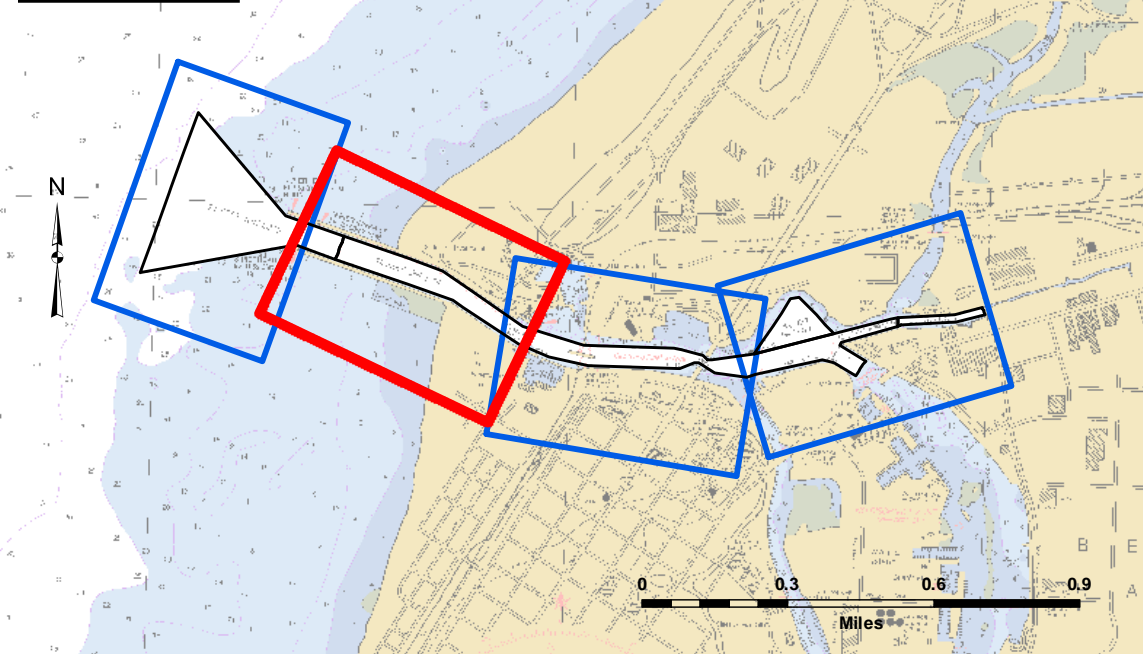


SHEET INDEX

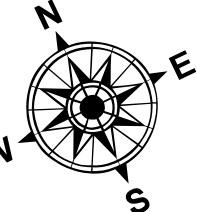


VICINITY MAP



LEGEND

- Federal Navigation Channel
- Federal Navigation Center Line
- Cable Submarine
- - - Cable Overhead
- Contour Line
- Placement Area
- Shoaling Area
- Shoalest Sounding**
- ⚓ Beacon, General
- ◆ Red Navigation Buoy
- ◇ Green Navigation Buoy



1 inch = 100 feet



NOTES: THE SOUNDINGS INDICATED HEREIN ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATA SET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10X10 AREA CENTERED ON THE TEXT, DERIVED FROM A 1X1 AVERAGE DATASET AT CELL CENTER. THIS MAP SHOULD NOT BE USED FOR CHANNEL CLEARANCE OR VOLUME COMPUTATIONS.

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VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A FIXED GAGE MARK ALONG THE SHEET STEEL WALL IN BY CROSS SECTION 8+00E IN ST. JOSEPH HARBOR, MI.

