

SOUNDING COLOR LEGEND

■	DEPTHS 0.1' OR MORE ABOVE PROJECT DEPTH
■	DEPTHS AT OR BELOW PROJECT DEPTH
X.X	PROJECT DEPTH

LEGEND OF SYMBOLS

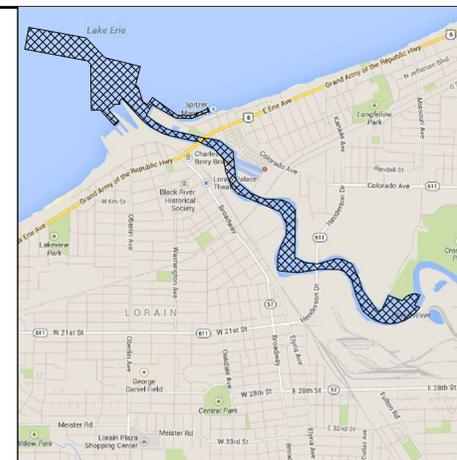
17+00 (NEW), 17+00 (OLD)	CHANNEL STATIONING
○ 417	CHANNEL CORNER
⊙ H.L.F.	HARBOR LINE CORNER
— — — — —	FEDERAL CHANNEL
— — — — —	HARBOR LINE
— — — — —	SUBMARINE CABLE
⊕	CAN BUOY
⊙	NUN BUOY
⊙	LIGHTED BUOY
⊙	FIXED LIGHT
⊙	LIGHT HOUSE
W	LIGHT COLOR WHITE
R	LIGHT COLOR RED
G	LIGHT COLOR GREEN
FL	FLASHING LIGHT
F	FIXED LIGHT
Oc	OCCULTING LIGHT
Iso	EQUAL INTERVAL
AL	ALTERNATING
Q	QUICK (FLASHING)
S	LIGHT CYCLE SECONDS

CHANNEL CORNER COORDINATES

POINT	NORTHING	EASTING
458	657372.31	2056011.18
460	657281.62	2056327.04
462	657100.67	2057162.42
464	657086.60	2057292.55
1023	656823.86	2057858.18
1022	656454.35	2058195.02
1021	655989.87	2058285.02
470	655428.32	2058504.76
472	655201.93	2058725.14
474	654549.32	2060256.57
481	654859.54	2060582.78
479	654982.15	2060317.15
477	655025.60	2059660.81
475	655232.36	2058175.32
473	655617.42	2058719.13
471	655754.32	2058640.35

