



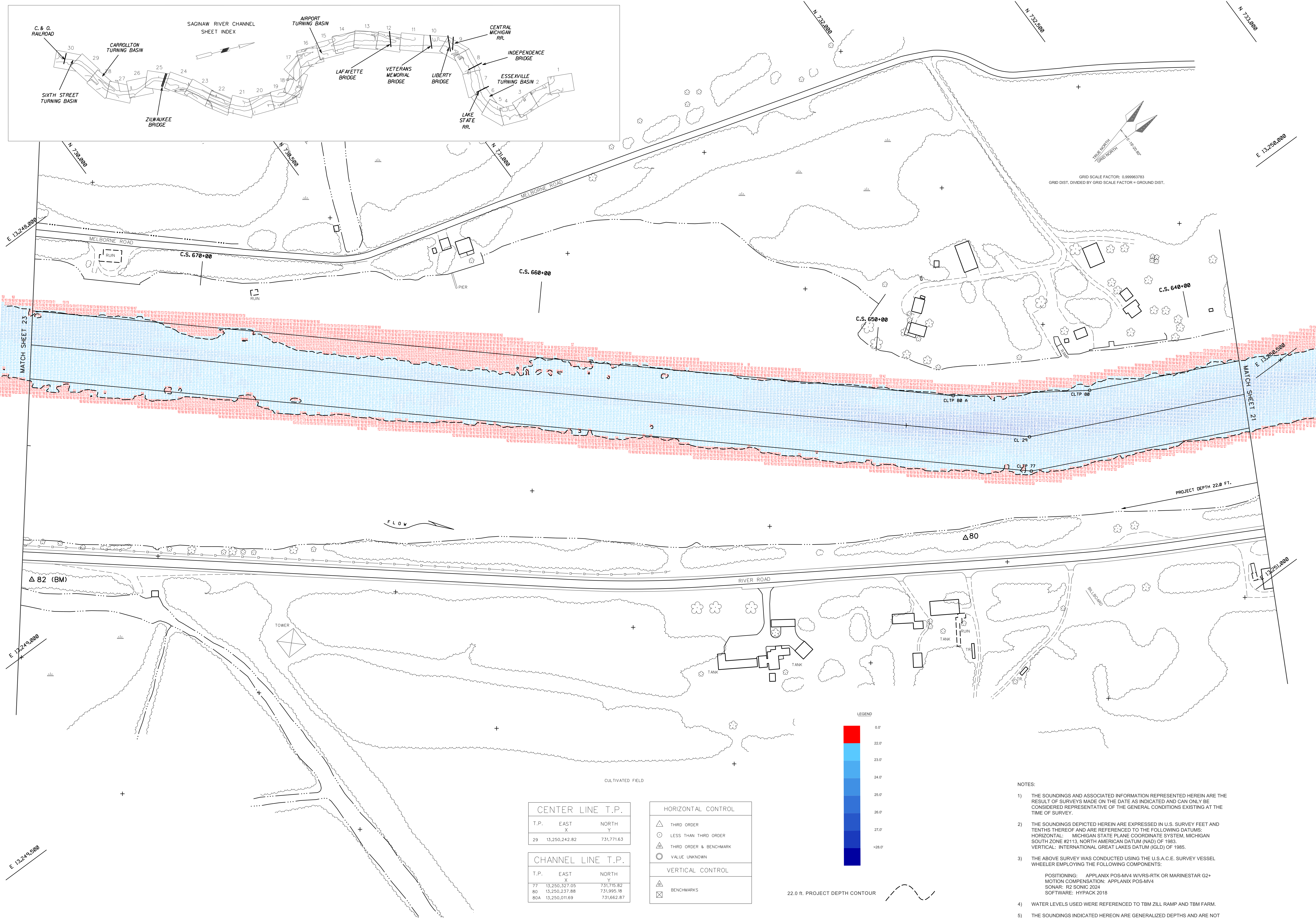
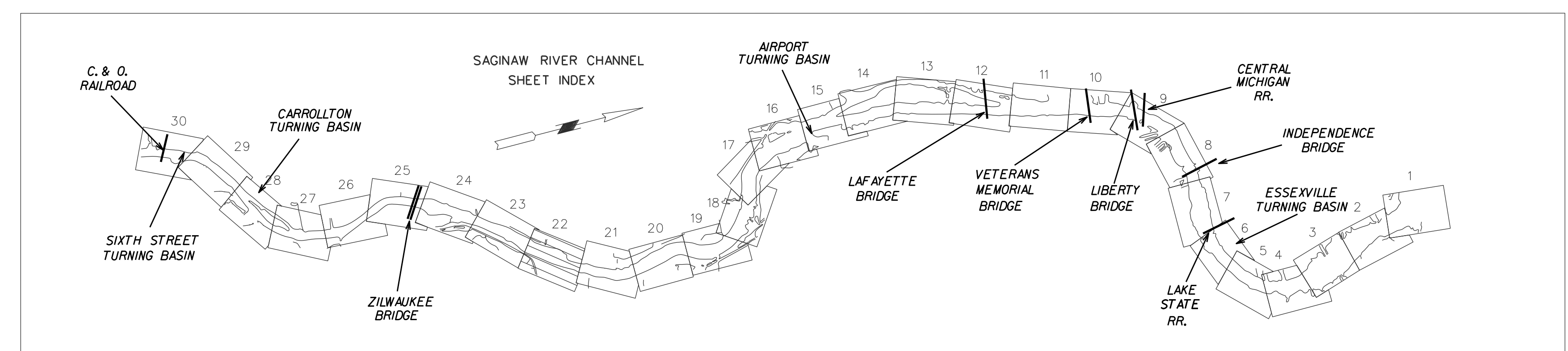
US Army Corps  
of Engineers

U.S. ARMY CORPS OF ENGINEERS  
DETROIT DISTRICT  
DETROIT, MI 48226  
6300 WEST JEFFERSON AVE  
DETROIT, MI 48209

SAGINAW RIVER  
MICHIGAN  
CONDITION SURVEY  
JULY 2016

SHEET  
IDENTIFICATION

SHEET 22 OF 22



CENTER LINE T.P.			
T.P.	EAST X	NORTH Y	
29	13,250,242.82	731,771.63	

CHANNEL LINE T.P.			
T.P.	EAST X	NORTH Y	
77	13,250,327.05	731,715.82	
80	13,250,237.88	731,995.18	
80A	13,250,011.69	731,662.67	

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

- NOTES:
- THE SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.
  - THE SOUNDINGS DEPICTED HEREIN 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.
  - THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL WHEELER EMPLOYING THE FOLLOWING COMPONENTS:  
POSITIONING: APPLANIX POS-MV4 WVRIS-RTK OR MARINESTAR G2+  
MOTION COMPENSATION: APPLANIX POS-MV4  
SONAR: R2 SONIC 2024  
SOFTWARE: HYPACK 2018
  - WATER LEVELS USED WERE REFERENCED TO TBM ZILL RAMP AND TBM FARM.
  - THE SOUNDINGS INDICATED HEREON ARE GENERALIZED DEPTHS AND ARE NOT REPRESENTATIVE OF THE FULL DATASET. THE SOUNDINGS REPRESENT THE MINIMUM DEPTH FOUND WITHIN THE 10 FOOT BY 10 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/SOAL REMOVAL OPERATIONS AND NOTICES TO NAVIGATION INTERESTS.