PROJECT DEPTHS FOR THIS HARBOR RANGE FROM 23.0' TO 18.0'

POSITIONING METHOD: APPLANIX POS M/V W/DGPS CORRECTIONS
MOTION COMPENSATION: APPLANIX OCEAN MASTER POS M/V
EQUIPMENT: 2024 MULTIBEAM ECHOSOUNDER
SOFTWARE: HYPACK
VESSEL: LAUNCH 3058

2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

** SHOALEST SOUNDING PER QUARTER PER REACH.

U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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

ST JOSEPH HARBOR, MI
St Joseph Harbor
ST_01_JOE_20200325_CS
25 March 2020

Sheet
Reference
Number
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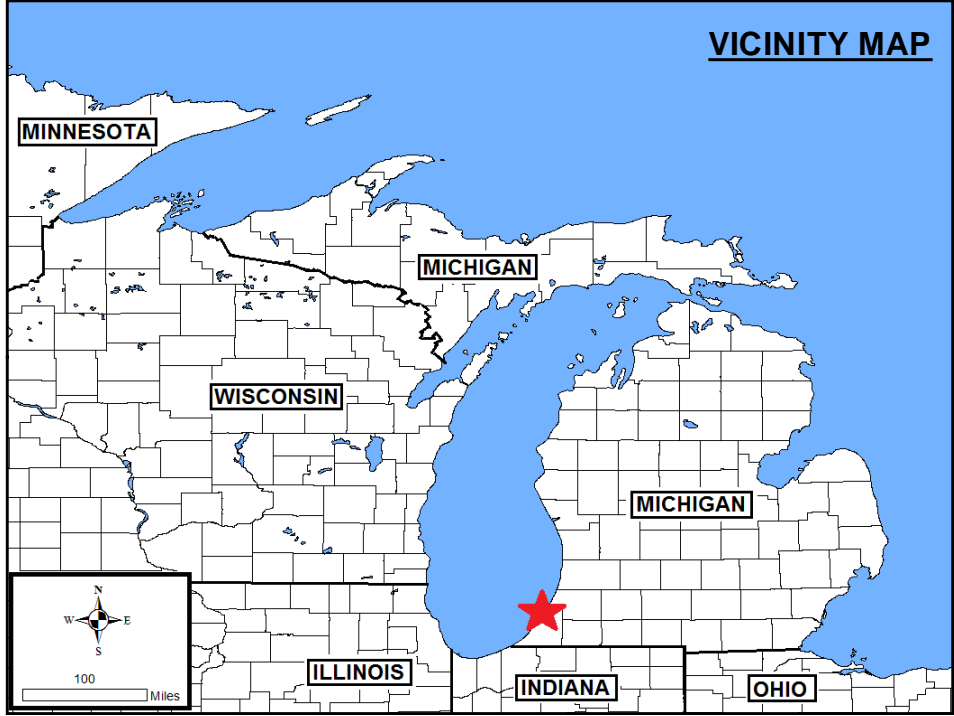
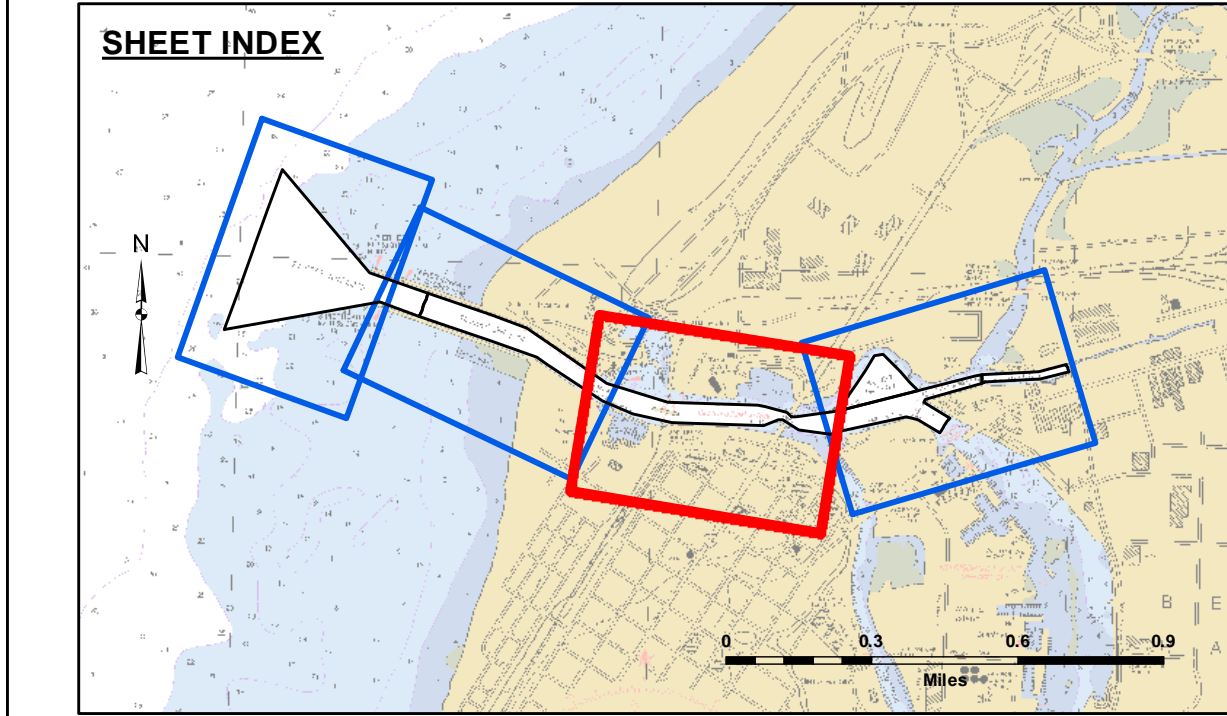
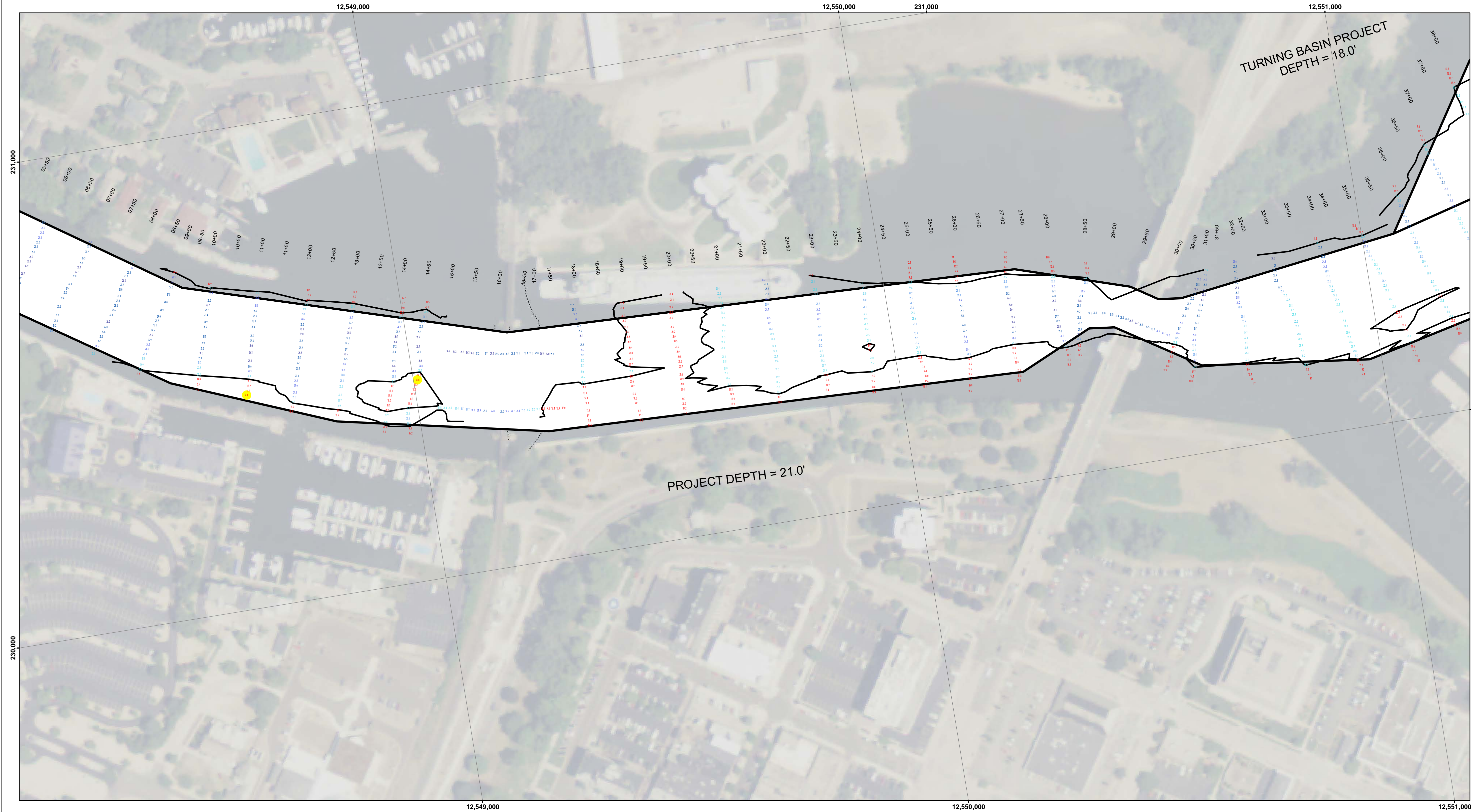
Revision Number:
4.1-20191105



