43°43'50" N
83°47'10" W
83°44'0" N
83°47'0" W
43°44'10" N
83°46'50" W
43°43'40" N
83°46'40" W

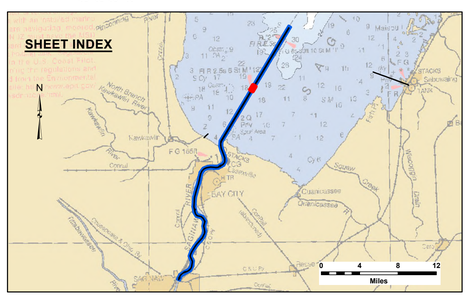
349+00 350+00 351+00 352+00 353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00 369+00 370+00 371+00 372+00 373+00 374+00 375+00 376+00 377+00 378+00

PROJECT DEPTH = 27.0'

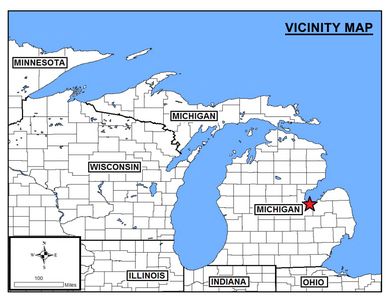
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

43°43'40" N
83°46'50" W
43°43'50" N
83°46'40" W
43°44'0" N

SHEET INDEX



VICINITY MAP



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'

W N S E

1 inch = 100 feet

Feet
0 100 200 300 400

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SOFTWARE: HYPACK

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.

US Army Corps of Engineers
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DETROIT DISTRICT

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Plotted By: _____
Checked By: _____

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

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
09 October 2025

Sheet Reference Number
15 of 62

Revision Number:
5.25.07.03-5.25.07.03

83°47'30" W
43°43'30" N
83°47'20" W
83°47'10" W
43°43'20" N

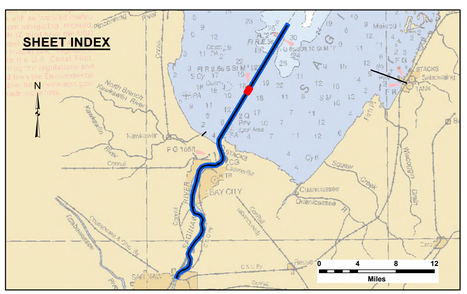
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PROJECT DEPTH = 27.0'

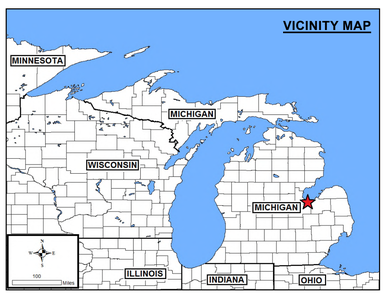
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

43°43'20" N
83°47'10" W
43°43'30" N
83°47'0" W
43°43'40" N

SHEET INDEX



VICINITY MAP



LEGEND

- Cable Submarine
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SOUNDING LEGEND

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- PROJECT DEPTH
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- PROJECT DEPTH +4'
- PROJECT DEPTH +5'

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Feet
0 100 200 300 400

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US Army Corps of Engineers
District: CELRE

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DETROIT DISTRICT

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Plotted By: _____
Checked By: _____

Submitted: _____
Chief, Technical Services

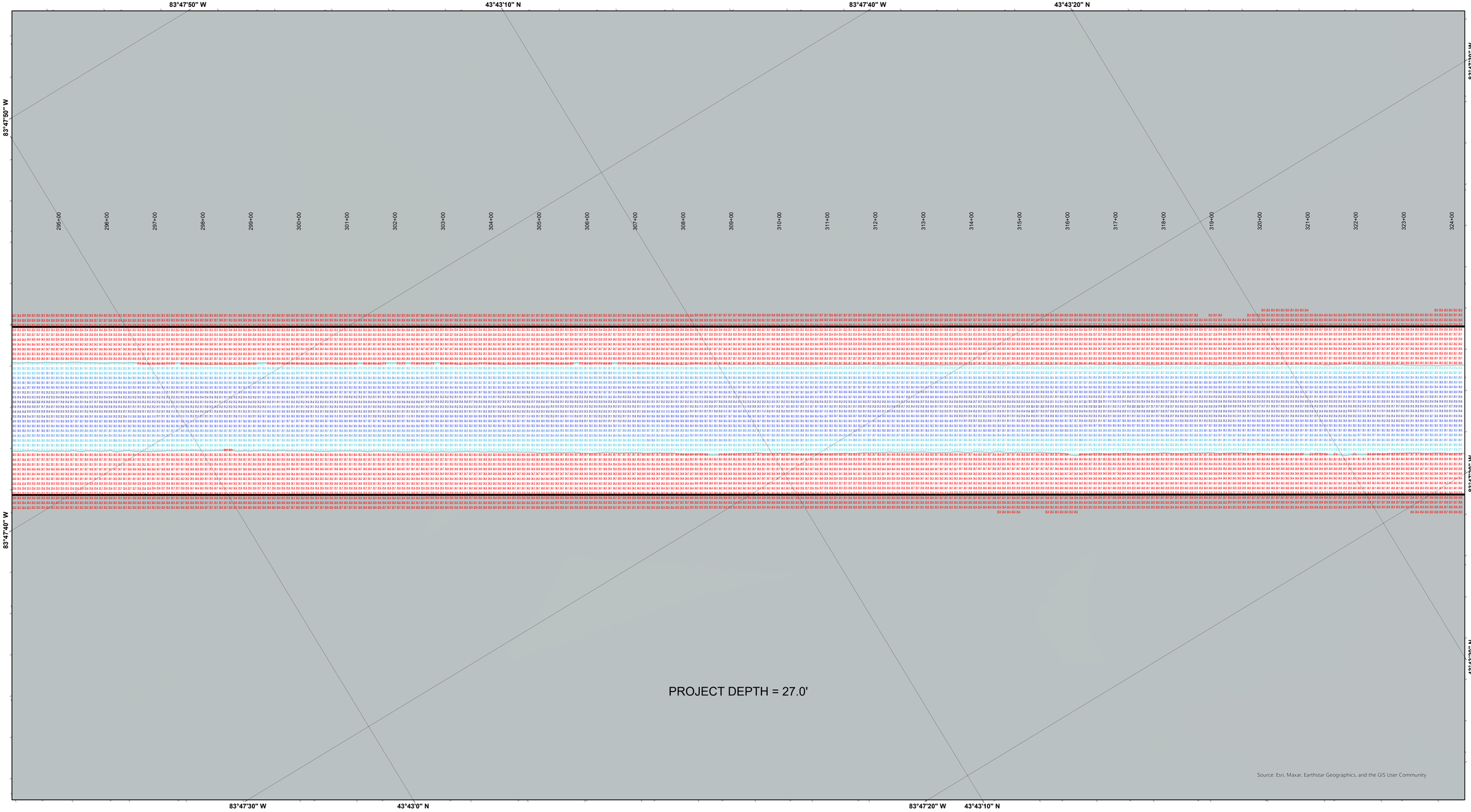
Recommended: _____
Chief, Survey Section

