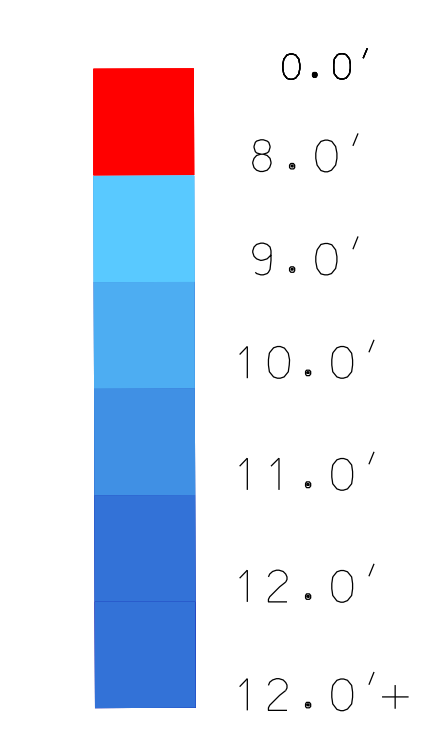


FLOW ←

SURVEYED ON: 30 OCTOBER 2018
 POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
 VESSEL: SKIFF

PROJECT DEPTH 8 FT.
 CHANNEL LIMITS SHOWN THUS: _____
 8 FT. CONTOUR SHOWN THUS: _____

8' Legend



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 EXISTING AT THAT TIME.

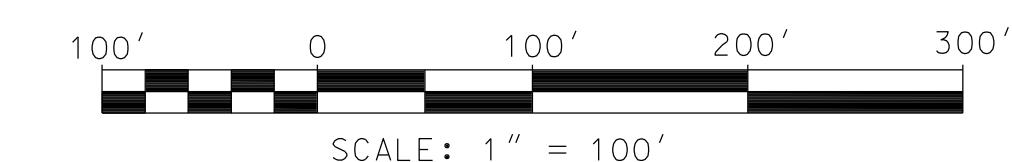
ALL SOUNDINGS ARE IN FEET AND ARE REFERENCED TO LOW WATER DATUM ELEVATION 577.0 FT. ABOVE MEAN SEA LEVEL I.G.L.D. 1955

HORIZONTAL GRID SYSTEM IS REFERENCED TO THE MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983 (NAD83), US FOOT.

THE BASE MAP FEATURES DEPICTED ON THIS MAP WERE DIGITIZED FROM EXISTING LINE DRAWINGS DATED APRIL 1976 AND ARE OUTDATED AND INACCURATE.

ALL NAD83 GRID AND COORDINATE DATA USED FOR THIS SHEET WERE CONVERTED FROM NAD27 COORDINATES USING CORPSCON VERSION 3.01 SOFTWARE.

VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A FIXED GAGUE MARK ALONG THE SHEET STEEL WALL IN THE GRAND HAVEN GOVERNMENT BASIN.



CHANNEL LINE COORDINATES		
POINT	EASTING	NORTHING
CLL23	12,644,125.84	563,081.12
CLP23	12,644,083.83	563,053.76
CLR23	12,644,041.81	563,026.40
CLL24	12,644,652.51	562,390.79
CLP24	12,644,610.56	562,363.34
CLR24	12,644,568.61	562,335.89
CLL25	12,645,153.45	561,490.00
CLP25	12,645,110.11	561,465.05
CLR25	12,645,069.06	561,435.98
CLL25A	12,645,322.88	561,258.41
CLR25A	12,645,248.26	561,191.04
CLL26	12,645,494.81	561,103.49
CLP26	12,645,466.65	561,062.64
CLR26	12,645,435.83	561,022.03
CLL26A	12,645,711.75	560,979.34
CLR26A	12,645,667.95	560,889.19
CLL27	12,645,932.49	560,889.67
CLP27	12,645,925.83	560,839.45
CLR27	12,645,908.05	560,791.84
CLL27A	12,646,173.34	560,861.33
CLR27A	12,646,168.86	560,761.17
CLL27B	12,646,373.55	560,866.89
CLR27B	12,646,383.96	560,767.14
CLL28	12,646,599.68	560,908.07
CLP28	12,646,614.27	560,858.57
CLR28	12,646,639.36	560,813.66
CLL29	12,647,205.81	561,328.21
CLP29	12,647,239.95	561,292.43
CLR29	12,647,276.10	561,256.65
CLL30	12,647,329.44	561,514.65
CLP30	12,647,368.84	561,482.35
CLR30	12,647,408.24	561,450.05
CLL31	12,647,672.51	562,152.27
CLP31	12,647,717.97	562,131.23
CLR31	12,647,763.43	562,110.19
CLL32	12,647,922.39	562,790.45
CLP32	12,647,969.93	562,774.72
CLR32	12,648,017.46	562,758.99
MTP4	12,643,906.09	563,376.97
MTP5	12,648,176.01	563,530.24

NO.		DATE		REVISION		BY	
U.S. ARMY ENGINEER DISTRICT, DETROIT							
CORPS OF ENGINEERS							
DETROIT, MICHIGAN							
DRAWN BY				GRAND RIVER, MICHIGAN CONDITION OF CHANNEL OCTOBER 2018 GRAND HAVEN AREA OFFICE			
DESIGNED BY							
CHECKED BY							
REVIEWED:							
SUBMITTED:							
APPROVAL RECOMMENDED:				DATE			
CHEF, PROJ. OPERS. SEC.		CHEF, OTS BRANCH		APPROVED		SCALE 1" = 100 FT.	
PE		CHEF, CONST. OPNS DIVISION		CADD FILENAME: grand_river_5b_2018.dgn		DRAWING NUMBER	
						SHEET 5B OF 11	