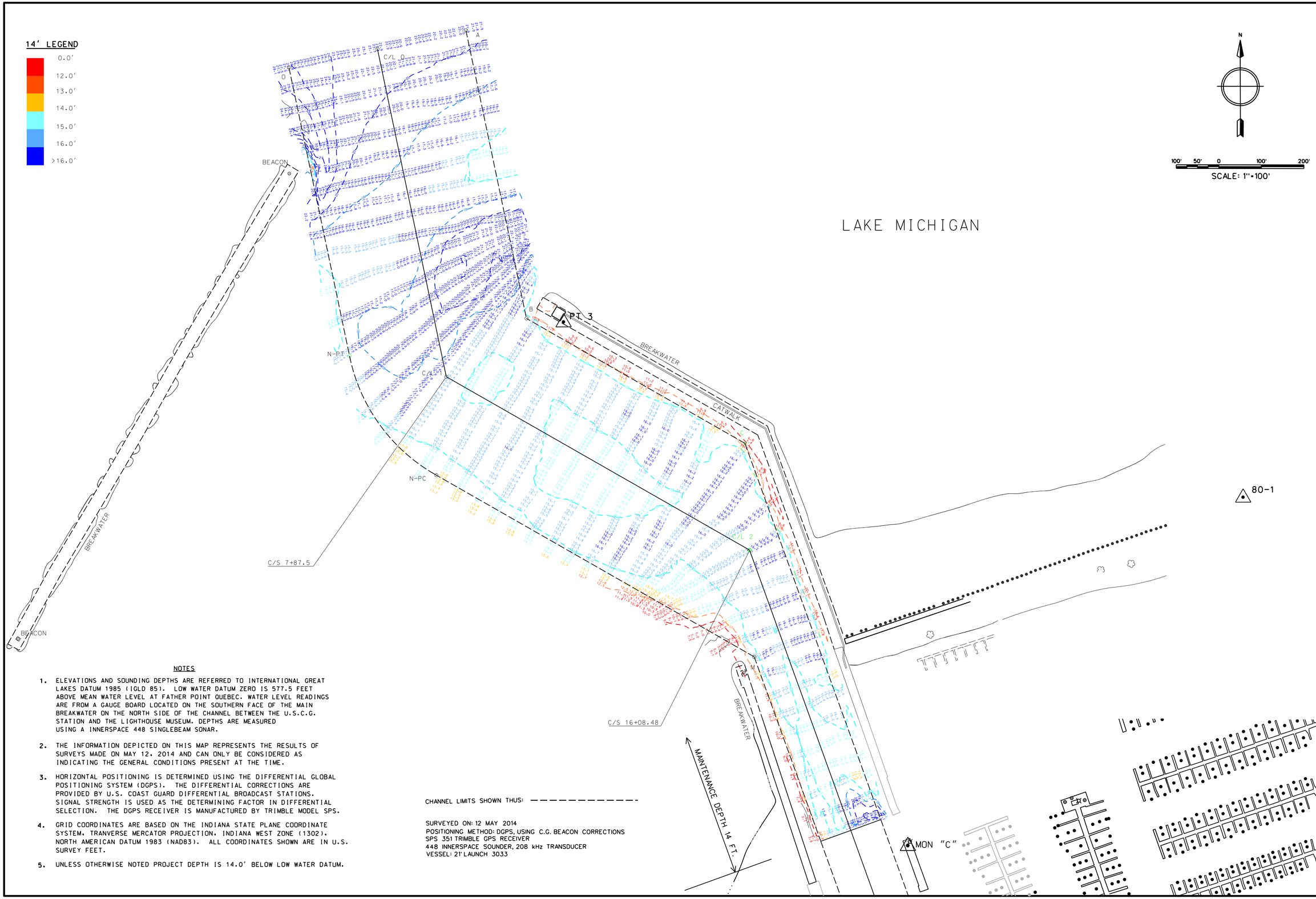

NOTES

1. ELEVATIONS AND SOUNDING DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM 1985 (IGLD 85). LOW WATER DATUM ZERO IS 577.5 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT QUEBEC. WATER LEVEL READINGS ARE FROM A GAUGE BOARD LOCATED ON THE SOUTHERN FACE OF THE MAIN BREAKWATER ON THE NORTH SIDE OF THE CHANNEL BETWEEN THE U.S.C.G. STATION AND THE LIGHTHOUSE MUSEUM. DEPTHS ARE MEASURED USING A INNERSPACE 448 SINGLEBEAM SONAR.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON MAY 12, 2014 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS PRESENT AT THE TIME.
3. HORIZONTAL POSITIONING IS DETERMINED USING THE DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS). THE DIFFERENTIAL CORRECTIONS ARE PROVIDED BY U.S. COAST GUARD DIFFERENTIAL BROADCAST STATIONS. SIGNAL STRENGTH IS USED AS THE DETERMINING FACTOR IN DIFFERENTIAL SELECTION. THE DGPS RECEIVER IS MANUFACTURED BY TRIMBLE MODEL SPS.
4. GRID COORDINATES ARE BASED ON THE INDIANA STATE PLANE COORDINATE SYSTEM, TRANVERSE MERCATOR PROJECTION, INDIANA WEST ZONE (1302), NORTH AMERICAN DATUM 1983 (NAD83). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.
5. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 14.0' BELOW LOW WATER DATUM.

CHANNEL LIMITS SHOWN THUS: — — — — — — — — — — — —

SURVEYED ON: 12 MAY 2014
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
SPS 351 TRIMBLE GPS RECEIVER
448 INNERSPACE SOUNDER, 208 kHz TRANSDUCER
VESSEL: 21' LAUNCH 3033

US Army Corps of Engineers
Chicago District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: ERIC SCHMIDT
Dwn by: E.D.S.
Ckd by:
Reviewed by:
Chief, Fac. Mgmt.
Submitted by:
Chief, SMR Section
Survey Date: MAY 12, 2014
Rev.
Design file name:
Drawing code:
File name:
Plot date: 05/13/2014
