HORIZONTAL CONTROL
THIRD ORDER
LESS THAN THIRD ORDER
THIRD ORDER & BENCHMARK
VALUE UNKNOWN
VERTICAL CONTROL
BENCHMARKS

CHANNEL LINE T.P.

T.P.	EAST X	NORTH Y
15	13,257,545.00	770,206.17
17	13,256,756.15	770,378.68
20	13,257,770.70	770,499.35

CENTER LINE T.P.

T.P.	EAST X	NORTH Y
7	13,257,973.70	770,383.04

NOTES:

1) THE SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREON ARE THE RESULTS OF A SURVEY ON THE DATES INDICATED. SOUNDINGS ARE NOT CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.

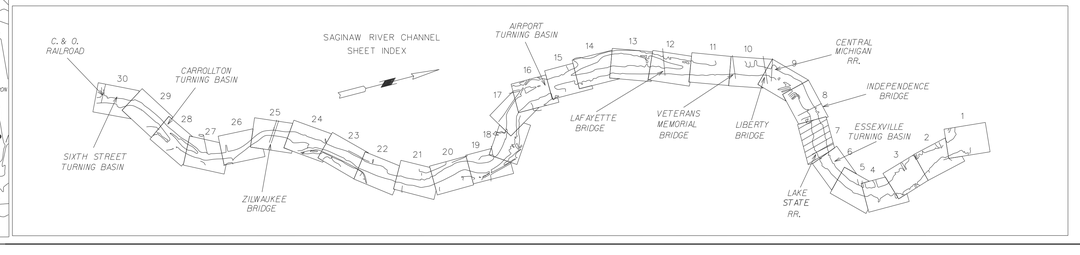
2) THE SOUNDINGS DEPICTED HEREON ARE EXPRESSED IN U.S. SURVEY FEET AND TENTHS THEREOF AND ARE REFERENCED TO THE FOLLOWING DATUMS:
HORIZONTAL: MICHIGAN STATE PLANE COORDINATE SYSTEM, MICHIGAN SOUTH ZONE #2113, NORTH AMERICAN DATUM (NAD) OF 1983.
VERTICAL: INTERNATIONAL GREAT LAKES DATUM (IGLD) OF 1985.

3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL LAUNCH #3 WITH THE FOLLOWING EQUIPMENT/SOFTWARE:
POSITIONING: APPLANIX POS-MV# W.DGPS
MOTION COMPENSATION: APPLANIX POS-MV#4
SONAR: ODOM ES-300
SOFTWARE: HYPACK 2013

4) WATER LEVELS USED WERE REFERENCED TO THE GAGE BOARD LOCATED ON THE DOWNSTREAM END OF THE CENTER PIER OF THE LAKE STATE RAILROAD BRIDGE. THE DATUM WAS ESTABLISHED FROM THE NGS BENCHMARK HL MON 16 USE (PID QJ0534).

LEGEND

25.0' HL PROJECT DEPTH CONTOUR



US ARMY CORPS OF ENGINEERS
DETROIT DISTRICT

UNITED STATES ARMY CORPS OF ENGINEERS
DETROIT AREA OFFICE, DETROIT, MICHIGAN

CONDITION SURVEY
SAGINAW RIVER, MI

CS 148+00 TO CS 182+00

DRAWN BY: D.H.
CHECKED BY: C.V.L.
DATE OF SURVEY: 25 JUNE 2016

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

SHEET 7 OF 30