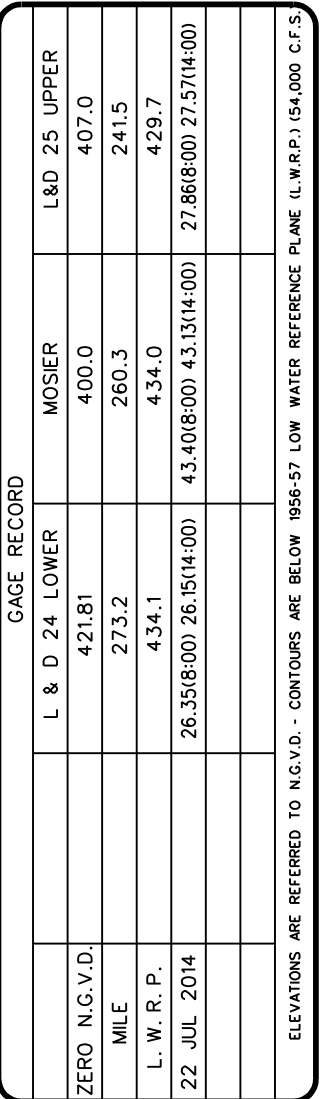


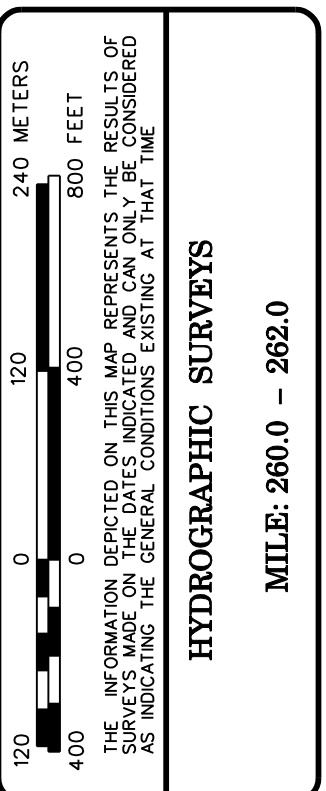


Date	Gage	Time	WS Elev
20140722	Lock & Dam 25 (Upper)	8:00	434.86
20140722	Lock & Dam 25 (Upper)	14:00	434.57
20140722	Mosier Landing, MD	8:00	443.40
20140722	Mosier Landing, MD	14:00	443.13
20140722	Lock & Dam 24 (Lower)	8:00	448.16
20140722	Lock & Dam 24 (Lower)	14:00	447.96

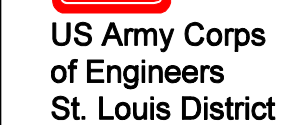
1. SOUNDED JULY 22, 2014 BY
BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE
NORTH AMERICAN DATUM OF 1927 (NAD 27),
COORDINATES SHOWN ARE MISSOURI/EAST
ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL
GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).



U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	Surveyed by: BOWEN ENGINEERING		Survey Date: JULY 22, 2014	
	Drawn by: X	Reviewed by: X	Ctd by: X	
UPPER MISSISSIPPI RIVER BASIN MISSISSIPPI RIVER	SUBMITTED: X		APPROVED: X	
	File name: ##00000001##		Plot date: ##00/00/00##	



20



	L & D	24 LOWER	MOSER	L&D 25 UPPER
TERR N.G.V.D.	427181	400.0		407.0
MIE	2732	260.3		241.5
L.W.R.P.	434.1	434.0		429.7
22 JUL 2014	26.35(6+00)	26.15(14+00)	43.40(+00) 43.13(14+00)	27.86(8+00) 27.57(14+00)

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	Surveyed by: BOWEN ENGINEERING	Survey Date: JULY 22, 2014
UPPER MISSISSIPPI RIVER BASIN	Drawn by: X	Reviewed by: X
	Ckd by: X	
	SUBMITTED: X	APPROVED: X
MISSISSIPPI RIVER	File name: #86061261#### Plot date:	