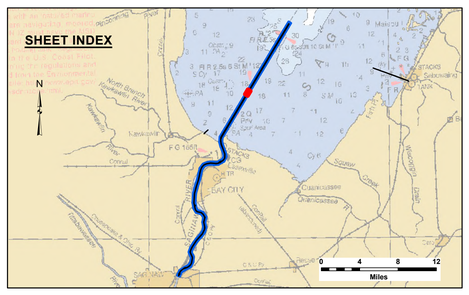
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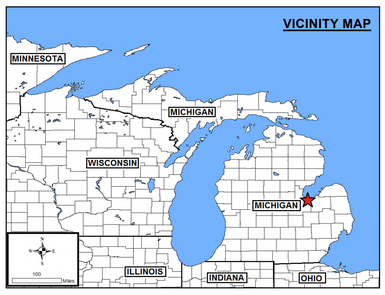
Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
09 October 2025

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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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- PROJECT DEPTH +4'
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Feet 0 100 200 300 400

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AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
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US Army Corps of Engineers
District: CELRE

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DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
09 October 2025

Sheet Reference Number
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5.25.07.03-5.25.07.03

CORPS OF ENGINEERS

U.S. ARMY

83°48'10" W

43°42'50" N

83°48'0" W

43°43'0" N

83°47'50" W

43°43'0" N

83°47'40" W

83°48'0" W

PROJECT DEPTH = 27.0'

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

43°42'30" N

83°47'50" W

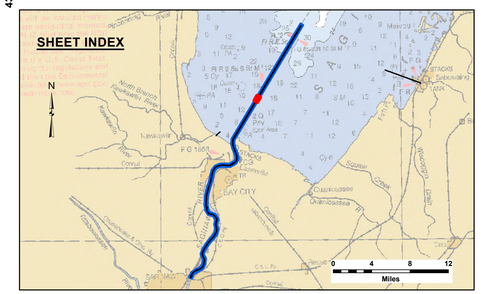
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83°47'40" W

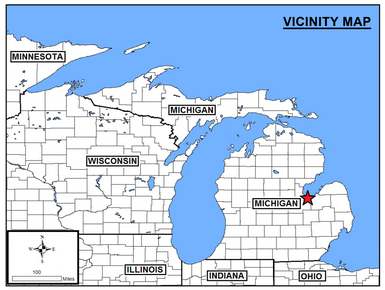
43°42'50" N

267+00 268+00 269+00 270+00 271+00 272+00 273+00 274+00 275+00 276+00 277+00 278+00 279+00 280+00 281+00 282+00 283+00 284+00 285+00 286+00 287+00 288+00 289+00 290+00 291+00 292+00 293+00 294+00 295+00 296+00 297+00

SHEET INDEX



VICINITY MAP



LEGEND

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SOUNDING LEGEND

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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
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CORPS OF ENGINEERS

U.S. ARMY

83°48'30" W

43°42'20" N

83°48'20" W

43°42'30" N

83°48'10" W

43°42'40" N

83°48'0" W

PROJECT DEPTH = 27.0'

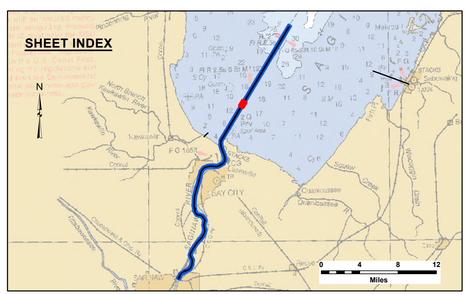
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83°48'10" W 43°42'10" N

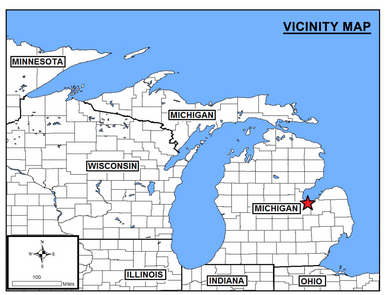
43°42'20" N 83°48'0" W

43°42'30" N

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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

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.

US Army Corps of Engineers
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U.S. ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
09 October 2025

Sheet Reference Number
19 of 62

Revision Number:
5.25.07.03-5.25.07.03

CORPS OF ENGINEERS

U.S. ARMY

83°48'50" W

43°42'0" N

83°48'40" W

43°42'10" N

83°48'30" W

43°41'50" N

83°48'40" W

83°48'20" W

213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00 223+00 224+00 225+00 226+00 227+00 228+00 229+00 230+00 231+00 232+00 233+00 234+00 235+00 236+00 237+00 238+00 239+00 240+00 241+00 242+00

PROJECT DEPTH = 27.0'

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

83°48'30" W

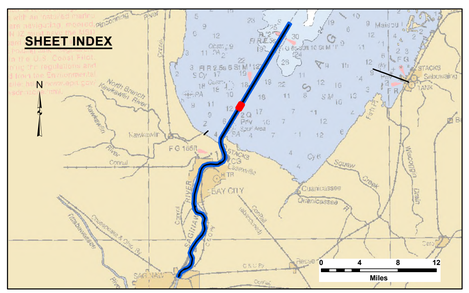
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83°48'20" W

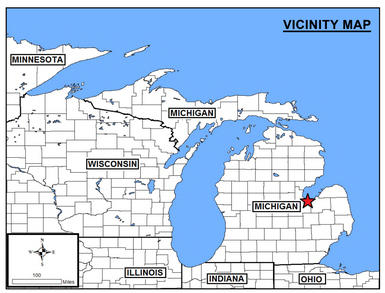
43°42'0" N

83°48'10" W

SHEET INDEX



VICINITY MAP



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

Feet

0 100 200 300 400

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US Army Corps of Engineers District: CELRE