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of Engineers
District: CELRE

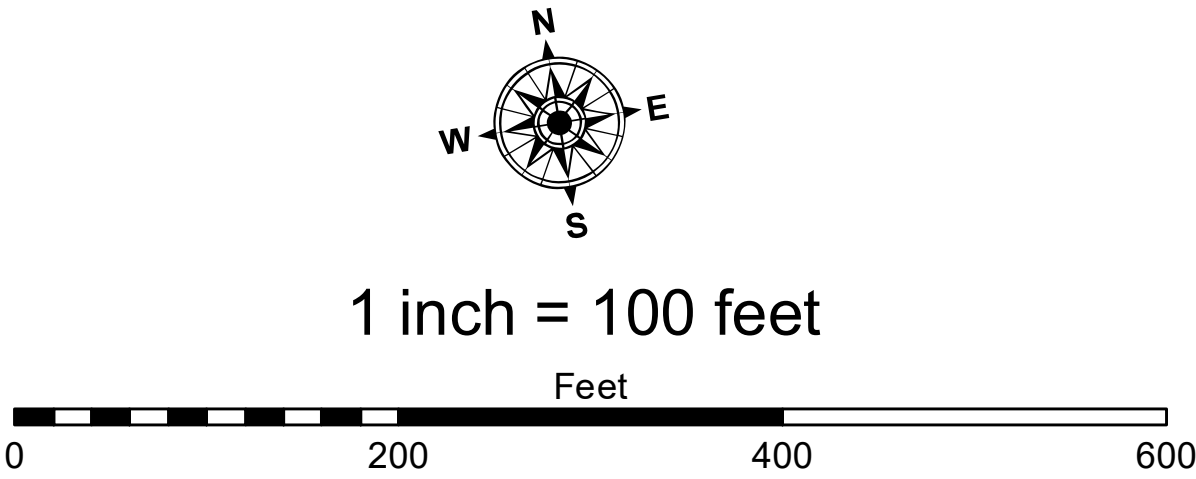
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LEGEND

- Federal Navigation Channel
- Federal Navigation Center Line
- Cable Submarine
- - - Cable Overhead
- Contour Line
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2010 AERIAL PHOTOGRAPHY DATA SOURCE: USGS