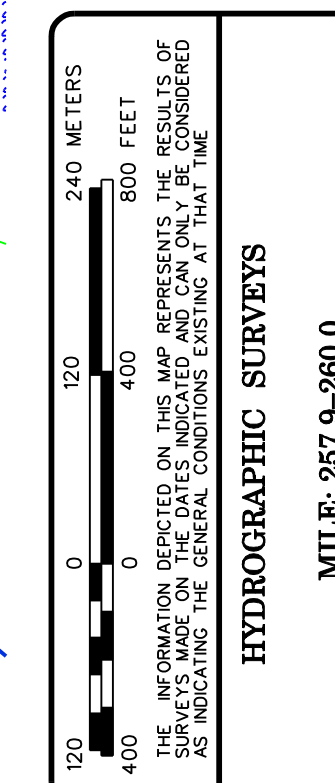
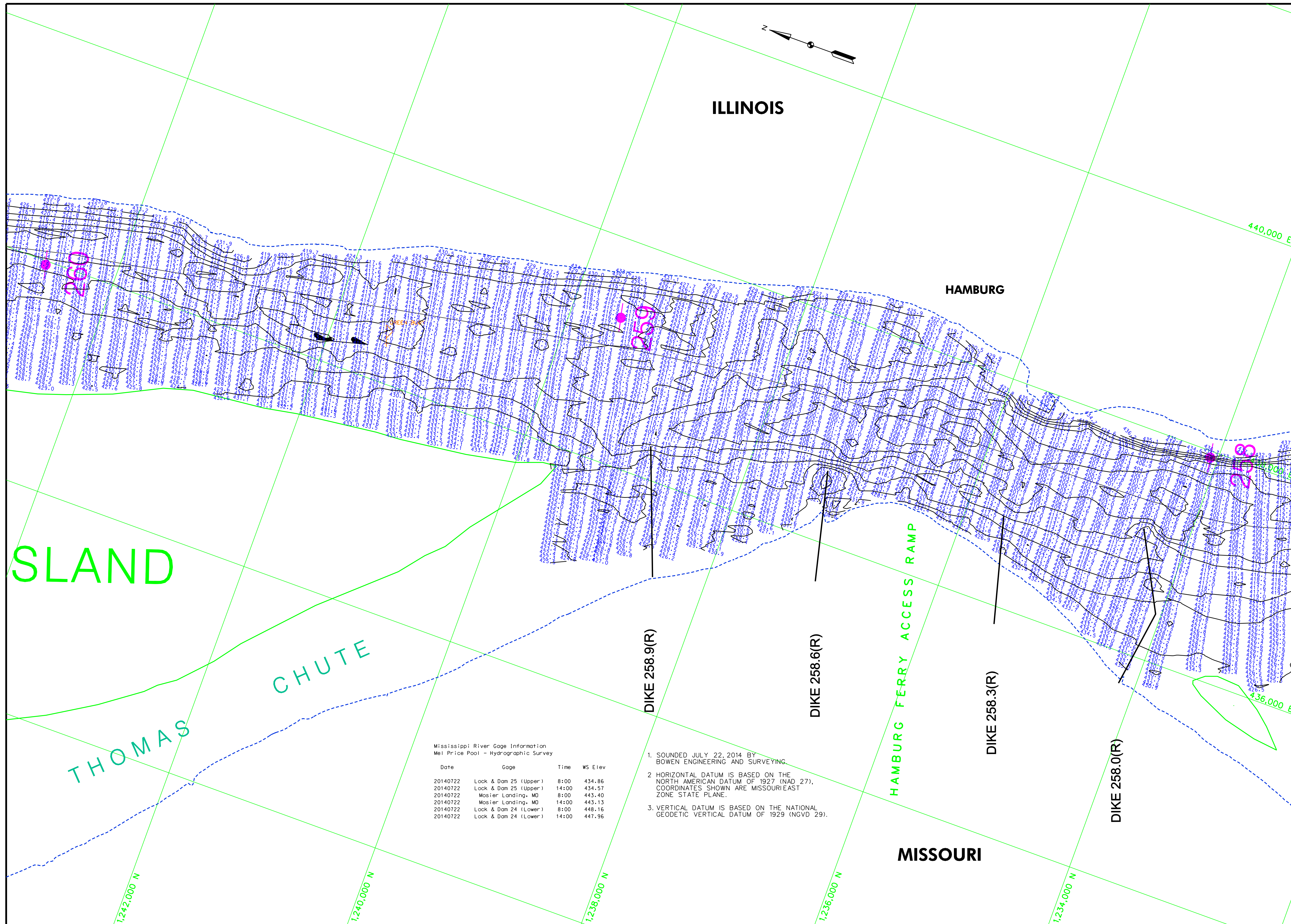


