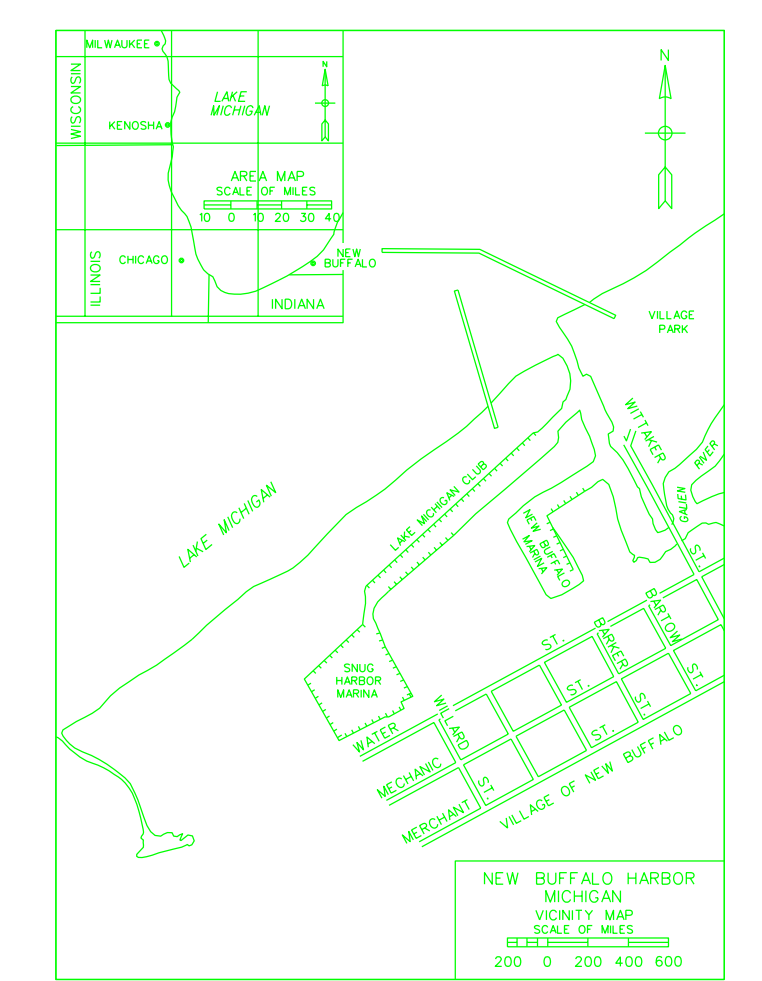
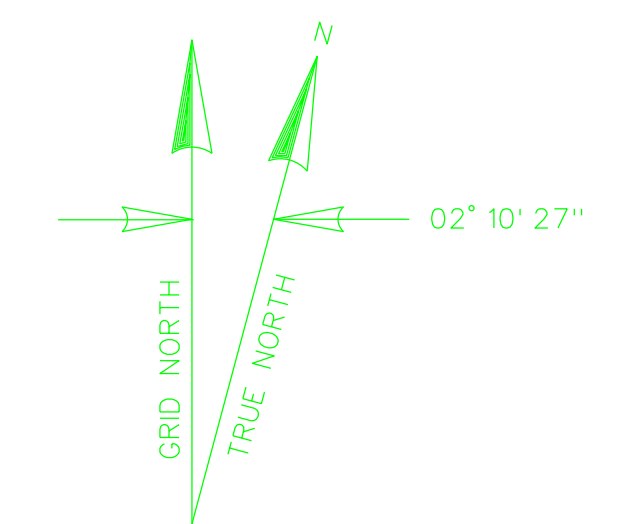


N 120.000 E 12.472.000 DATE OF PHOTOGRAPHY 21 AUGUST 1991 E 12.473.000 E 12.474.000 E 12.475.000 N 119.000 N 118.000



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 PRESENT AT THAT TIME.

ALL SOUNDINGS ARE REFERENCED TO IGLD 1985 FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC. A HYDRAULIC CORRECTOR OF 0.32 FT. WAS APPLIED.

HORIZONTAL GRID DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983, U.S. FOOT.

LAKE MICHIGAN

STATION	NORTH (Y)	EAST (X)
11	117709.43	12474306.29
12	118253.03	12474013.98
13	118859.44	12473794.07
14	119340.36	12473361.61
15	119347.09	12473156.65
16	119267.13	12473154.06
17	119088.50	12473426.69
18	118817.53	12473724.17
19	118220.28	12473940.76
20	117671.55	12474235.83
21	117690.49	12474271.06
22	118236.65	12473977.37
23	118838.49	12473759.12
24	119305.94	12473343.27
25	119307.11	12473155.37
26	119377.62	12472226.99
27	119297.66	12472224.37
28	119337.64	12472225.68

PROJECT DEPTH 10 FT.  
PROJECT DEPTH 8 FT.

CHANNEL LIMITS SHOWN THUS: - - - - -  
10 FT. CONTOUR SHOWN THUS: - - - - -  
8 FT. CONTOUR SHOWN THUS: - - - - -

SURVEYED ON: 15 MARCH 2012  
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS  
VESSEL: LAUNCH 3033

NO.	DATE	REVISION	BY
<b>U.S. ARMY ENGINEER DISTRICT, DETROIT</b> CORPS OF ENGINEERS DETROIT, MICHIGAN			
DRAWN BY:		<b>NEW BUFFALO HARBOR, MICHIGAN</b> <b>CONDITION OF CHANNEL</b> <b>MARCH 2012</b> <b>GRAND HAVEN AREA OFFICE</b>	
DESIGNED BY:			
CHECKED BY:			
REVIEWED BY:			
SUBMITTED:		APPROVAL RECOMMENDED:	
CHIEF, PROJ. OPS. SEC.		CHIEF, DIS. BRANCH	
APPROVED:		DATE:	
CHIEF, CONST. & OPER. DIVISION		SCALE 1" = 100 FT.	
		SHEET 1 OF 1	