Plot scale:
Approval Recommended:
Area Eng. (MAD)
Approved by:
District Engineer:

CHICAGO DISTRICT
FEDERAL NAVIGATION CHANNEL
MICHIGAN CITY

MICHIGAN CITY
2014 CONDITION SURVEY

Sheet reference number:
MCH-01
Sheet 1 of 2

NOTES

1. ELEVATIONS AND SOUNDING DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM 1985 (IGLD 85). LOW WATER DATUM ZERO IS 577.5 FEET ABOVE MEAN WATER LEVEL AT FATHER POINT QUEBEC. WATER LEVEL READINGS ARE FROM A GAUGE BOARD LOCATED ON THE SOUTHERN FACE OF THE MAIN BREAKWATER ON THE NORTH SIDE OF THE CHANNEL BETWEEN THE U.S.C.G. STATION AND THE LIGHTHOUSE MUSEUM. DEPTHS ARE MEASURED USING A INNERSPACE 448 SINGLEBEAM SONAR.
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4. GRID COORDINATES ARE BASED ON THE INDIANA STATE PLANE COORDINATE SYSTEM, TRANVERSE MERCATOR PROJECTION, INDIANA WEST ZONE (1302), NORTH AMERICAN DATUM 1983 (NAD83). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.
5. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 12.0' BELOW LOW WATER DATUM.

SURVEYED ON: 12 MAY 2014
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
SPS 351 TRIMBLE GPS RECEIVER
448 INNERSPACE SOUNDER, 208 kHz TRANSDUCER
VESSEL: 21' LAUNCH 3033

CHANNEL LIMITS SHOWN THUS: - - - - - - - - - - - - - - -

12' LEGEND	10' LEGEND
0.0'	0.0'
10.0'	8.0'
11.0'	9.0'
12.0'	10.0'
13.0'	11.0'
14.0'	12.0'
>14.0'	>12.0'

MATCH LINE SHEET 1
MATCH LINE SHEET 2
PROJECT DEPTH 8'
N 2,359,000
N 2,358,500
N 2,358,000
F.P.
PAVED PARKING
PAVED STORAGE
MONUMENT
PLAYGROUND
SUB STATION
POOL
TENNIS COURT
PENN CENTRAL R.R.
FRANKLIN STREET
WATER DISCHARGE
CANAL
TURNING BASIN
PIPES
POWER GRID
PIPELINE TRENCH
TRANSFORMER BANK
PARKING
C/L 1
C/L 2
C/L 3
C/L 4
C/L 5
C/L 6
C/L 7
MATCH LINE SHEET 2
MATCH LINE SHEET 3
N

US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.