PLATE
NUMBER

21





		GAGE RECORD				
		L & D 24 LOWER	WOSER	L&D 25 UPPER		
	N.G.V.D.	421.81	400.0	407.0		
	MILE	2732	260.3	241.5		
	L.W.R.P.	434.1	434.0	429.7		
	X		46.86(8.00)	46.58(72.00)		
18 JUL 2014					31.55(8.00)	31.42(2.00)
22 JUL 2014		26.51(6.00)	25.15(14.00)	43.30(6.00)	43.13(14.00)	27.86(8.00)
						27.91(4.00)
ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTIGUES ARE BELOW 1956-37 LOW WATER REFERENCE PLANE (L.W.R.P.) 1944.00 C.F.S.						

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	Survived by: BOWEN ENGINEERING	Survey Date: JULY 18 & 22, 2014
UPPER MISSISSIPPI RIVER BASIN	Drawn by: X	Reviewed by: X
	Old by: X	
MISSISSIPPI RIVER	SUBMITTED: X	APPROVED: X
File name: #MISSISSIPPI/REGISTRATION###		Plot date: ##MM##/##YY##/####

HYDROGRAPHIC SURVEYS

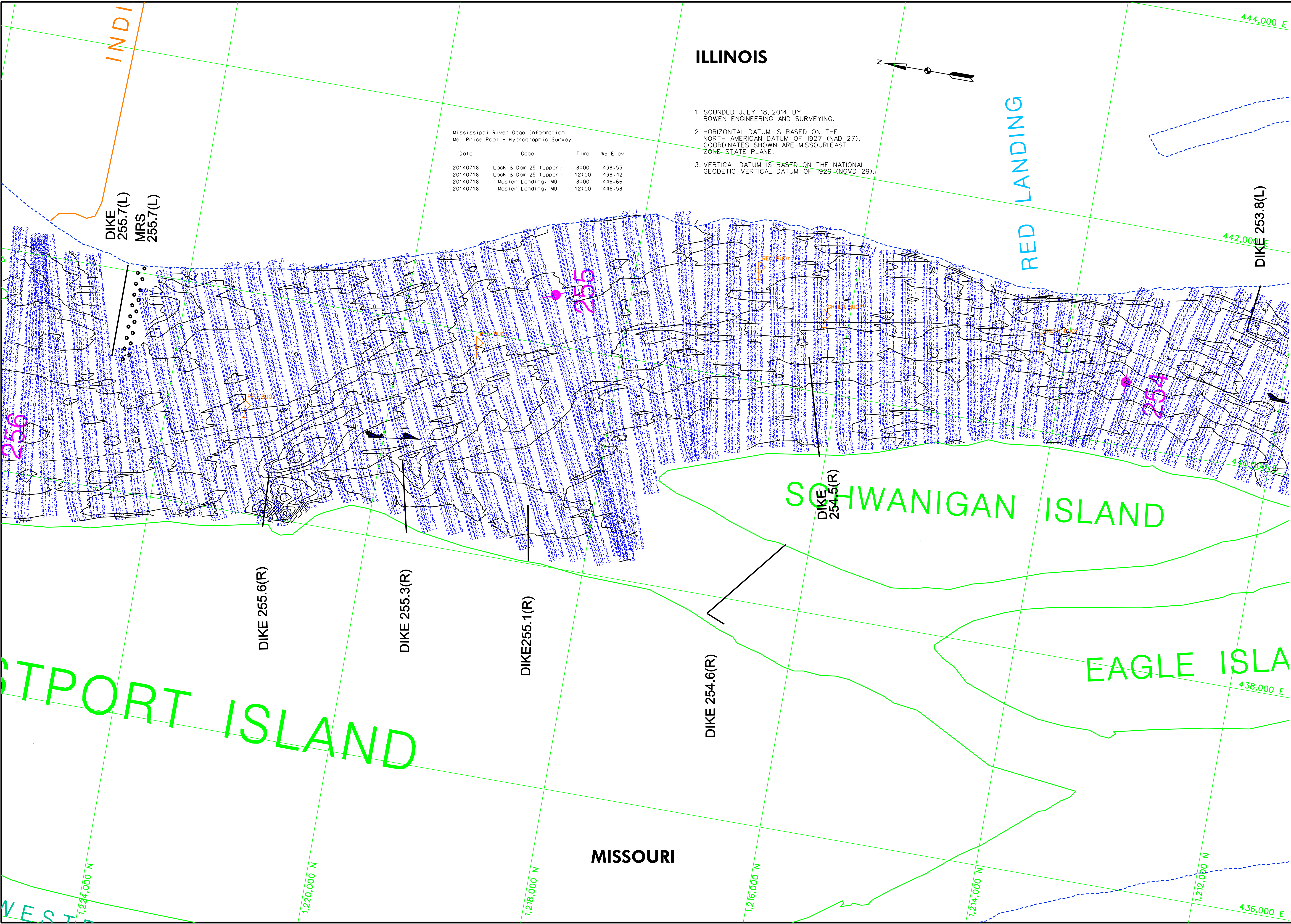
MILE: 265.9 – 257.9

120 0 120 240 METERS
400 0 400 800 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS CONDUCTED BY THE U.S. NAVY AND IS NOT TO BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.

PLATE
