GRID NORTH
TRUE NORTH
01°-23'-34"

ALL SOUNDINGS ARE REFERENCED TO I.G.L.D. 1985 FOR LAKE MICHIGAN, ELEVATION 577.5 FT. ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC. HYDRAULIC CORRECTOR OF 0.3 FT. APPLIED.

GRID SYSTEM BASED ON LAMBERT PROJECTION, MICHIGAN STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE (2112) 1983 NORTH AMERICAN DATUM, U.S. SURVEY FOOT.

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.

VERTICAL WATER LEVEL READINGS WERE TAKEN FROM A FIXED GAUGE MARK ALONG THE SHEET STEEL WALL NEAR THE COAST GUARD STATION IN MANISTEE HARBOR, MI.

PROJECT DEPTH 23 FEET
CHANNEL LIMITS SHOWN THUS:
23 FT. CONTOUR SHOWN THUS:

SURVEYED ON: 29 SEPTEMBER 2016
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
VESSEL: LAUNCH 3033

CENTERLINE TURNING POINTS

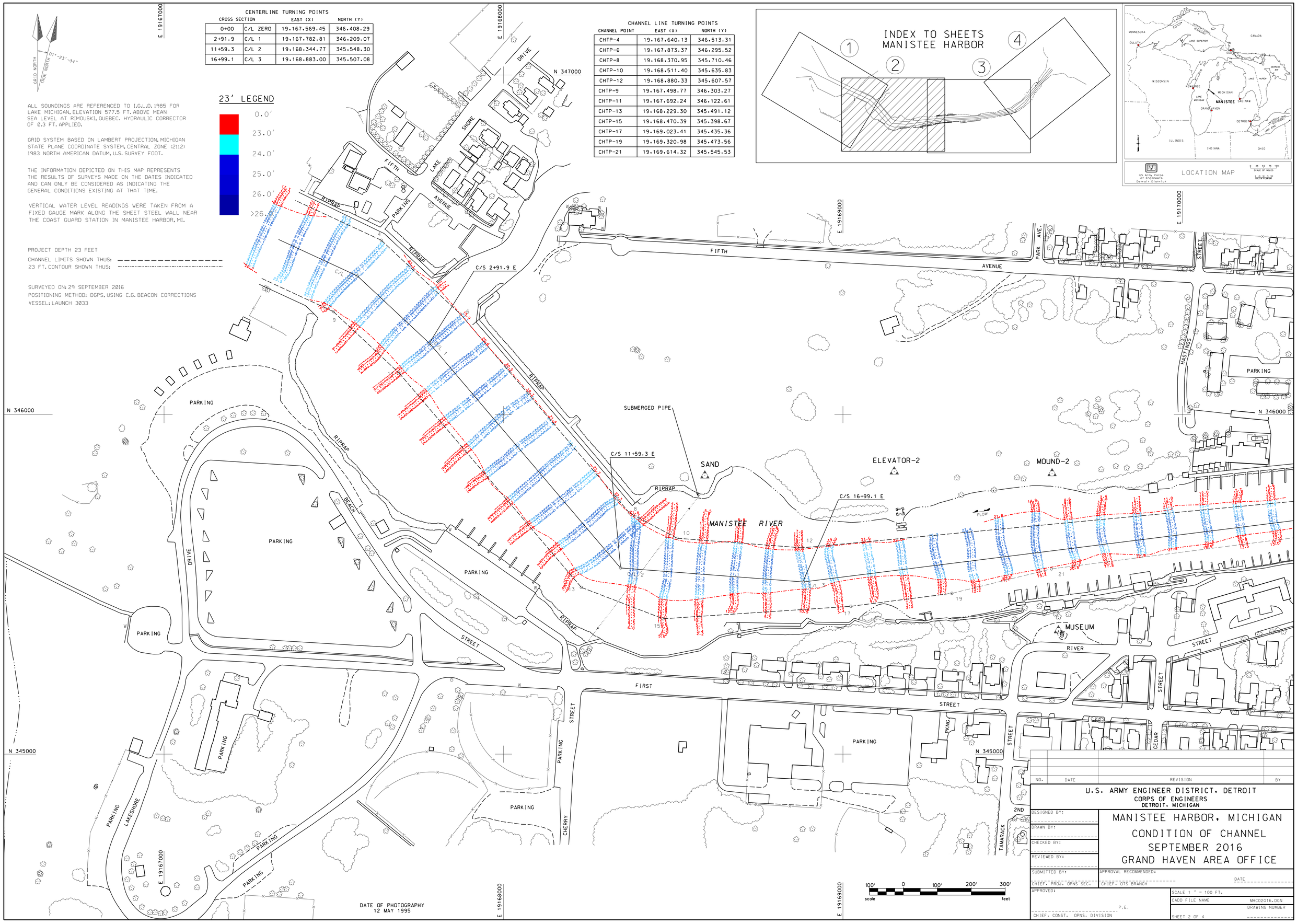
CROSS SECTION		EAST (X)	NORTH (Y)
0+00	C/L ZERO	19,167,569.45	346,408.29
2+91.9	C/L 1	19,167,782.81	346,209.07
11+59.3	C/L 2	19,168,344.77	345,548.30
16+99.1	C/L 3	19,168,883.00	345,507.08

23' LEGEND

	0.0'
	23.0'
	24.0'
	25.0'
	26.0'
	>26.0'

CHANNEL LINE TURNING POINTS

CHANNEL POINT	EAST (X)	NORTH (Y)
CHTP-4	19,167,640.13	346,513.31
CHTP-6	19,167,873.37	346,295.52
CHTP-8	19,168,370.95	345,710.46
CHTP-10	19,168,511.40	345,635.83
CHTP-12	19,168,880.33	345,607.57
CHTP-9	19,167,498.77	346,303.27
CHTP-11	19,167,692.24	346,122.61
CHTP-13	19,168,229.30	345,491.12
CHTP-15	19,168,470.39	345,398.67
CHTP-17	19,169,023.41	345,435.36
CHTP-19	19,169,320.98	345,473.56
CHTP-21	19,169,614.32	345,545.53



NO.	DATE	REVISION	BY

U.S. ARMY ENGINEER DISTRICT, DETROIT
CORPS OF ENGINEERS
DETROIT, MICHIGAN

MANISTEE HARBOR, MICHIGAN
CONDITION OF CHANNEL
SEPTEMBER 2016
GRAND HAVEN AREA OFFICE

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
SUBMITTED BY:
CHIEF, PROJ. OPNS SEC.
APPROVAL RECOMMENDED:
CHIEF, OTS BRANCH
DATE
APPROVED:
P.E.
CHIEF, CONST. OPNS. DIVISION

SCALE 1 " = 100 FT.
CADD FILE NAME MHC02G16.DGN
DRAWING NUMBER
SHEET 2 OF 4