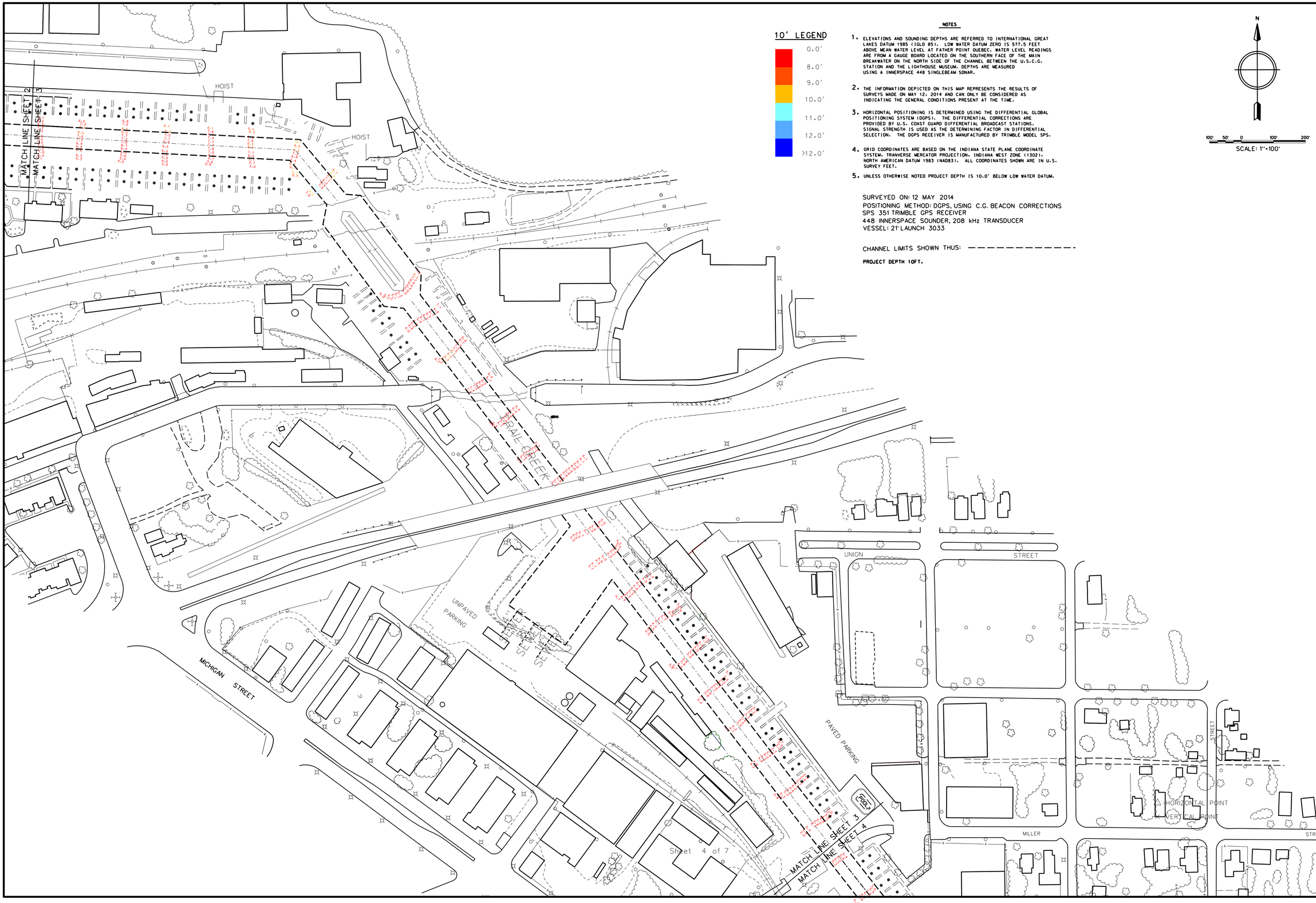
Surveyed by: Eric Samdahl	Rev.
Dwn. by: Eric	Ckd by:
Design File name:	Drawing code:
Approval Recommended:	Reviewed by: Chief, Ops. Mgmt.
Prep'd by: Matt Fratus	Submitted by: Chief, O&M Section
Approved by: Chief, Engineering	
Survey date: 12 MAY 2014	File name:
	Plot date: 05/13/2014
	Plot scale: 1" = 100'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