NUMBER





Mississippi River Gage Information
Mel Price Pool - Hydrographic Survey

Date	Gage	Time	WS Elev
20140718	Lock & Dam 25 (Upper)	8:00	438.55
20140718	Lock & Dam 25 (Upper)	12:00	438.42
20140718	Mosier Landing, MO	8:00	446.66
20140718	Mosier Landing, MO	12:00	446.58

ILLINOIS

1. SOUNDED JULY 18, 2014 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27). COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).



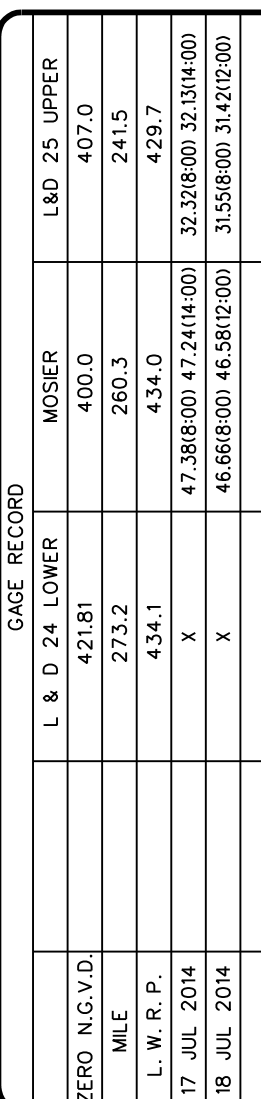
GAUGE RECORD			
L & D	24 LOWER	WOSER	L&D 25 UPPER
ZERO NGVD	431.81	400.0	407.0
MILE	273.2	260.3	241.5
L.W.R.D.	434.1	434.0	429.7
18 JUL 2014	X	46.66(00) 46.58(00)	31.55(00) 31.42(00)

ELEVATIONS ARE REFERRED TO NGVD - CONTIGUOUS ARE BELOW 1984-57 LOW WATER REFERENCE PLANE (L.W.R.P.) 14,000 OF 5

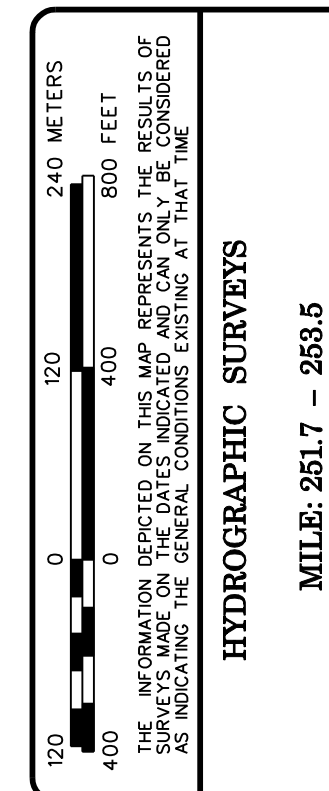
U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI		Survey Date: JUL 18, 2014	
UPPER MISSISSIPPI RIVER BASIN	Drawn by:	Reviewed by:	Ckd by:
	X	X	X
SUBMITTED:		APPROVED:	
X		X	
File Name:		Plot Date:	
#DESIGN/REPRODUCTION#		#REPORT/NAME#	