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DETROIT DISTRICT

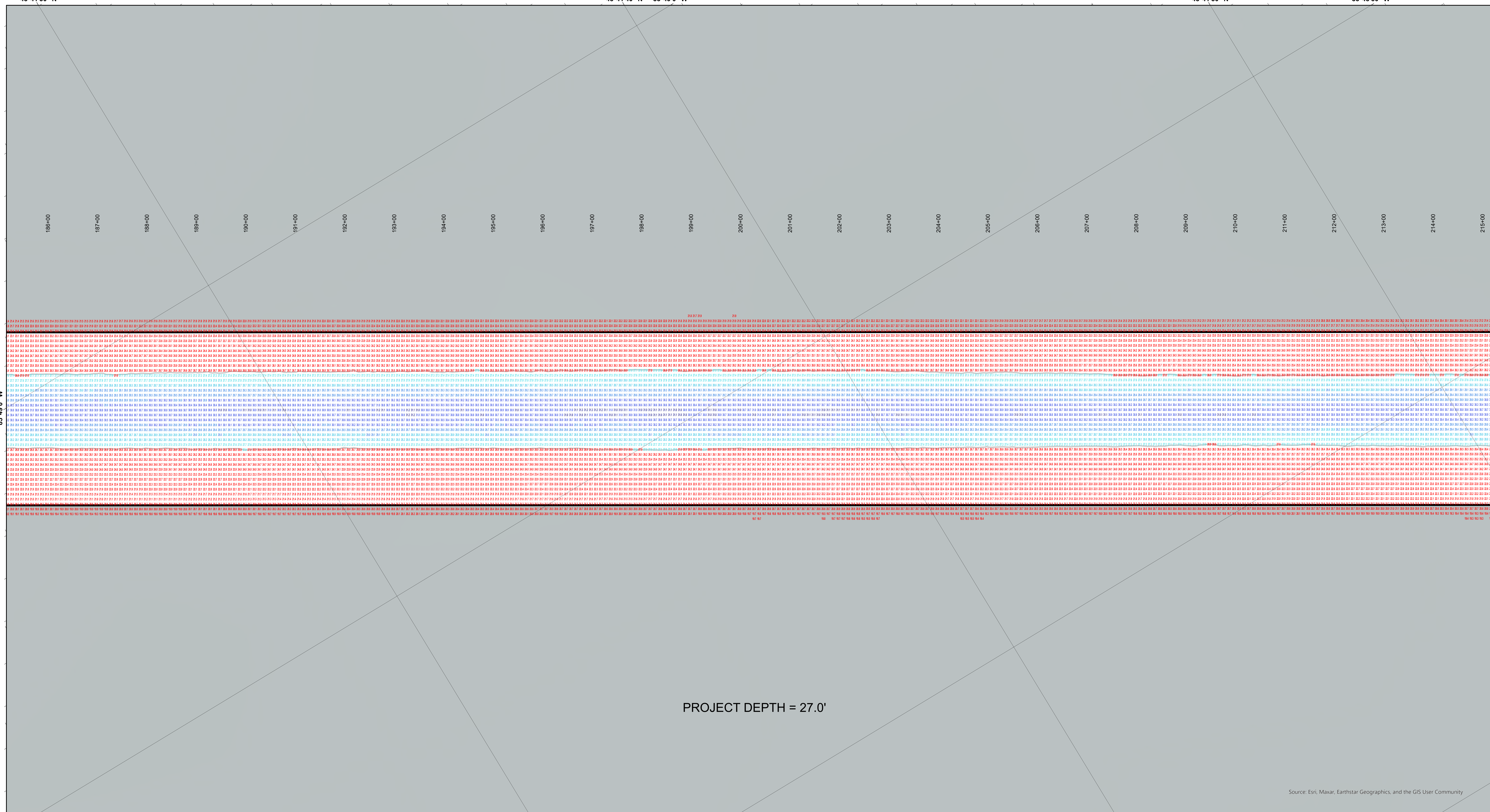
Surveyed By:	Plotted By:	Checked By:
Submitted:	Recommended: Chief, Survey Section	Approved: Chief, Technical Services