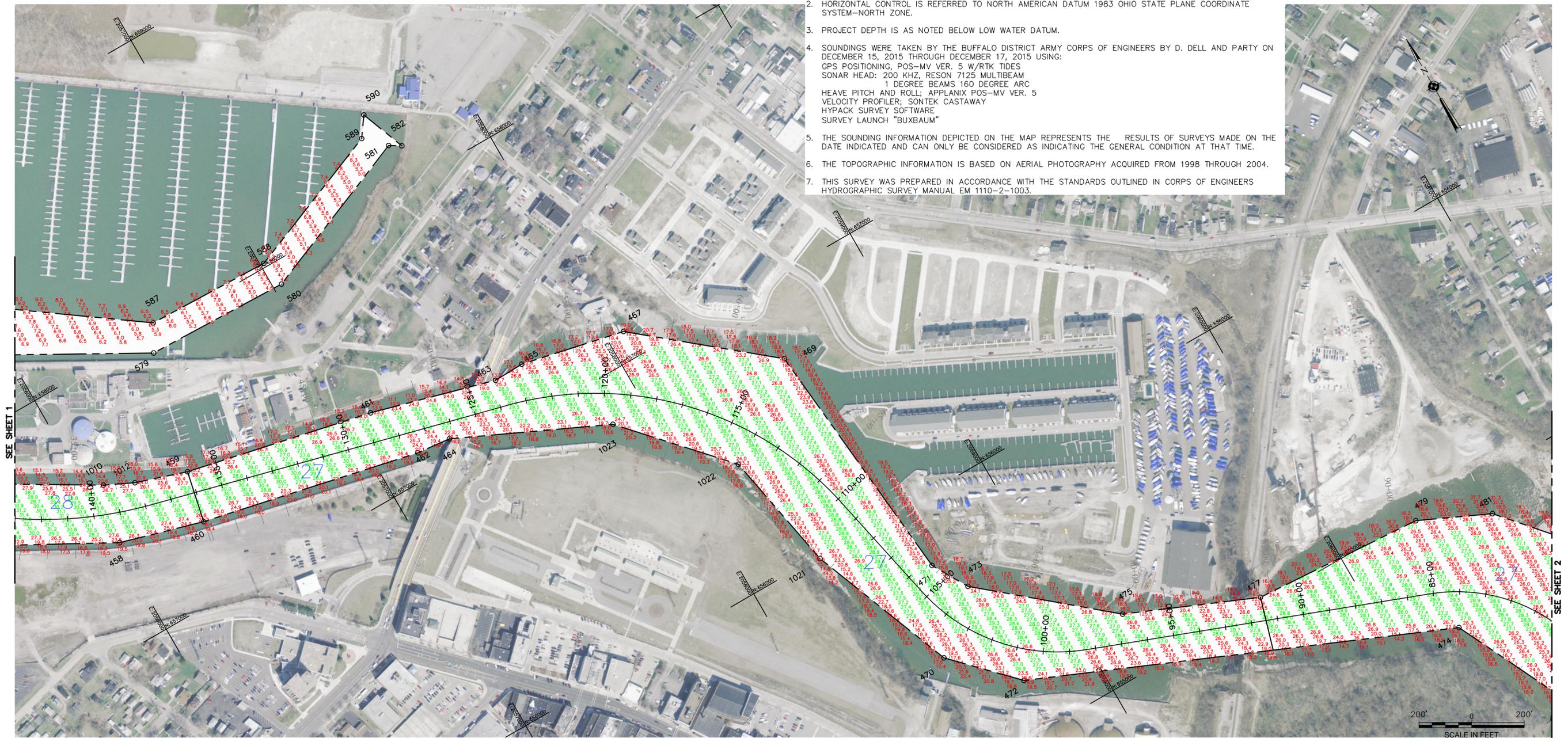
CHANNEL CORNER COORDINATES

POINT	NORTHING	EASTING
469	656713.41	2058546.49
467	657108.39	2058068.83
465	657194.26	2057672.02
463	657191.49	2057555.32
461	657321.77	2057082.66
459	657476.29	2056368.49
1012	657540.12	2056174.77
1010	657591.76	2056066.45
579	657930.40	2056482.17
580	657913.74	2057033.33
581	658165.19	2057648.47
582	658138.90	2057691.50
590	658312.59	2057624.90
589	658239.35	2057573.32
588	658015.30	2057014.63
587	658030.02	2056537.86



SHEET INDEX
NOT TO SCALE

VICINITY MAP
NOT TO SCALE



SITE SPECIFIC NOTES:

- PROJECT DEPTHS AND SOUNDINGS ARE REFERRED TO LOW WATER DATUM OF 569.2 FEET IGLD 1985.
- HORIZONTAL CONTROL IS REFERRED TO NORTH AMERICAN DATUM 1983 OHIO STATE PLANE COORDINATE SYSTEM-NORTH ZONE.
- PROJECT DEPTH IS AS NOTED BELOW LOW WATER DATUM.
- SOUNDINGS WERE TAKEN BY THE BUFFALO DISTRICT ARMY CORPS OF ENGINEERS BY D. DELL AND PARTY ON DECEMBER 15, 2015 THROUGH DECEMBER 17, 2015 USING:
GPS POSITIONING, POS-MV VER. 5 W/RTK TIDES
SONAR HEAD: 200 KHZ, RESON 7125 MULTIBEAM
1 DEGREE BEAMS 160 DEGREE ARC
HEAVE PITCH AND ROLL; APPLANIX POS-MV VER. 5
VELOCITY PROFILER; SONTEK CASTAWAY
HYPACK SURVEY SOFTWARE
SURVEY LAUNCH "BUXBAUM"
- THE SOUNDING INFORMATION DEPICTED ON THE MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION AT THAT TIME.
- THE TOPOGRAPHIC INFORMATION IS BASED ON AERIAL PHOTOGRAPHY ACQUIRED FROM 1998 THROUGH 2004.
- THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OUTLINED IN CORPS OF ENGINEERS HYDROGRAPHIC SURVEY MANUAL EM 1110-2-1003.



