	PROJECT DEPTH
	PROJECT DEPTH +1'
	PROJECT DEPTH +2'
	PROJECT DEPTH +3'
	PROJECT DEPTH +4'
	PROJECT DEPTH +5'



NOTES:

- 1) 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 EXISTING AT THAT TIME.
- 2) ALL SOUNDINGS ARE IN FEET AND ARE REFERENCED TO LOW WATER DATUM ELEVATION AS SHOWN ABOVE MEAN SEA LEVEL I.G.L.D. 1985.
- 3) HORIZONTAL GRID SYSTEM IS REFERENCED TO THE MICHIGAN STATE PLANE COORDINATE SYSTEM, LAAMBERT PROJECTION, SOUTH ZONE (2119), NORTH AMERICAN DATUM 1983 (NAD83), US FOOT.
- 4) VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A FIXED GAGUE MARK ALONG THE SHEET STEEL WALL IN THE GRAND HAVEN GOVERNMENT BASIN.
- 5) POSITIONING METHOD: TRIMBLE DGPS W/VWAS CORRECTIONS
EQUIPMENT: ODOM CV 100 SINGLE BEAM SOUNDER
SOFTWARE: HYPACK
VESSEL: 3064

IMAGERY SOURCED FROM: 2014 MICHIGAN NAIP IMAGERY

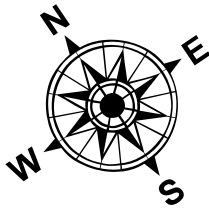


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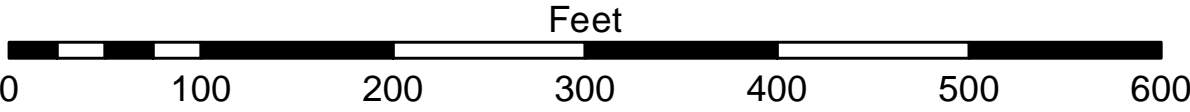
- Cable Submarine
- - Cable Overhead
- Placement Area
- ⊥ Beacon, General
- Contour Lines
- ▭ Channel Limits