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
09 October 2025

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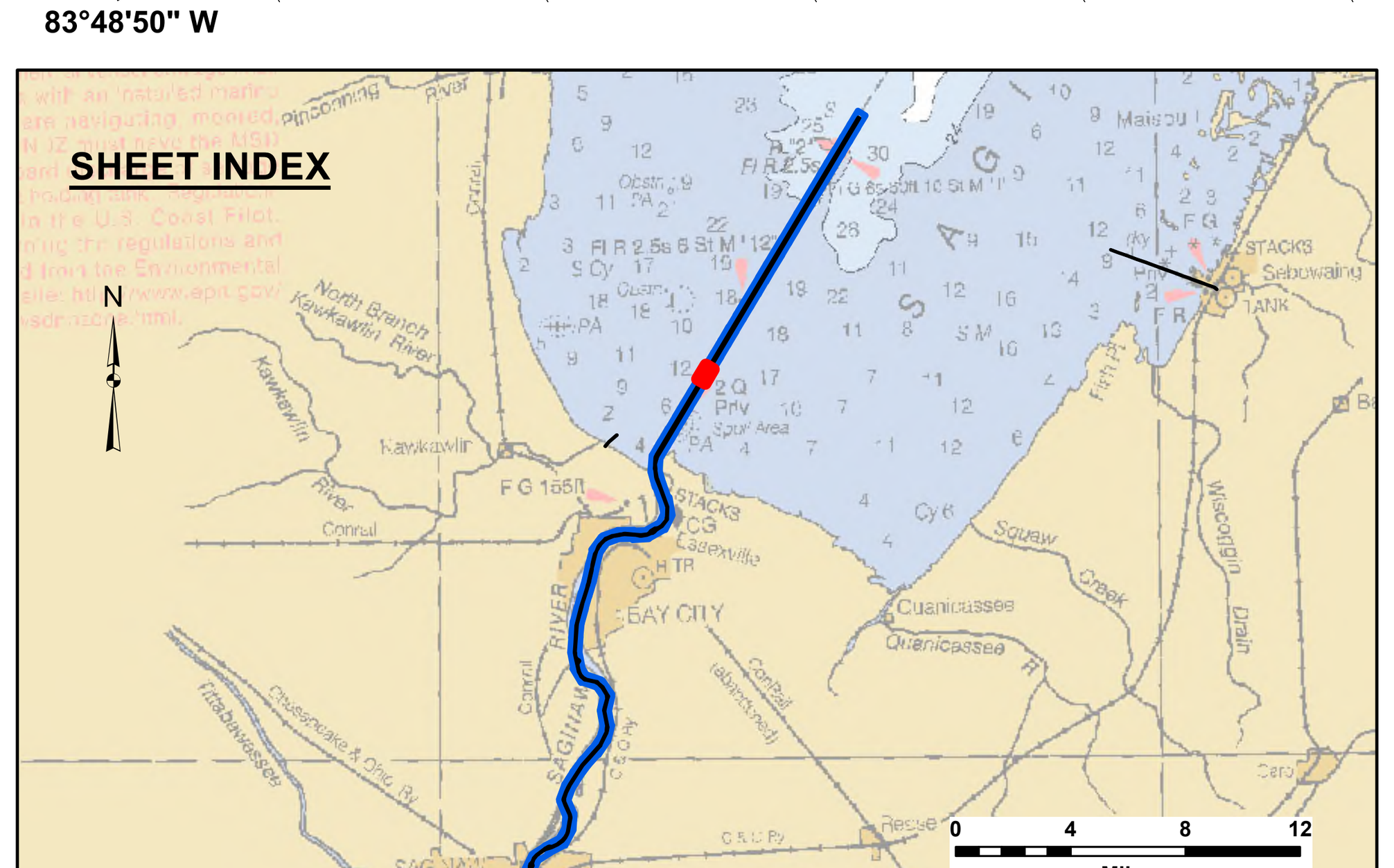
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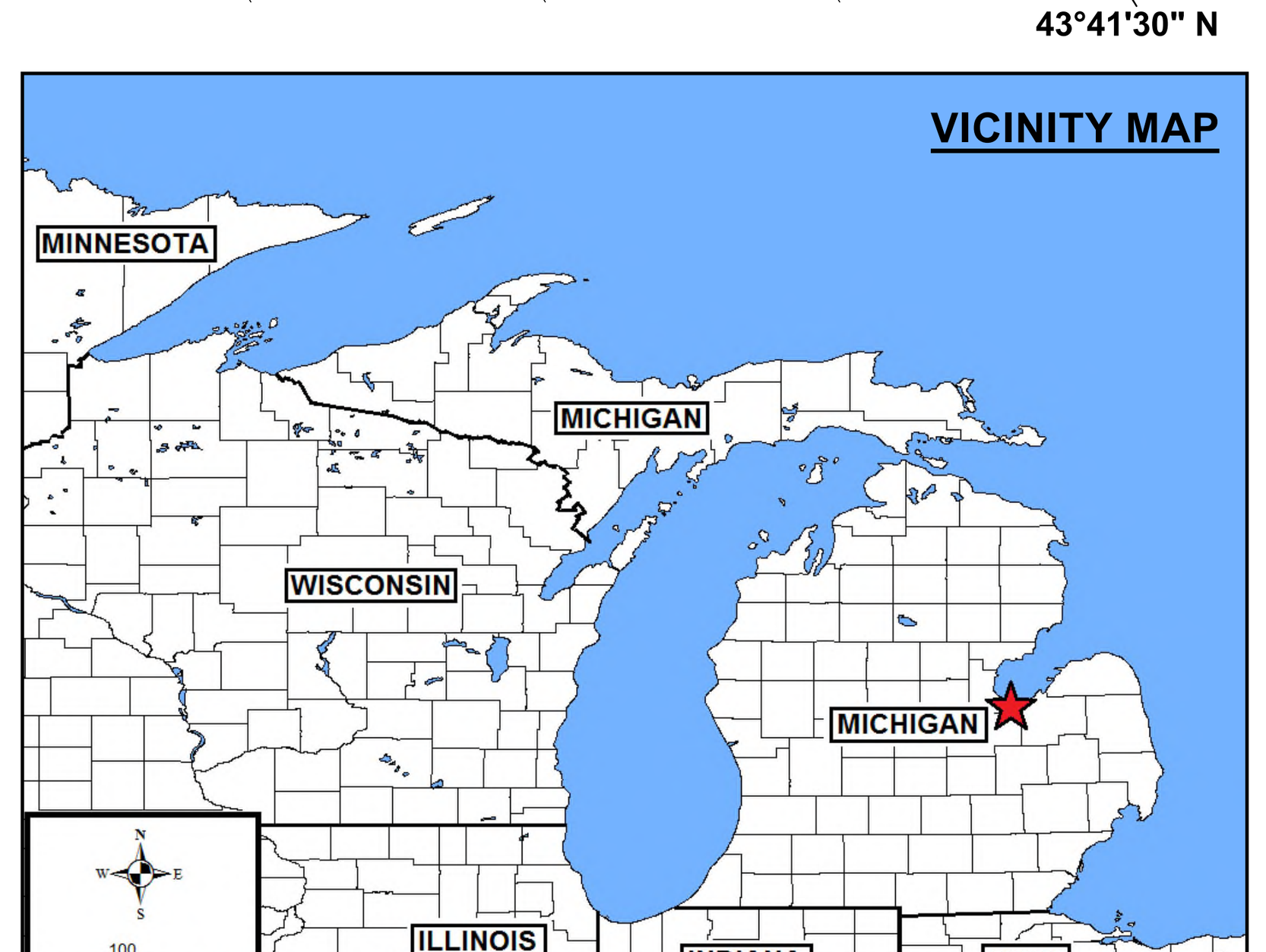
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83°49'0" W 83°48'40" W 43°41'50" N 83°48'30" W

83°48'50" W 43°41'30" N 83°48'40" W 43°41'40" N 83°48'30" W



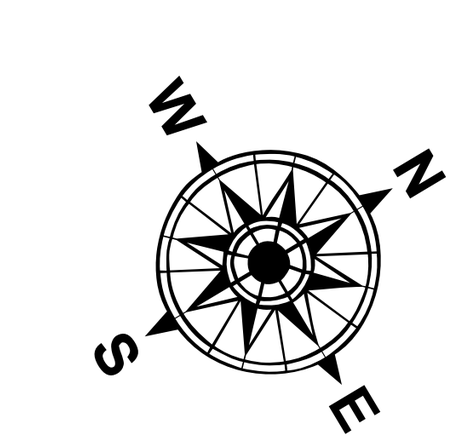


LEGEND

- 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'
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1 inch = 100 feet

Feet
0 100 200 300 400

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US Army Corps of Engineers
District: CELRE

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Plotted By: ___
Checked By: ___

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

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
09 October 2025

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Revision Number:
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CORPS OF ENGINEERS

