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.

PROJECT DEPTH 23 FEET

CHANNEL LIMITS SHOWN THUS: — — — — — — — — — — — —

23 FT. CONTOUR SHOWN THUS: —··—··—··—··—··—··—··—

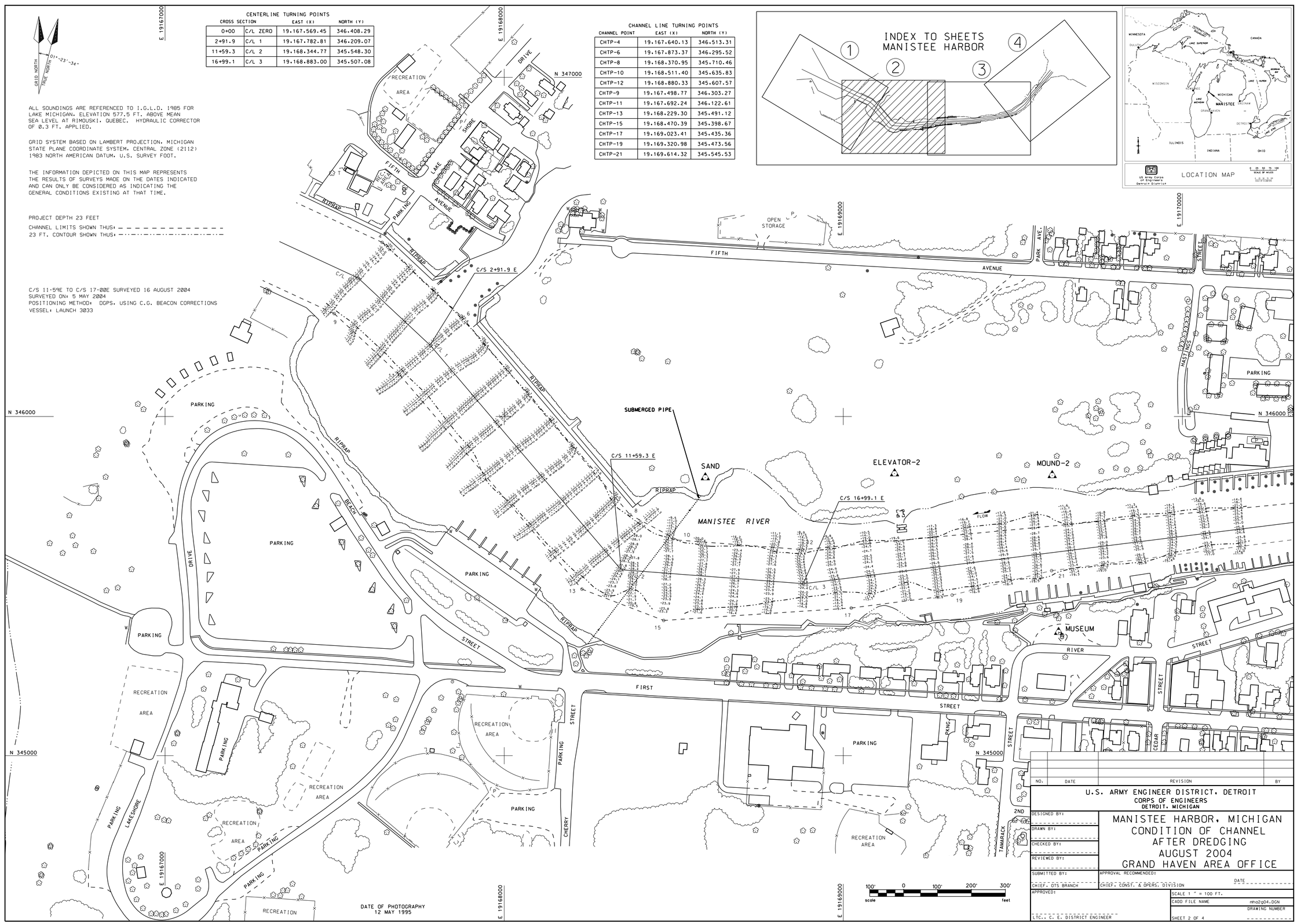
C/S 11+59E TO C/S 17+00E SURVEYED 16 AUGUST 2004
SURVEYED ON: 5 MAY 2004
POSITIONING METHOD: DGPS, USING C.G. BEACON CORRECTIONS
VESSEL: LAUNCH 3033

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

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
AFTER DREDGING
AUGUST 2004
GRAND HAVEN AREA OFFICE

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
SUBMITTED BY:
CHIEF, DTS BRANCH
APPROVAL RECOMMENDED:
CHIEF, CONST. & OPERS. DIVISION
DATE
APPROVED:
LTC., C. E. DISTRICT ENGINEER

SCALE 1 " = 100 FT.
CADD FILE NAME mha2g04.DGN
DRAWING NUMBER
SHEET 2 OF 4