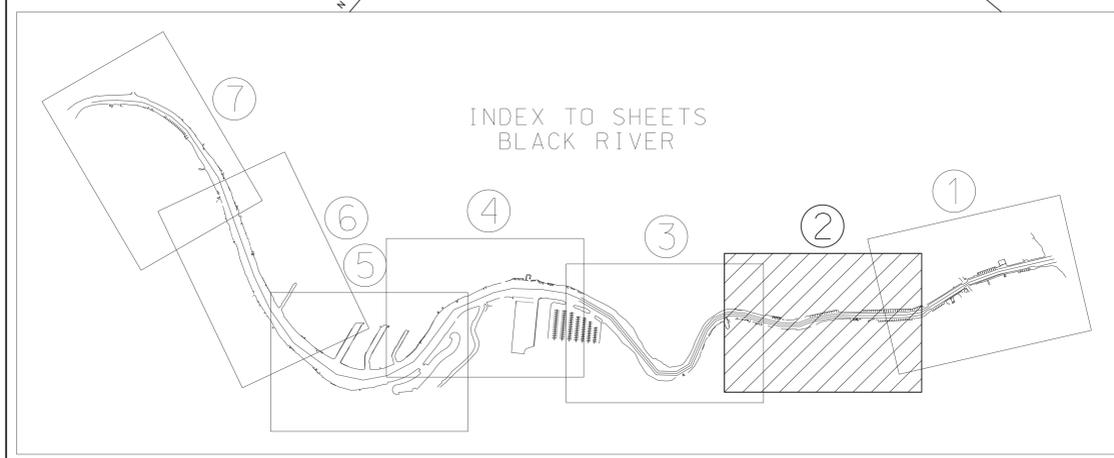


- NOTES:
- 1) THE SOUNDINGS AND ASSOCIATED INFORMATION REPRESENTED HEREIN ARE THE RESULT OF SURVEYS MADE ON THE DATE AS INDICATED AND CAN ONLY BE CONSIDERED REPRESENTATIVE OF THE GENERAL CONDITIONS EXISTING AT THE TIME OF SURVEY.
 - 2) THE SOUNDINGS DEPICTED HEREIN ARE EXPRESSED IN U.S. SURVEY FEET AND 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.
 - 3) THE ABOVE SURVEY WAS CONDUCTED USING THE U.S.A.C.E. SURVEY VESSEL SKIFF EMPLOYING THE FOLLOWING COMPONENTS:
 POSITIONING: TRIMBLE BLUE DOPS WITH CORRECTIONS FROM BEACON FREQ 319
 MOTION COMPENSATION: N/A
 SONAR: ODOM CV-300 (SINGLEBEAM)
 SOFTWARE: HYPACK 2013
 - 4) TIME CORRECTION VALUES REFERENCED FROM A PAINT MARK ON SEAWALL DESCRIBED AS "TBM LIKE" LOCATED ON TOP OF STEEL WALL SOUTH EAST OF LAUNCH (SHEET 2). ELEVATION IGLD 85 = 582.27.
 MOUTH OF BLACK RIVER L.W.D. = 576.20



20.0 ft. PROJECT DEPTH CONTOUR



CENTERLINE TURNING POINTS

STATION	EAST	NORTH
5	13,641,540.16	544,615.94
6	13,640,993.73	545,266.91
7	13,640,628.52	545,570.56
8	13,640,410.54	545,692.92
9	13,640,183.65	545,959.37
10	13,640,025.63	546,271.62

CHANNEL LINE TURNING POINTS

STATION	EAST	NORTH
16	13,641,502.30	544,583.27
17	13,640,967.17	545,240.23
18	13,640,607.18	545,539.53
19	13,640,386.34	545,663.50
20	13,640,152.21	545,938.45
21	13,639,991.72	546,255.56
40	13,640,059.53	546,287.67
41	13,640,215.10	545,980.28
42	13,640,434.75	545,722.34
43	13,640,649.86	545,601.58
44	13,641,020.29	545,293.60
45	13,641,578.01	544,648.62

CONTROL POINTS (CORPSCON)

STATION	EAST	NORTH
BALL	13,640,546.11	545,522.09
HILL	13,640,025.11	545,846.75
ODD	13,640,582.72	545,705.31
PEW	13,640,037.19	546,579.48
PIER	13,639,847.16	546,213.84
REC	13,640,975.53	545,555.62
SNOW	13,641,420.55	544,657.73
TEN	13,640,571.14	545,887.29
45	13,641,418.24	544,322.41
BLACK RIVER	13,641,165.27	545,189.53

	UNITED STATES ARMY CORPS OF ENGINEERS DETROIT AREA OFFICE, DETROIT, MICHIGAN	
	CONDITION SURVEY BLACK RIVER, MI CS 32+00 TO CS 62+00	
SURVEYED BY: B.R.	DATE OF SURVEY: 17 AUGUST 2016	
CHECKED BY: C.V.L.		
		SHEET 2 OF 7