U.S. ARMY

43°41'10" N

83°49'20" W

43°41'20" N

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43°41'30" N

83°49'0" W

83°48'50" W

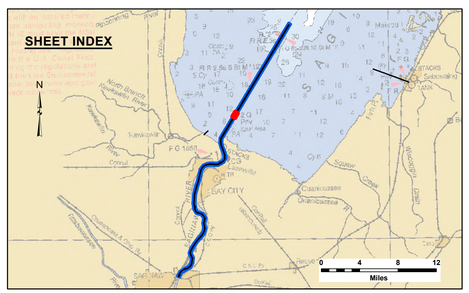
43°41'0" N

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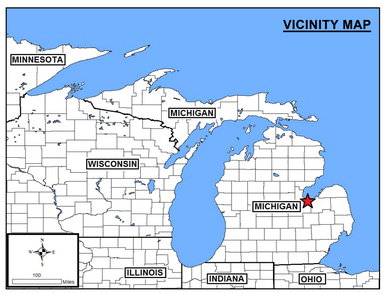
PROJECT DEPTH = 27.0'

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

SHEET INDEX



VICINITY MAP



LEGEND

- Cable Submarine
- Cable Overhead
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DETROIT DISTRICT

Surveyed By: _____
Plotted By: _____
Checked By: _____

Submitted: _____ Chief, Technical Services

Recommended: _____ Chief, Survey Section

Approved: _____

Saginaw, MI
Saginaw River
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CORPS OF ENGINEERS

U.S. ARMY

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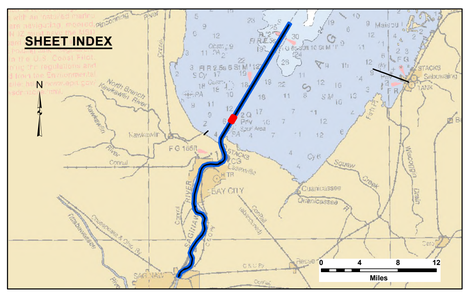
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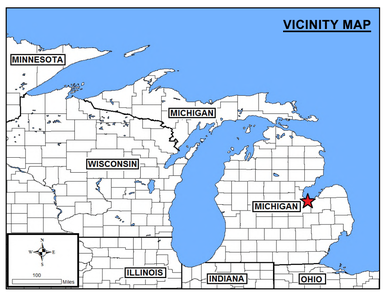
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PROJECT DEPTH = 27.0'

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U.S. ARMY

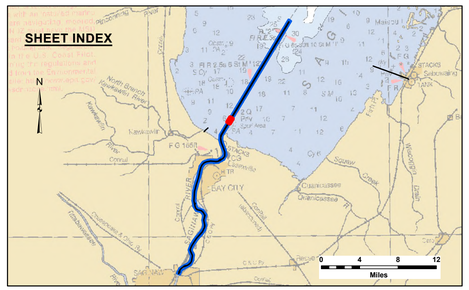
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83°49'30" W

104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00 113+00 114+00 115+00 116+00 117+00 118+00 119+00 120+00 121+00 122+00 123+00 124+00 125+00 126+00 127+00 128+00 129+00 130+00 131+00 132+00 133+00

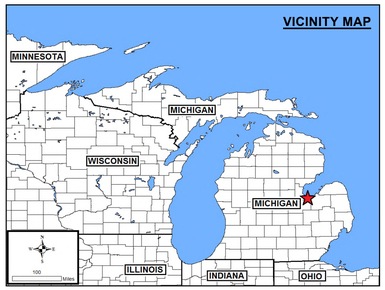
PROJECT DEPTH = 27.0'

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

SHEET INDEX



VICINITY MAP



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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- PROJECT DEPTH +3'
- PROJECT DEPTH +4'
- PROJECT DEPTH +5'