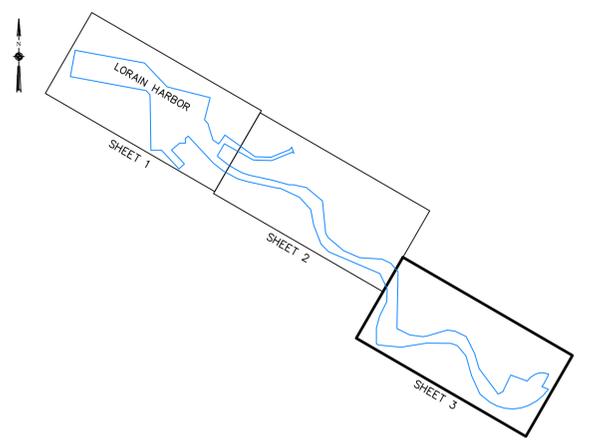
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** COPY OF SIGNED ORIGINAL **	
Drawn by: KFL	Reviewed by: ACK
Checked by: ACK	Reviewed by: Roman H. Figler III PLS
Chief Survey Section	Chief Survey Section
Approved by: Edward F. Gawarecki	Date: January 5, 2016
Chief, NY/PA Navigation and Maintenance Section Date: January 5, 2016 Edward F. Gawarecki	

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
BUFFALO, NEW YORK 14207-3199

LORAIN HARBOR, OH
PROJECT CONDITIONS SOUNDINGS 2015
SCALE: 1" = 200'

Sheet reference number
VH-103
Sheet 2 of 3



SHEET INDEX
NOT TO SCALE

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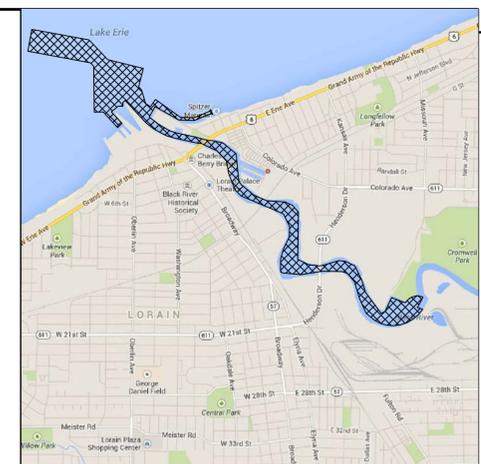
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CHANNEL CORNER COORDINATES

POINT	NORTHING	EASTING
476	654095.38	2060477.19
478	653715.80	2060464.36
480	653289.71	2060255.24
482	652935.27	2060152.73
484	652674.28	2060305.13
486	652360.60	2060892.69
565	652458.76	2060154.76
566	652421.70	2060232.32
488	652480.62	2061653.34
488a	652474.22	2062379.97
490a	652405.17	2062570.87
492a	652099.75	2062825.52
494	651511.61	2062896.13
538	651335.60	2065412.27
540	651493.30	2065481.43
545	651560.75	2065294.37
543	651437.24	2065240.43
541	651223.38	2065121.35
539a	651184.75	2065089.43