SOUNDING LEGEND

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1 inch = 100 feet



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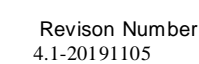
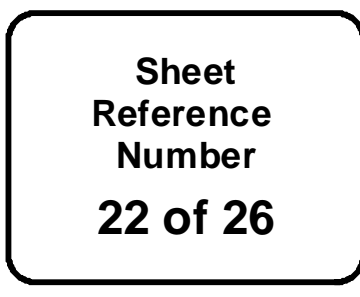
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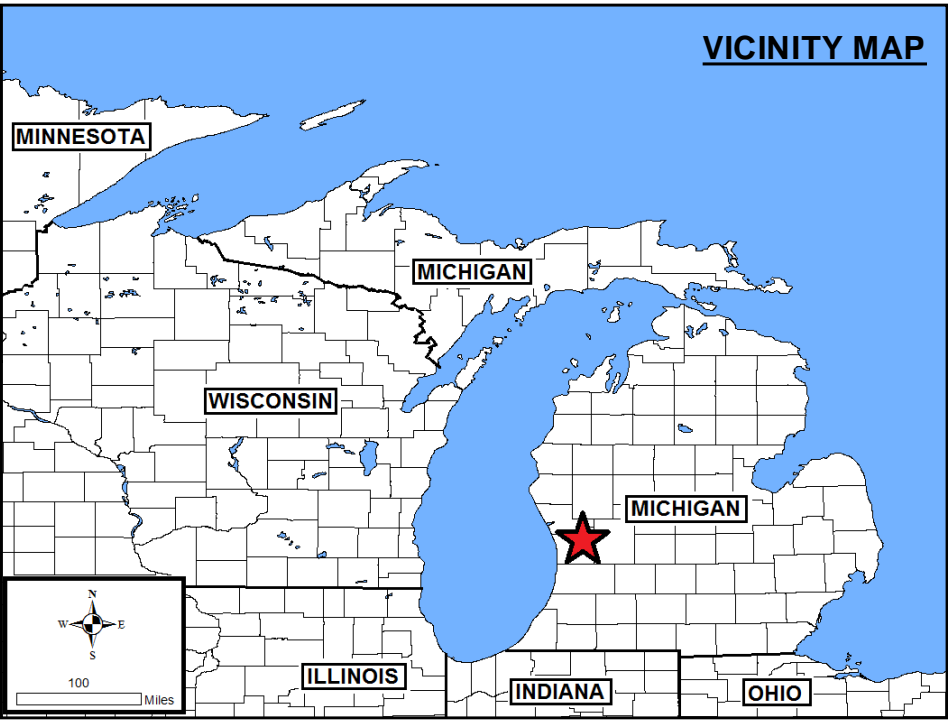
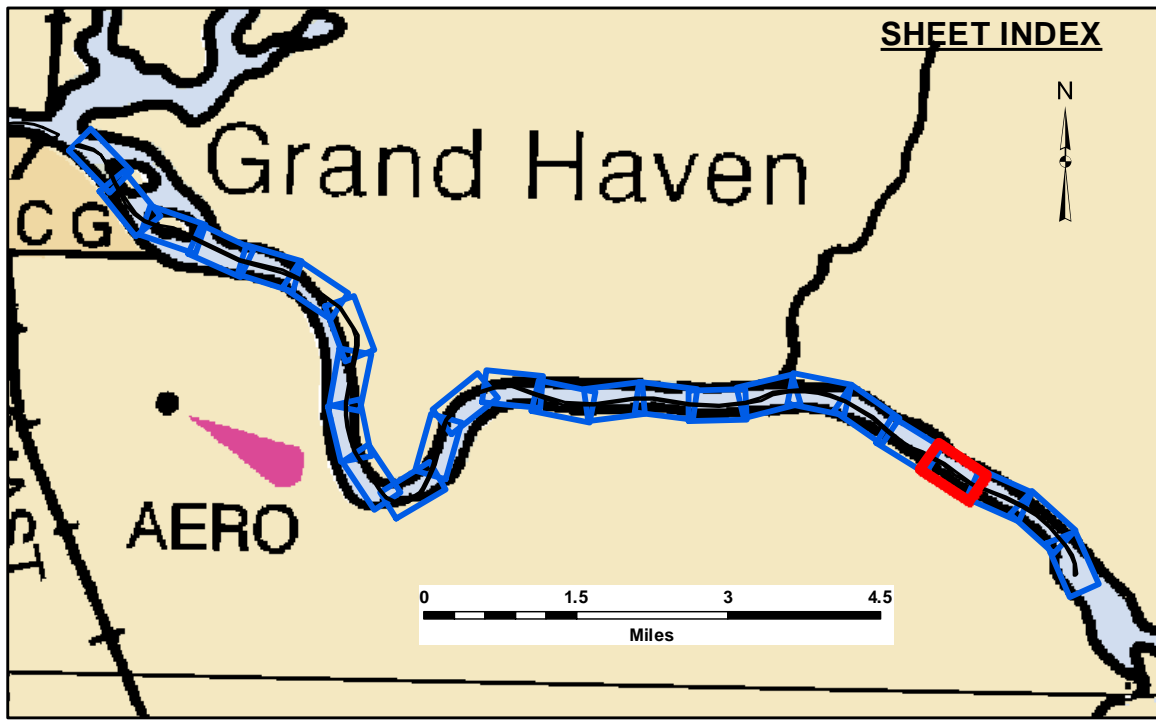
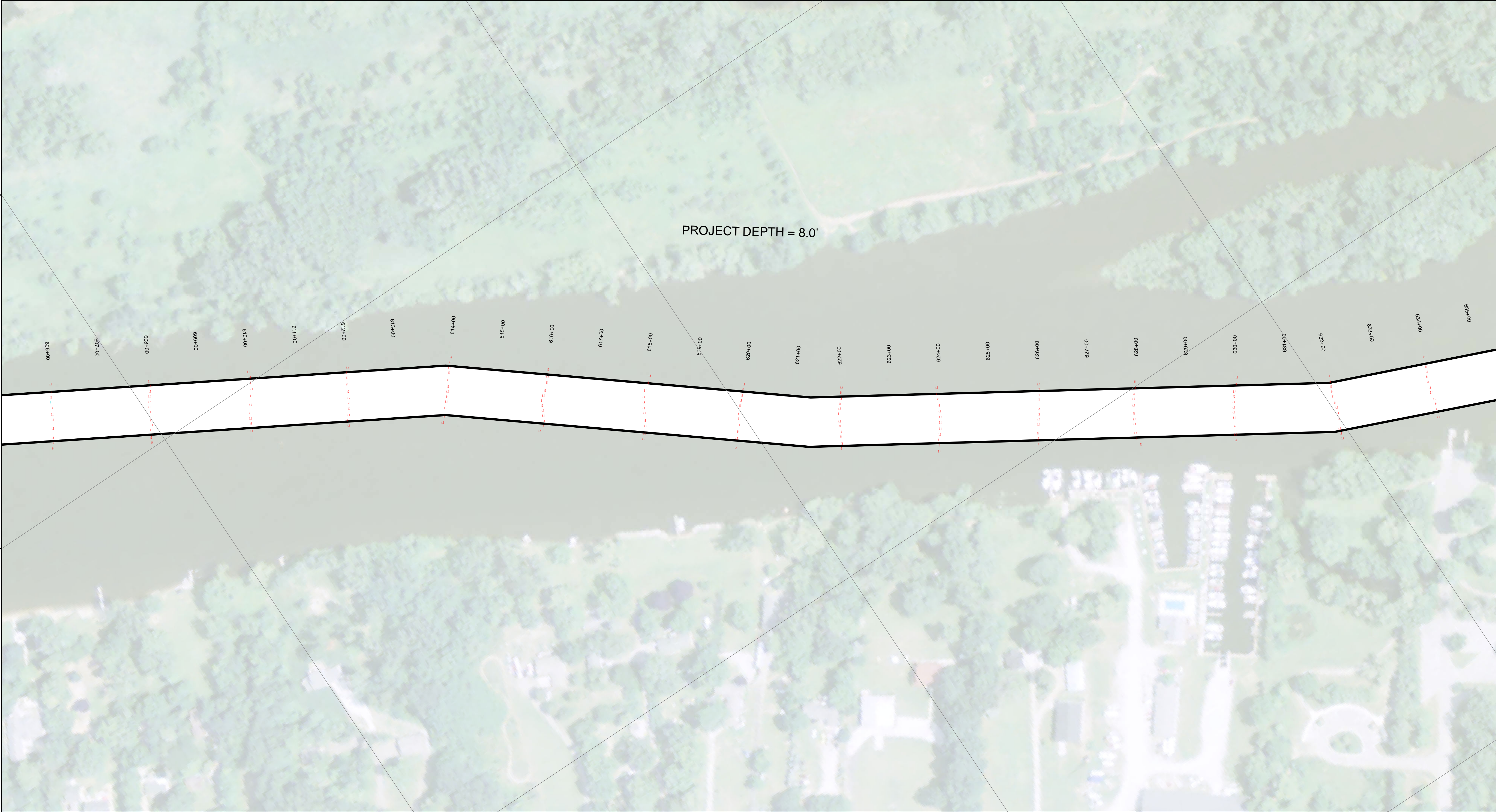
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Submitted:	Surveyed By:	
Recommended:	Plotted By:	
Approved:	Chief, Technical Services	

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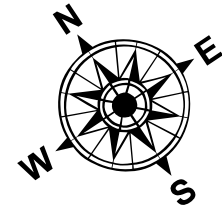


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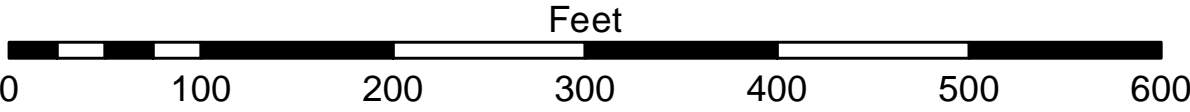
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**US Army Corps
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District: CELRE

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