1 inch = 100 feet

Feet
0 100 200 300 400

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SOFTWARE: HYPACK

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
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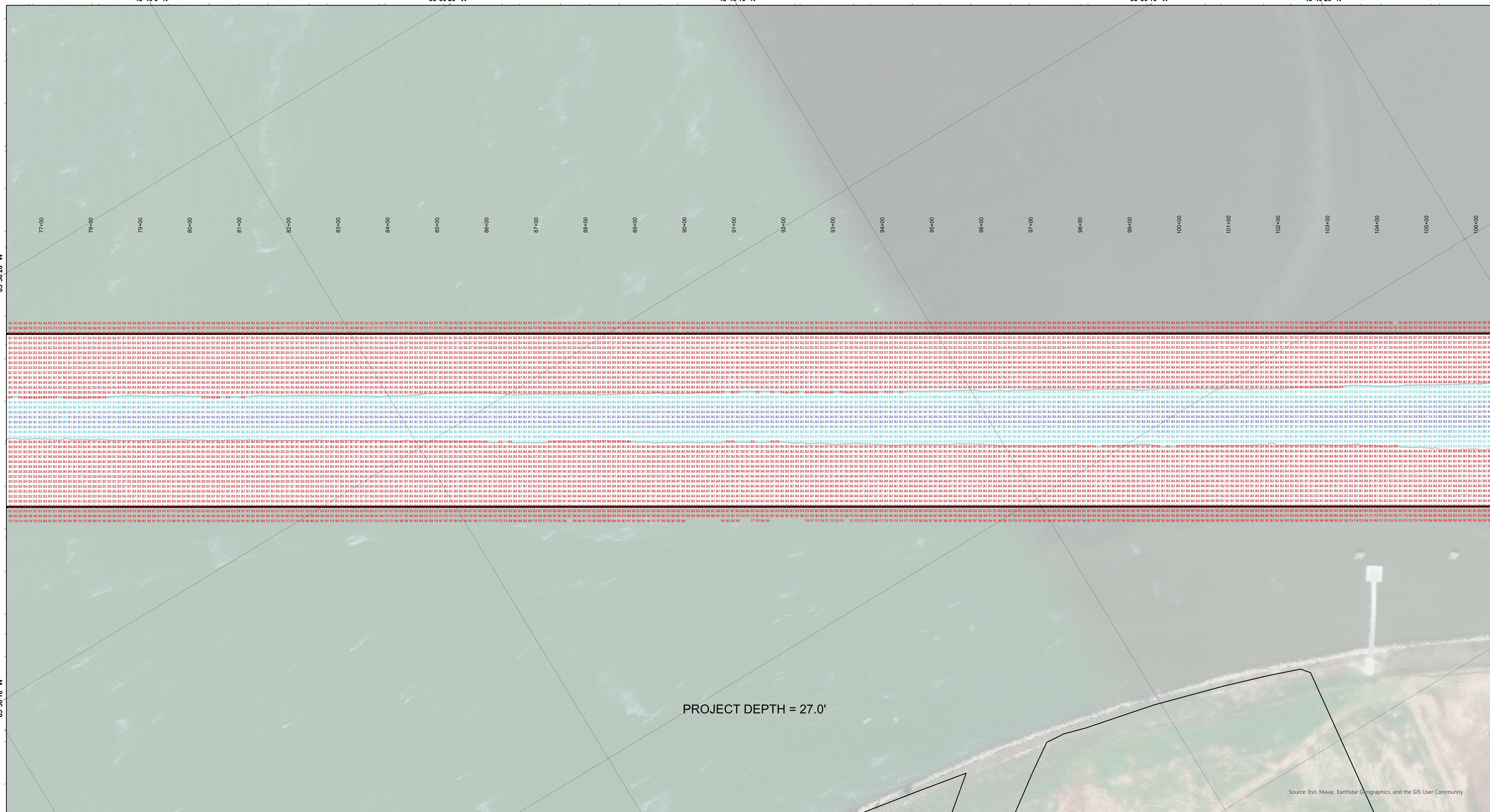
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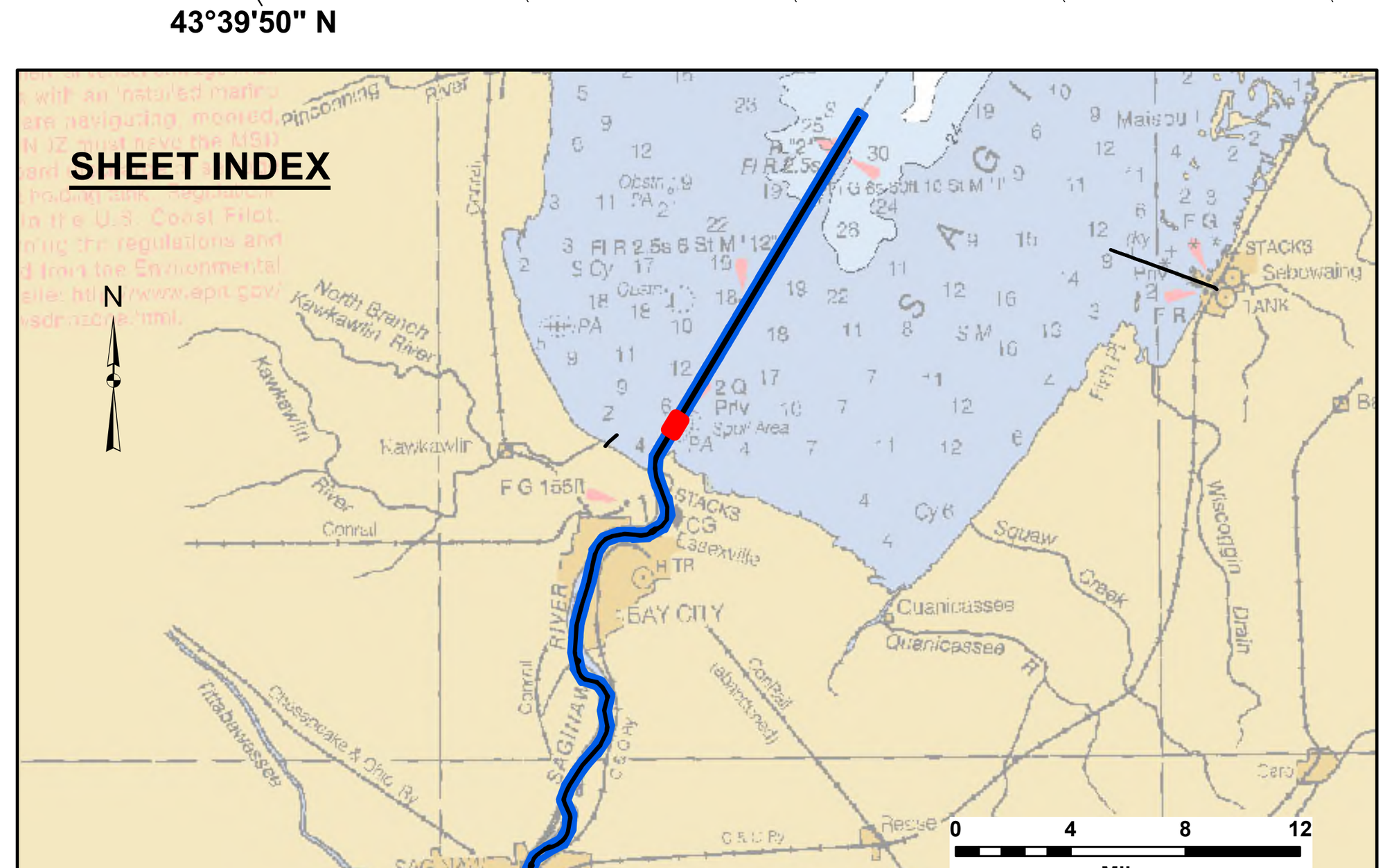
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Submitted:	____	Checked By:	____
	____		____
Recommended:	Chief, Survey Section		
Approved:	Chief, Technical Services		

