

INDEX TO SHEETS
BLACK RIVER

LEGEND:

- CHANNEL LIMITS
- UNDERGROUND LINE
- SHORE LINE S/L

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 AT THE TIME.

LOW WATER DATUM

ELEVATIONS AND PROJECT DEPTHS ARE REFERRED TO INTERNATIONAL GREAT LAKES DATUM, 1985. THE LOW WATER DATUM FOR THE BLACK RIVER IS 576.2 FT. ABOVE MEAN SEA LEVEL.

GRID COORDINATES

GRIDS SHOWN ARE BASED ON NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, SOUTH ZONE (2113), LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM, US SURVEY FOOT

DIRECTIONS

ALL DIRECTIONS ARE GRID AZIMUTHS REFERRED TO NORTH ZERO.

PROJECT DEPTHS

PROJECT DEPTHS ARE AS INDICATED ABOVE.

THE AUTOMATED ELECTRONIC SURVEY WAS CONDUCTED BY R. DELESTOWICZ ABOARD THE USACE SMALL BOAT.

AUTOMATED EQUIPMENT USED

DATA COLLECTION:	PANASONIC TOUGHBOOK
POSITIONING:	TRIMBLE DGPS
DATA PROCESSOR:	DELL PC
SOFTWARE:	COASTAL OCEANOGRAPHICS
PLOTTER:	ENCAD, CADJET 2
SONIC SOUNDER:	INNERSPACE 448

PROJECT DEPTHS

20.0 FT. CONTOUR

8.0 FT. CONTOUR

NOTES:

1. THE GRID COORDINATE SYSTEM SHOWN IS REFERENCED TO THE MICHIGAN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (2113), NORTH AMERICAN DATUM 1983 (NAD 83), US FOOT.

CHANNEL LINE TURNING POINTS

STATION	EAST	NORTH
22	13.639.831.41	546.618.30
23	13.639.658.04	546.847.60
24	13.639.431.56	546.970.09
25	13.639.186.58	546.971.84
26	13.638.443.11	546.749.12
27	13.638.138.70	546.857.44
28	13.637.889.91	547.174.25
29	13.638.151.52	548.929.98
30	13.638.036.61	549.243.67
31	13.638.110.59	549.255.91
32	13.638.227.68	548.559.12
33	13.637.969.93	547.193.80
34	13.638.184.29	546.920.83
35	13.638.445.11	546.828.02
36	13.639.175.85	547.046.92
37	13.639.450.80	547.044.96
38	13.639.708.04	546.905.82
39	13.639.896.49	546.656.58

CONTROL POINTS (G.P.S.)

STATION	EAST	NORTH
49	13638242.3490	549187.6630
MON 22	13638019.5170	546810.9560

CENTERLINE TURNING POINTS

STATION	EAST	NORTH
11	13.639.863.95	546.637.44
12	13.639.683.04	546.876.71
13	13.639.441.18	547.007.52
14	13.639.181.21	547.009.38
15	13.638.444.11	546.788.57
16	13.638.161.50	546.889.13
17	13.637.929.92	547.184.03
18	13.638.189.60	548.559.55
19	13.638.075.38	549.250.08

CONTROL POINTS (CORPSCON)

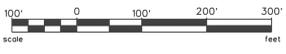
STATION	EAST	NORTH
KAY	13.639.145.48	547.162.59
MON 19	13.639.104.78	546.869.26
MON 20	13.638.896.64	546.802.79

NOTES:

1. GAGES USED WERE REFERENCED FROM GAGE BOARD SET ON PILING AT THE MOUTH OF THE BLACK RIVER ON THE NORTH SIDE NEAR AN OLD RAILROAD TRESTLE

2. POSITIONS WERE DETERMINED BY GPS REFERENCE BEACON 839, LOCATED AT FORT WAYNE DETROIT, MICHIGAN - FREQUENCY 319 KHZ, 200 BPS

3. TRANSDUCER FREQUENCY USED TO MEASURE DEPTH DATA WAS 208 KHZ AND THE BEAM ANGLE WAS 3.0 DEGREES.



NO.	DATE	REVISION	BY
U.S. ARMY ENGINEER DISTRICT, DETROIT CORPS OF ENGINEERS DETROIT, MICHIGAN			
BLACK RIVER, MI			
C.S. 63+00 TO C.S. 107+00 CONDITION 31 AUGUST 2009 DETROIT AREA OFFICE			
DESIGNED BY:	R. DELESTOWICZ		
CHECKED BY:			
REVIEWED BY:			
SUBMITTED BY:			
APPROVED:	APPROVAL RECOMMENDED:	DATE:	
SCALE AS SHOWN		1" = 100'	
CADD FILE NAME:		DRAWING NUMBER:	
SHEET 3 OF 3		brp0309c.dgn	