** SHOALEST SOUNDING PER QUARTER PER REACH.

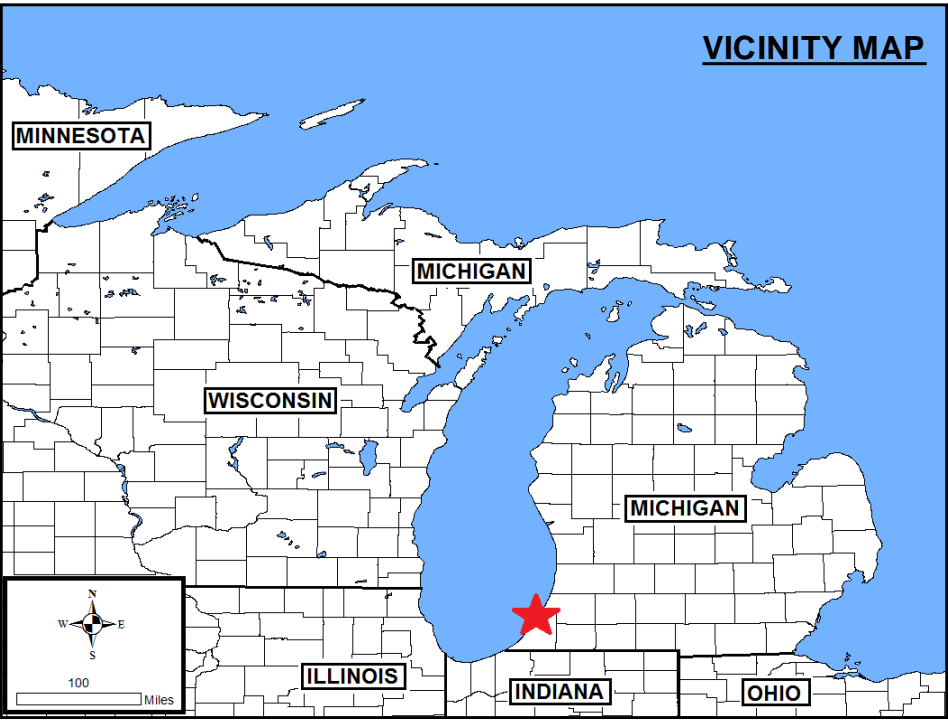
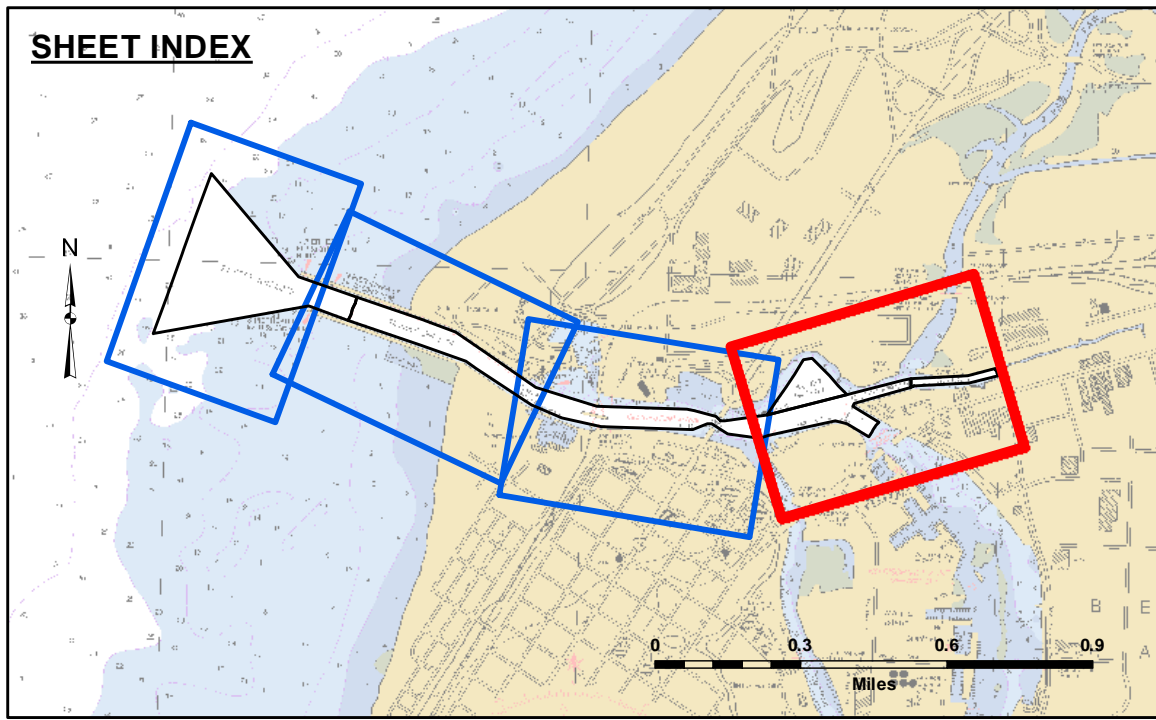
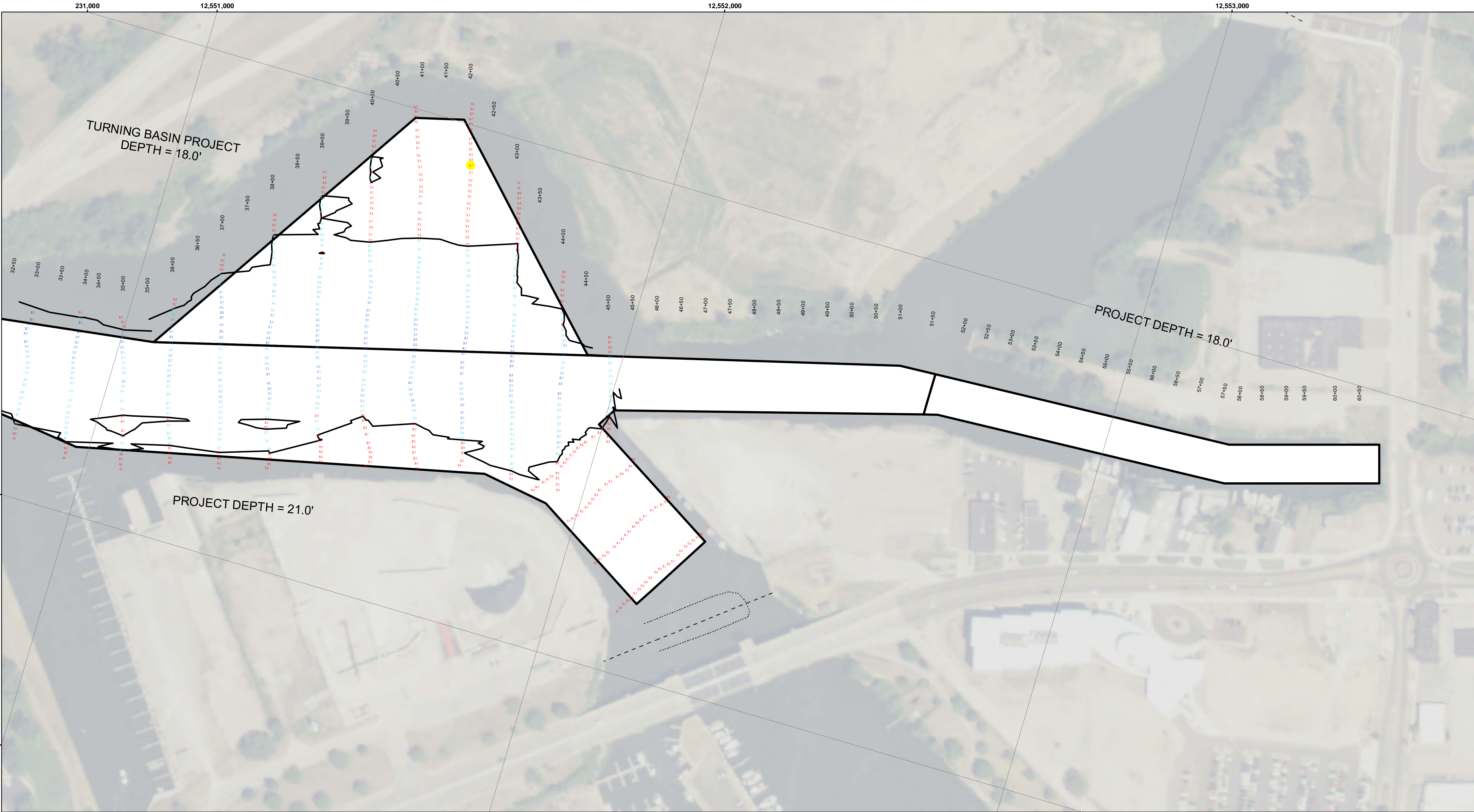


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Recommended: _____	Plotted By: _____
Approved: _____	Checked By: _____

ST JOSEPH HARBOR, MI
St Joseph Harbor
ST_01_JOE_20200325_CS
25 March 2020

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LEGEND

— Federal Navigation Channel	■ Shoaling Area
— Federal Navigation Center Line	● Shoalest Sounding**
..... Cable Submarine	⚓ Beacon, General
- - - Cable Overhead	◆ Red Navigation Buoy
— Contour Line	◇ Green Navigation Buoy
□ Placement Area	

1 inch = 100 feet

Feet

0 200 400 600

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

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

ST JOSEPH HARBOR, MI
St Joseph Harbor
ST_01_JOE_20200325_CS
25 March 2020

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