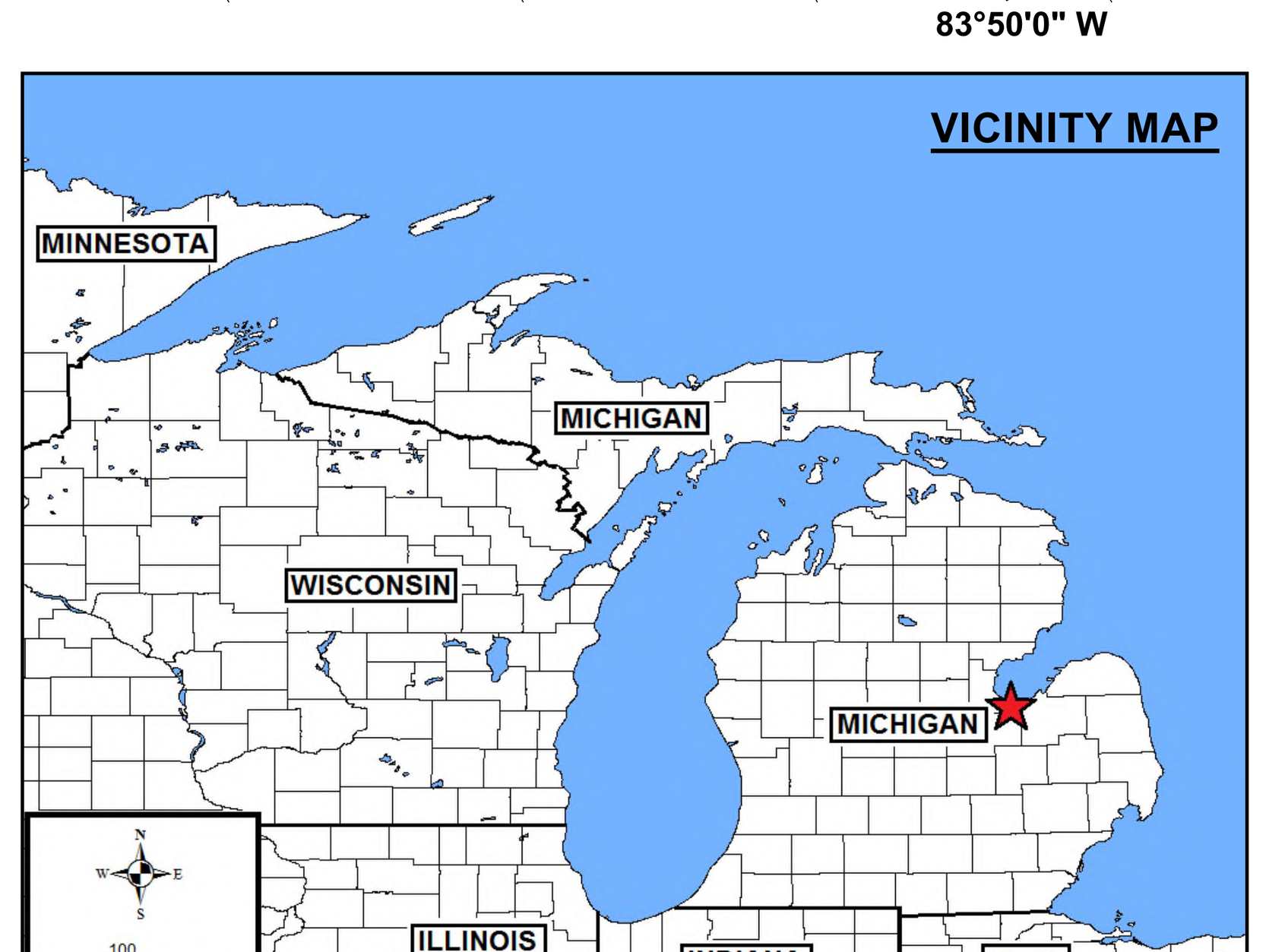
Saginaw, MI
Saginaw River
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LEGEND

- Cable Submarine
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- LESS THAN PROJECT DEPTH
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US Army Corps of Engineers
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Checked By: ___
Submitted: ___
Recommended: ___ Chief, Survey Section
Approved: ___ Chief, Technical Services

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
09 October 2025

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CORPS OF ENGINEERS

U.S. ARMY

43°39'40" N 83°50'40" W 43°39'50" N 83°50'30" W 43°40'0" N

83°50'40" W

83°50'30" W

83°50'20" W

83°50'10" W

50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00 77+00 78+00 79+00

PROJECT DEPTH = 27.0'

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

43°39'30" N 83°50'20" W 43°39'40" N 83°50'10" W 43°39'50" N

US Army Corps of Engineers District: CELRE

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Plotted By: _____

Checked By: _____

Submitted: _____ Chief, Technical Services

Recommended: _____ Chief, Survey Section

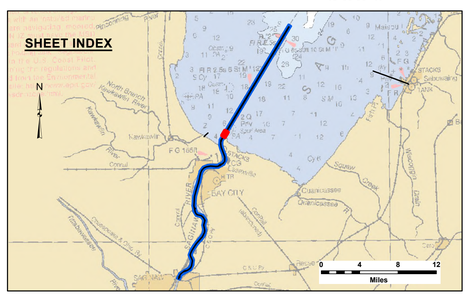
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Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
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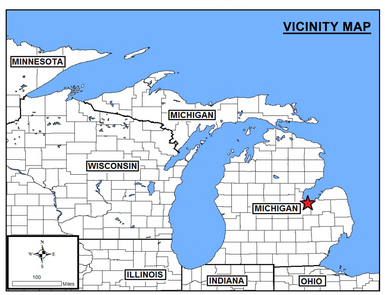
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VICINITY MAP



LEGEND

- Cable Submarine
- Cable Overhead
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- Beacon, General
- Contour Lines
- Channel_Limits

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SOFTWARE: HYPACK

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.

83°51'0" W 43°39'20" N 83°50'50" W 43°39'30" N

83°51'0" W 43°39'10" N

23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00

83°50'40" W

83°50'50" W

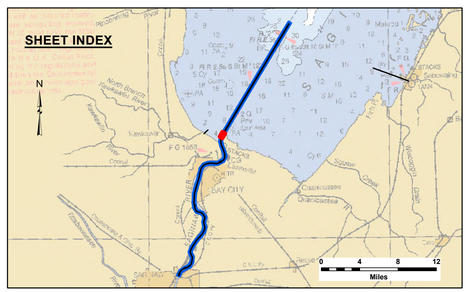
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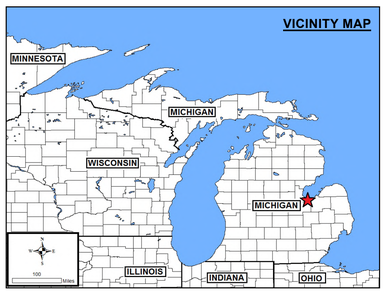
43°39'30" N

PROJECT DEPTH = 27.0'

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83°50'40" W 43°39'20" N 83°50'30" W