HYDROGRAPHIC SURVEYS	
MILE: 253.8 - 255.9	

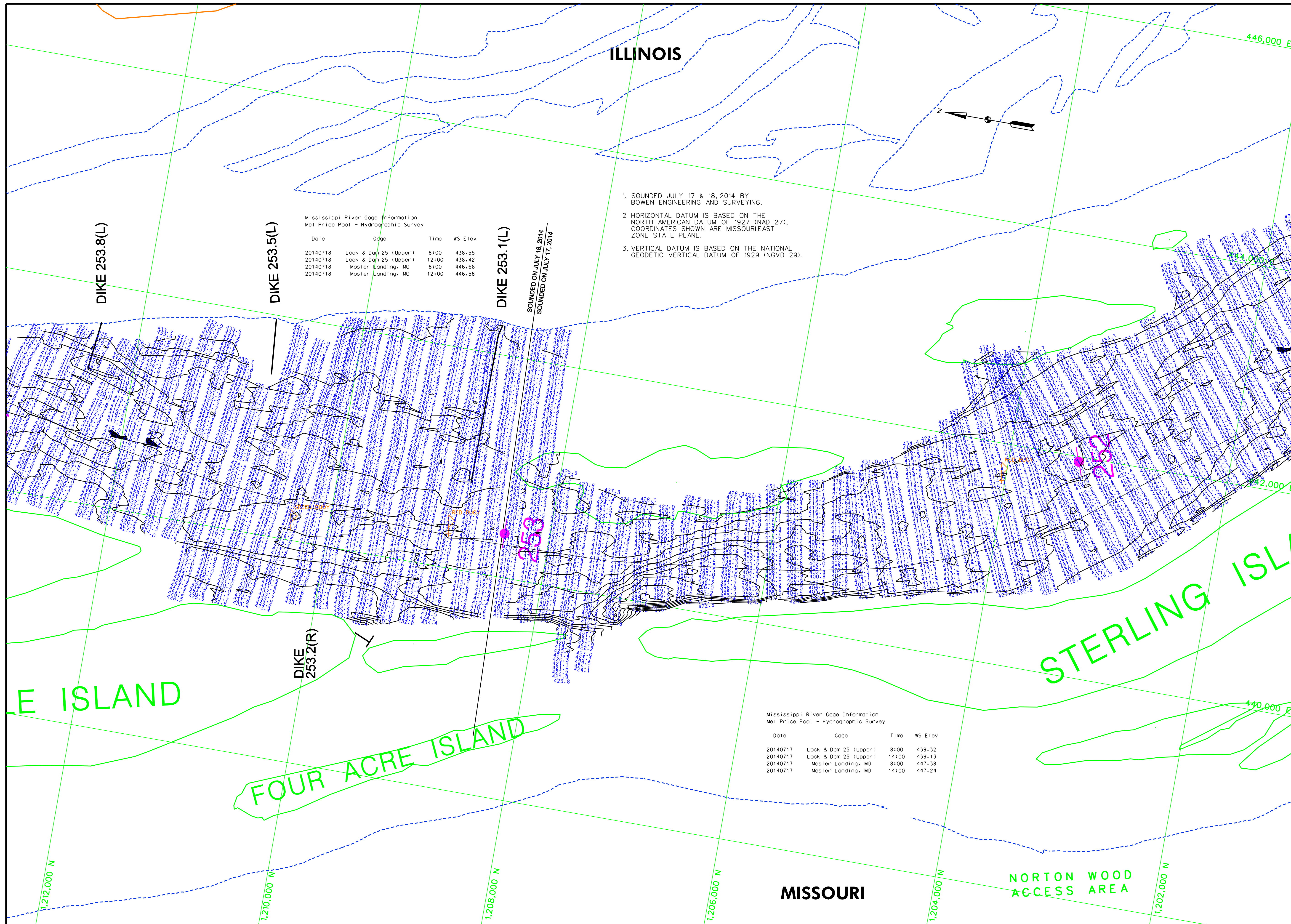
PLATE NUMBER
23

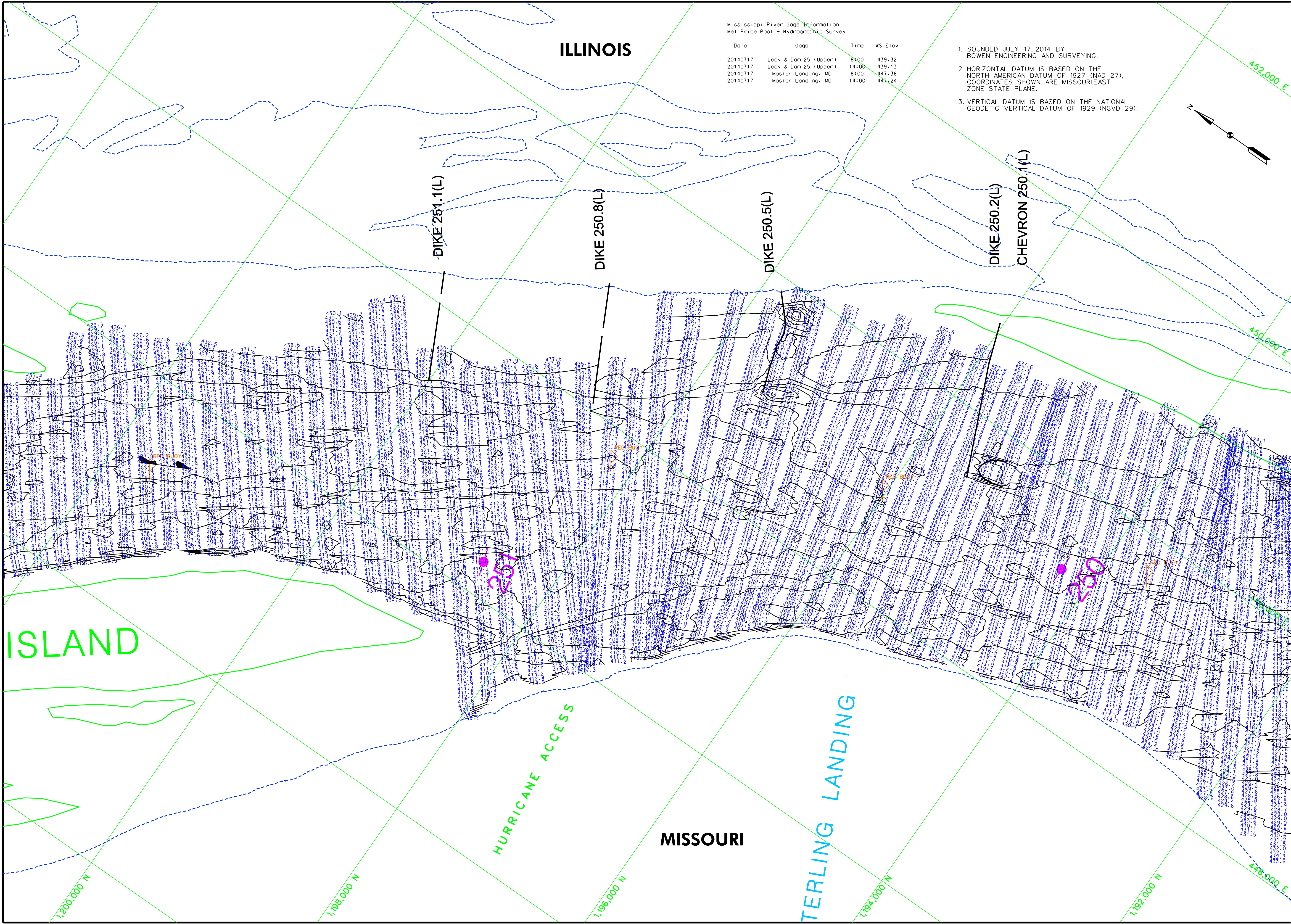


U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	Surveyed by: BOWEN ENGINEERING		Survey Date: JULY 17 & 18, 2014	
	Drawn by: X	Reviewed by: X	Old by: X	
UPPER MISSISSIPPI RIVER BASIN	SUBMITTED: X		APPROVED: X	
MISSISSIPPI RIVER	File name:		Plot date: ##/##/##	



24





Mississippi River Gage Information
Mel Price Pool - Hydrographic Survey

Date	Gage	Time	WS Elev
20140717	Lock & Dam 25 (Upper)	8:00	439.32
20140717	Lock & Dam 25 (Upper)	14:00	439.13
20140717	Mosier Landing, MO	8:00	447.38
20140717	Mosier Landing, MO	14:00	447.24

1. SOUNDED, JULY 17, 2014 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27). COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).