CHANNEL CORNER COORDINATES

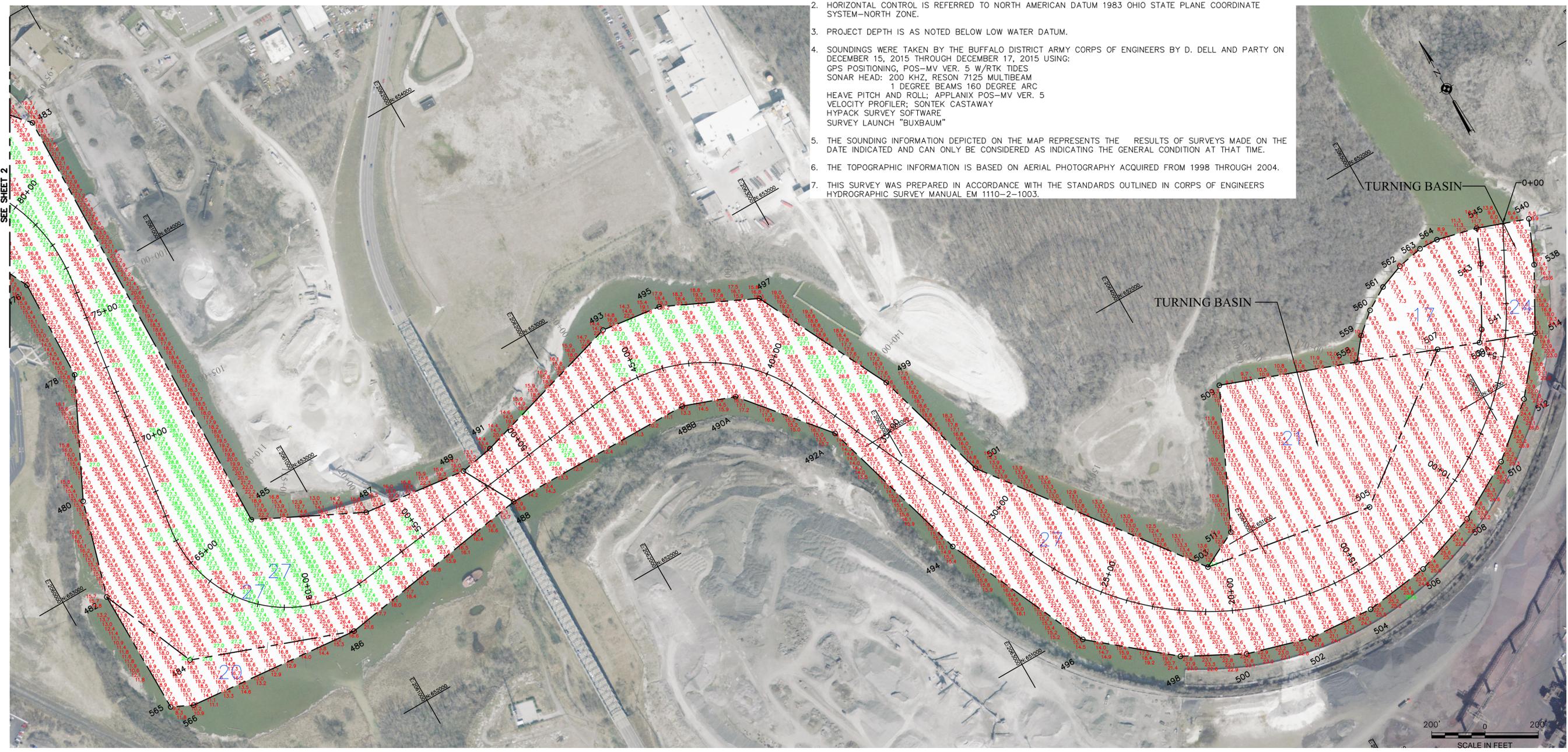
POINT	NORTHING	EASTING
507	651241.17	2064940.77
564	651598.05	2065143.48
563	651600.51	2065071.67
562	651581.63	2064973.42
561	651545.96	2064879.90
560	651494.60	2064793.94
559	651429.08	2064718.17
558	651351.40	2064654.88
509	651534.43	2064163.99
501	651721.88	2063216.45
499	652168.10	2063086.86
497	652679.00	2062831.55
495	652839.61	2062491.14
493	652869.60	2062264.61
491	652697.33	2061675.36
489	652674.05	2061547.46
487	652722.63	2061154.50
485	652914.37	2060767.35
483	654611.52	2060798.90



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US Army Corps of Engineers Buffalo District

Original sheet size = ANSI D

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Chief, Survey Section
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<http://www.usace.army.mil/library/ispandcharts.aspx>

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LORAIN HARBOR, OH

PROJECT CONDITIONS SOUNDINGS 2015

SCALE: 1" = 200'

Sheet reference number
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Sheet 3 of 3

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