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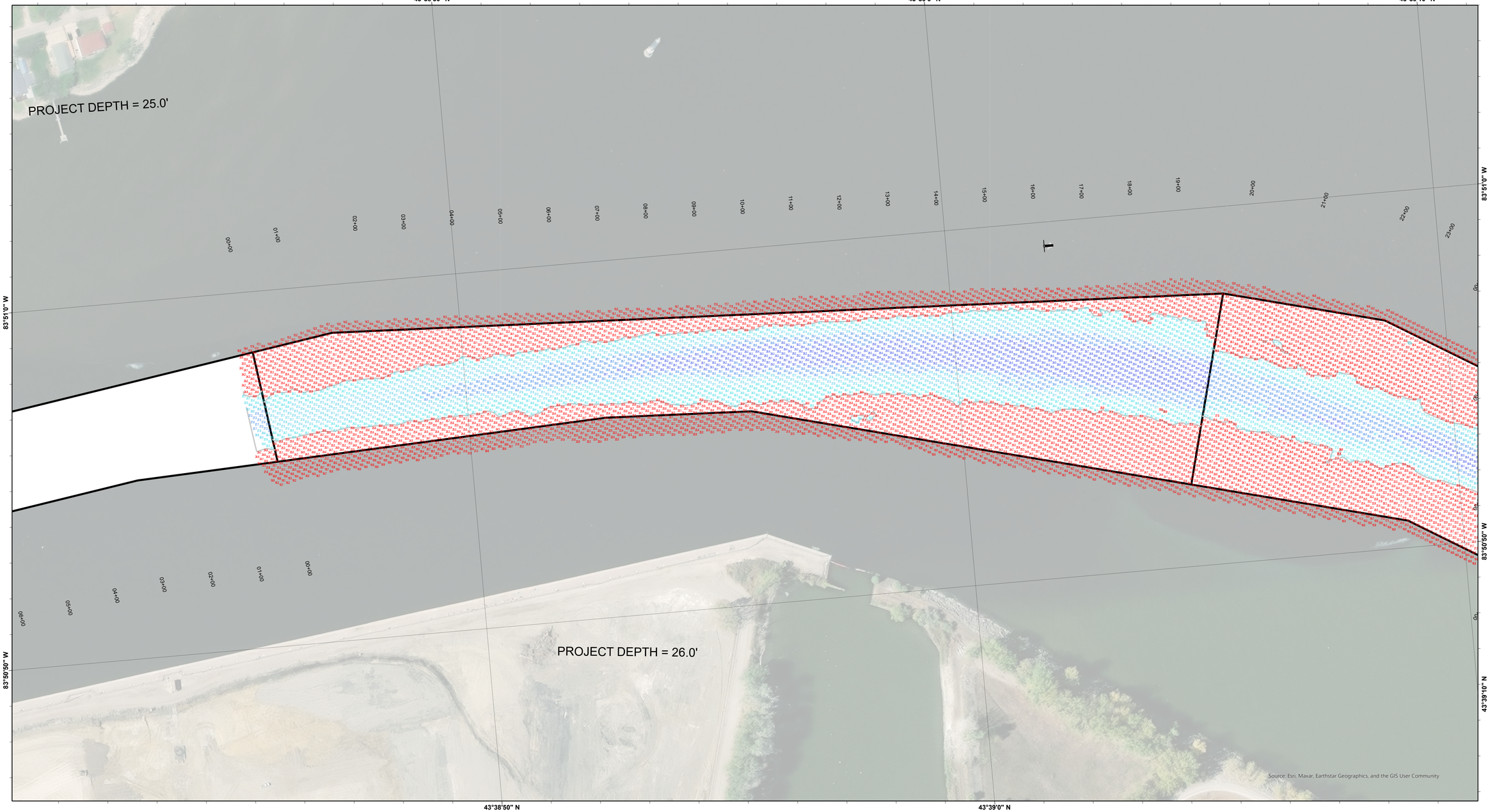
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DETROIT DISTRICT

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

Saginaw, MI
Saginaw River
SH_01_SAG_20251009_CS
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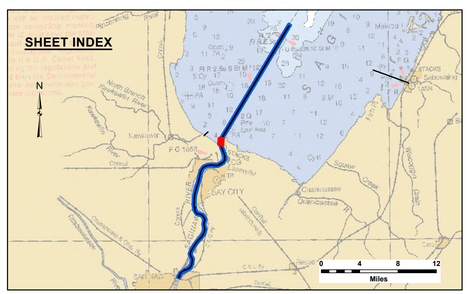
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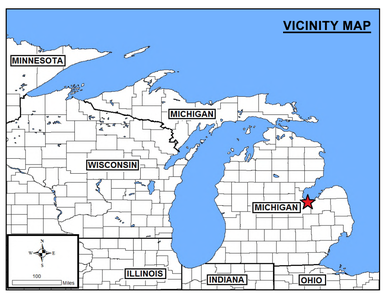
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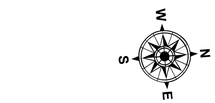


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NOTES: THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THE TIME.

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/ SHOAL REMOVAL OPERATIONS AND NOTICE TO NAVIGATION INTERESTS.

THE GRID SHOWN REFERENCES LATITUDE/LONGITUDE DISPLAYED AS DEGREES, MINUTE, SECONDS IN 10 SECOND INCREMENTS. THE SURVEY DATA REPRESENTED HEREIN IS PROJECTED TO THE MICHIGAN STATE PLANE, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983 (NAD83), US SURVEY FOOT.

ALL SOUNDINGS ARE REFERENCED TO INTERNATIONAL GREAT LAKES DATUM OF 1985 (IGLD 1985)
PROJECT DEPTH RANGE FROM 20.0' TO 27.0'

TIDE VALUES ARE DERRIVED FROM THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) WATER LEVEL STATIONS: ESSEXVILLE, MI (9007035) ALONG WITH THE FOLLOWING GAGES: G.BOARD ON PILING NEAR CS 820+00, TBM ZILL RAMP, TBM CHEB, TBM CASS RAMP, TBM RAILROAD [ESTABLISHED FROM COE VERTICAL CP BM 36], TBM SAIL AT THE FOOT OF THE 5TH STREET, G.BOARD
ON THE D.STREAM WESTERN PIER OF THE CENTRAL MICHIGAN R.R. BRIDGE [CAGE BOARD WAS ESTABLISHED FROM NGS BM HL MON 25 USE], G.BOARD ON THE DOWNSTREAM END OF THE CENTER PIER OF THE LAKE STATE RAILROAD BRIDGE [ESTABLISHED FROM NGS BM HL MON 16 USE (PID DJ0534)], G.BOARD ON THE D.STREAM END OF THE CTR PIER OF LAKE STATE R.R. BRIDGE, G.BOARD SET ON THE PILING AT THE MOUTH OF THE BLACK RIVER ON THE NORTH SIDE NEAR THE RAILROAD TRESTLE

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

AERIAL PHOTOGRAPHY DATA SOURCE: MAXAR, MICROSOFT
ALL COORDINATES ARE IN U.S. SURVEY FEET.