GAGE RECORD		L & D 24 LOWER	WOSER	L & D 25 UPPER
ZERO NGVD		431.81	400.0	407.0
MILE		273.2	260.3	241.5
L.W.R.D.		434.1	434.0	429.7
17 JUL 2014		X	47.38(00) 47.24(14:00)	32.32(00) 32.13(14:00)

ELEVATIONS ARE REFERRED TO NGVD. - CONTOURS ARE BELOW 1996.5' LOW WATER REFERENCE PLANE (L.W.R.P.) 194.000 G.T.S.

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI		Survey Date: JUL 17, 2014	
UPPER MISSISSIPPI RIVER BASIN	Drawn by:	Reviewed by:	Ckd by:
	X	X	X
	SUBMITTED:	APPROVED:	
	X	X	
MISSISSIPPI RIVER		File Name:	Plot Date:
		##DESIGN##	##DATE##

120
400
800
1200
METERS

0
400
800
1200
FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS A GUIDE TO THE GENERAL CONTOUR SURVEYED AT THAT TIME.

HYDROGRAPHIC SURVEYS

MILE: 248.8 - 251.7

CHURCH'S LANDING

BELLAMY LANDING

ILLINOIS

	Time	WS Elev
Upper	8:00	440.03
Upper	15:00	439.85
Lower	8:00	448.19
Lower	15:00	447.98

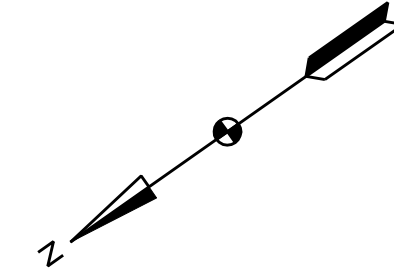
CROW ISLAND

HAUSGEN ISLAND

MISSOURI

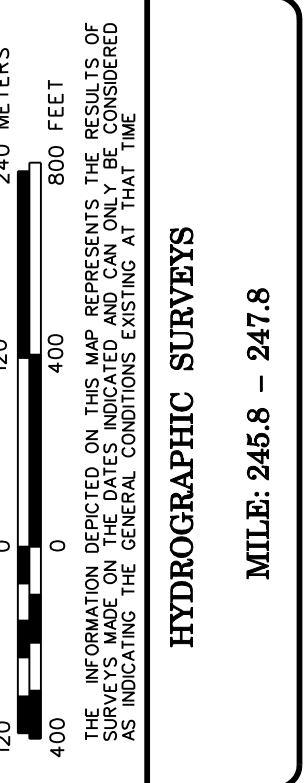
1. SOUNDED JULY 16, 2014 BY
BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE
NORTH AMERICAN DATUM OF 1927 (NAD 27),
COORDINATES SHOWN ARE MISSOURI EAST
ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL
GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

