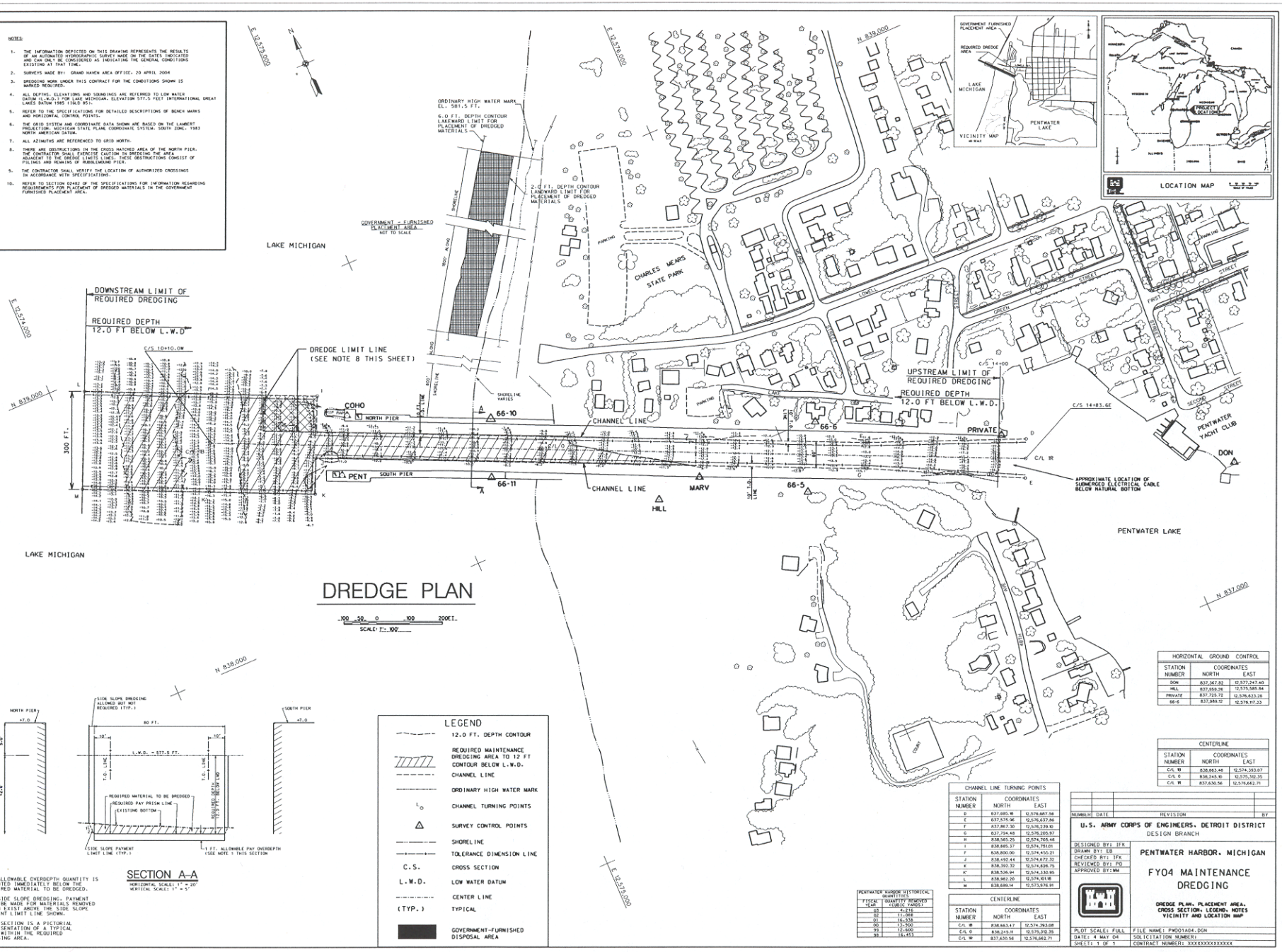
NOTES:

1. THE INFORMATION DEPICTED ON THIS DRAWING REPRESENTS THE RESULTS OF AN AUTOMATED HYDROGRAPHIC SURVEY MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
2. SURVEYS MADE BY: GRAND HAVEN AREA OFFICE, 20 APRIL 2004
3. DREDGING WORK UNDER THIS CONTRACT FOR THE CONDITIONS SHOWN IS WARRED REQUIRED.
4. ALL DEPTHS, ELEVATIONS AND SOUNDINGS ARE REFERRED TO LOW WATER DATUM (L.W.D.) FOR LAKE MICHIGAN, ELEVATION 577.5 FEET INTERNATIONAL GREAT LAKES DATUM 1985 (IGLD 85).
5. REFER TO THE SPECIFICATIONS FOR DETAILED DESCRIPTIONS OF BENCH MARKS AND HORIZONTAL CONTROL POINTS.
6. THE GRID SYSTEM AND COORDINATE DATA SHOWN ARE BASED ON THE LAMBERT PROJECTION, MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, 1983 NORTH AMERICAN DATUM.
7. ALL AZIMUTHS ARE REFERENCED TO GRID NORTH.
8. THERE ARE OBSTRUCTIONS IN THE CROSS HATCHED AREA OF THE NORTH PIER. THE CONTRACTOR SHALL EXERCISE CAUTION IN DREDGING THE AREA ADJACENT TO THE DREDGE LIMITS LINES. THESE OBSTRUCTIONS CONSIST OF PILINGS AND REMAINS OF RUBBLEMOUND PIER.
9. THE CONTRACTOR SHALL VERIFY THE LOCATION OF AUTHORIZED CROSSINGS IN ACCORDANCE WITH SPECIFICATIONS.
10. REFER TO SECTION 02482 OF THE SPECIFICATIONS FOR INFORMATION REGARDING REQUIREMENTS FOR PLACEMENT OF DREDGED MATERIALS IN THE GOVERNMENT FURNISHED PLACEMENT AREA.



DREDGE PLAN

SCALE: 1" = 100'

SECTION A–A

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'

NOTES:

1. THE ALLOWABLE OVERDEPTH QUANTITY IS COMPUTED IMMEDIATELY BELOW THE REQUIRED MATERIAL TO BE DREDGED.
2. FOR SIDE SLOPE DREDGING, PAYMENT WILL BE MADE FOR MATERIALS REMOVED WHICH EXIST ABOVE THE SIDE SLOPE PAYMENT LIMIT LINE SHOWN.
3. THIS SECTION IS A PICTORIAL REPRESENTATION OF A TYPICAL AREA WITHIN THE REQUIRED DREDGING AREA.

LEGEND

	12.0 FT. DEPTH CONTOUR
	REQUIRED MAINTENANCE DREDGING AREA TO 12 FT CONTOUR BELOW L.W.D.
	CHANNEL LINE
	ORDINARY HIGH WATER MARK
L_0	CHANNEL TURNING POINTS
△	SURVEY CONTROL POINTS
	SHORELINE
	TOLERANCE DIMENSION LINE
C.S.	CROSS SECTION
L.W.D.	LOW WATER DATUM
	CENTER LINE
(TYP.)	TYPICAL
	GOVERNMENT-FURNISHED DISPOSAL AREA

PENTWATER HARBOR HISTORICAL QUANTITIES	
FISCAL YEAR	QUANTITY REMOVED (CUBIC YARDS)
03	4,216
02	11,088
01	16,538
00	53,900
99	12,400
98	16,453

CHANNEL LINE TURNING POINTS		
STATION NUMBER	COORDINATES NORTH	EAST
D	837,085.18	12,576,687.58
E	837,575.96	12,576,637.86
F	837,867.30	12,576,239.92
G	837,794.48	12,576,205.97
H	838,565.25	12,574,705.46
I	838,685.37	12,574,751.01
J	838,800.00	12,574,455.21
J	838,492.44	12,574,672.32
K	838,392.32	12,574,826.75
K'	838,526.94	12,574,330.95
L	838,982.26	12,574,301.18
M	838,689.14	12,573,976.91

CENTERLINE		
STATION NUMBER	COORDINATES NORTH	EAST
C/L 1R	838,663.47	12,574,393.08
C/L 0	838,245.11	12,575,312.35
C/L 1W	837,630.56	12,576,642.71

HORIZONTAL GROUND CONTROL		
STATION NUMBER	COORDINATES NORTH	EAST
DON	837,367.82	12,577,247.40
HILL	837,959.26	12,575,585.84
PRIVATE	837,725.72	12,576,623.26
66-6	837,589.12	12,576,117.33

CENTERLINE		
STATION NUMBER	COORDINATES NORTH	EAST
C/L 1R	838,663.46	12,574,393.07
C/L 0	838,245.10	12,575,312.35
C/L 1W	837,630.56	12,576,642.71

NUMBER	DATE	REVISION	BY

U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
DESIGN BRANCH

DESIGNED BY: IFK
DRAWN BY: EB
CHECKED BY: IFK
REVIEWED BY: PG
APPROVED BY: WM

PENTWATER HARBOR, MICHIGAN

FY04 MAINTENANCE DREDGING

DREDGE PLAN, PLACEMENT AREA, CROSS SECTION, LEGEND, NOTES VICINITY AND LOCATION MAP

PLOT SCALE: FULL
DATE: 4 MAY 04
SHEET: 1 OF 1
FILE NAME: PWD01A04.DGN
SOLICITATION NUMBER:
CONTRACT NUMBER: XXXXXXXXXXXXXX

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