LAKE MICHIGAN AREA OFFICE
MICHIGAN CITY, TRAIL CREEK

MAY 2014
CONDITION SURVEY

Sheet reference number:
MCTC-02
Sheet 2 of 4



10' LEGEND

- 0.0'
- 8.0'
- 9.0'
- 10.0'
- 11.0'
- 12.0'
- >12.0'

NOTES

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5. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 10.0' BELOW LOW WATER DATUM.

SURVEYED ON: 12 MAY 2014
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
SPS 351 TRIMBLE GPS RECEIVER
448 INNERSPACE SOUNDER, 208 kHz TRANSDUCER
VESSEL: 21' LAUNCH 3033

CHANNEL LIMITS SHOWN THUS: — — — — — — — — — — — —

PROJECT DEPTH 10FT.

N

100' 50' 0 100' 200'
SCALE: 1"=100'

US Army Corps of Engineers
Detroit District

Symbol	Description	Date	Appr.	Symbol	Description	Date	Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Approval Recommended:
Area Eng. LMAD Office
Approved by:
District Engineer:

Surveyed by: Eric Schmidt
Dwn by: E.D.S.
Ckd by:
Reviewed by:
Chief, Fac. Mgmt.
Submitted by:
Chief, SMR Section

Survey Date: 12 MAY 2014
Rev.
Design file name:
Drawing code:
File name:
Plot date: 05/13/2014
Plot scale: 1" = 100'

LAKE MICHIGAN AREA OFFICE
MICHIGAN CITY, TRAIL CREEK

MAY 2014
CONDITION SURVEY

Sheet reference number:
MCTC-03
Sheet 3 of 4

SURVEYED ON: 12 MAY 2014
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
SPS 351 TRIMBLE GPS RECEIVER
448 INNERSPACE SOUNDER, 208 kHz TRANSDUCER
VESSEL: 21' LAUNCH 3033

CHANNEL LIMITS SHOWN THUS: — — — — — — — — — — —

NOTES

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4. GRID COORDINATES ARE BASED ON THE INDIANA STATE PLANE COORDINATE SYSTEM, TRANVERSE MERCATOR PROJECTION, INDIANA WEST ZONE (1302), NORTH AMERICAN DATUM 1983 (NAD83). ALL COORDINATES SHOWN ARE IN U.S. SURVEY FEET.
5. UNLESS OTHERWISE NOTED PROJECT DEPTH IS 6.0' BELOW LOW WATER DATUM.

N

100' 50' 0 100' 200'
SCALE: 1"=100'

10' LEGEND	6' LEGEND
0.0'	0.0'
8.0'	4.0'
9.0'	5.0'
10.0'	6.0'
11.0'	7.0'
12.0'	8.0'
>12.0'	>8.0'

△ HORIZONTAL POINT
VERTICAL POINT

UNION STREET
MILLER STREET
SCOTT STREET
STREET
WALKER STREET
AND
NORFOLK
MICHIGAN STREET
8TH STREET
WESTERN RR.
PAVED PARKING
DEWATERING AREA
DIRT PARKING
UNPAVED PARKING
SUB STATION
F.P.
MATCH LINE SHEET 3
MATCH LINE SHEET 4
Sheet 4 of 7

US Army Corps of Engineers
Detroit District

Symbol	Description	Date Appr. Symbol	Description	Date Appr.

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

Surveyed by: Eric Schmidt
Drawn by: E.B.S.
Checked by:
Approval Recommended:
Area Eng. Spec. Staff/Eng.
Approved by:
Project Eng. Manager

Survey Dated: 12 MAY 2014
Design file name:
Drawing code:
Checked by: Peter Fec. Mgmt.
Submitted by:
Project Spec. Section

Rev.:
File name:
Plot date: 05/12/2014
Plot scale: 1" = 100'

LAKE MICHIGAN AREA OFFICE
MICHIGAN CITY, TRAIL CREEK

MAY 2014
CONDITION SURVEY

Sheet reference number:
MCTC-04
Sheet 4 of 4