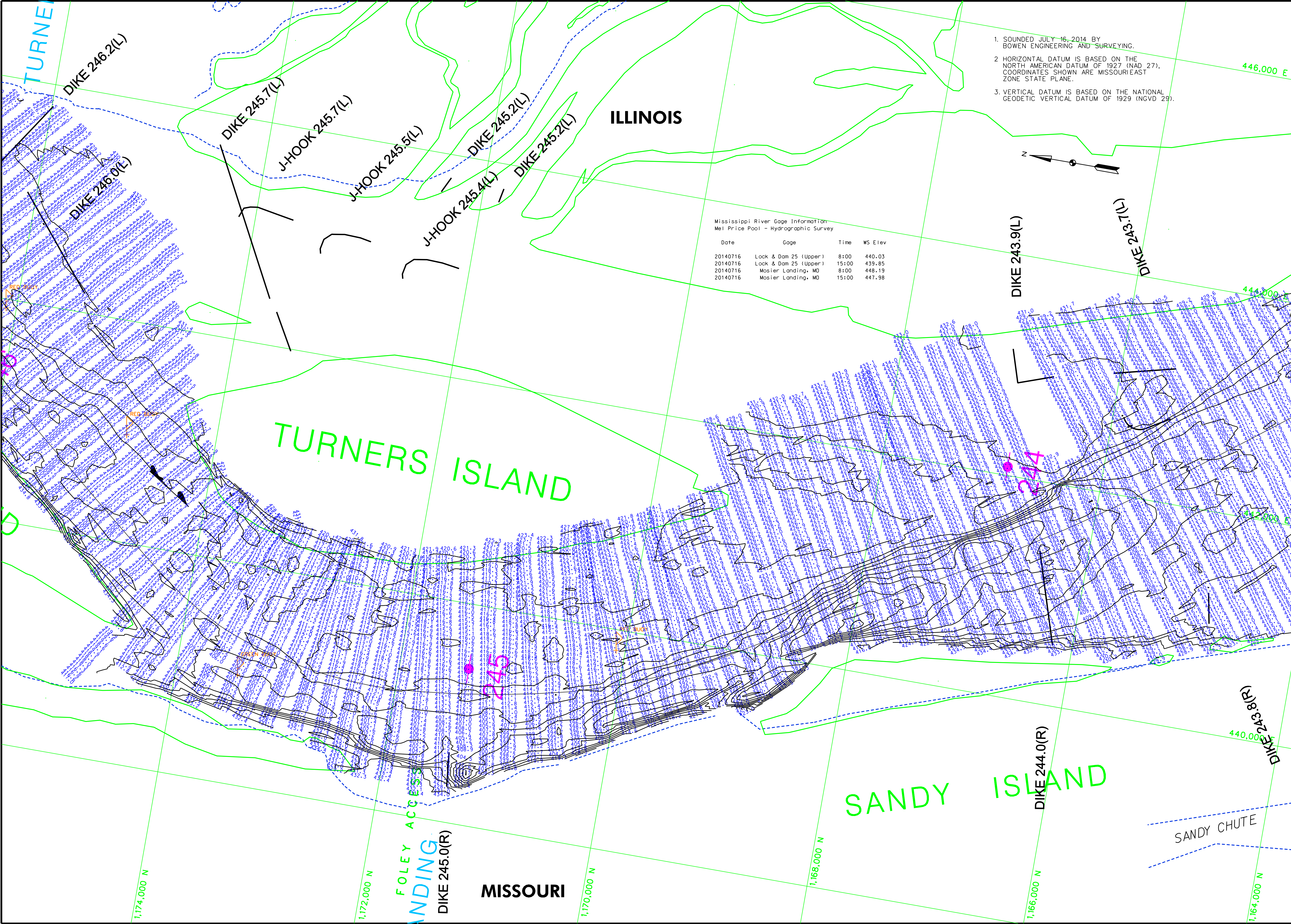
Mississippi River Gage Information			
Mel Price Pool - Hydrographic Survey			
Date	Gage	Time	WS Elev
20140716	Lock & Dam 25 (Upper)	8:00	440.03
20140716	Lock & Dam 25 (Upper)	15:00	439.85
20140716	Mosier Landing, MD	8:00	448.19
20140716	Mosier Landing, MD	15:00	447.98



ELEVATIONS ARE REFERRED TO N.G.V.D. - CONTIGUOUS ARE BELOW		9556-37 LOW WATER REFERENCE PLANE L.W.R.P.=154.000 C.T.S.	
ZERO N.G.V.D.	L & D 24 LOWER	MOSER	L&D 25 UPPER
MILE	421.81		407.0
L. W. R. P.	275.2	260.3	
16 JUL 2014	434.1	429.7	
	X	48.98(100) 32.85(15.00)	33.03(800) 32.85(15.00)

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI					
DRAWN BY: X		REVIEWED BY: X		CWD BY: X	
SUBMITTED:		APPROVED:			
X		X			
UPPER MISSISSIPPI RIVER BASIN					
MISSISSIPPI RIVER					
File name: M08SOWF01RIVERSECTION.dwg				Plot date: ###DATE=MM##YY	

PLATE
NUMBER



1. SOUNDED JULY 16, 2014 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27), COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Mississippi River Gage Information
Mel Price Pool - Hydrographic Survey

Date	Gage	Time	WS Elev
20140716	Lock & Dam 25 (Upper)	8:00	440.03
20140716	Lock & Dam 25 (Upper)	15:00	439.85
20140716	Mosier Landing, MO	8:00	448.19
20140716	Mosier Landing, MO	15:00	447.98



GAGE RECORD		L & D 24 LOWER	MOSE	L & D 25 UPPER
ZERO NGVD		431.81	400.0	407.0
MILE		X	260.3	241.5
L.W.R.P.		X	434.1	429.7
16 JUL 2014		X	48.98(00) 47.98(5.00)	33.03(8.00) 32.85(5.00)

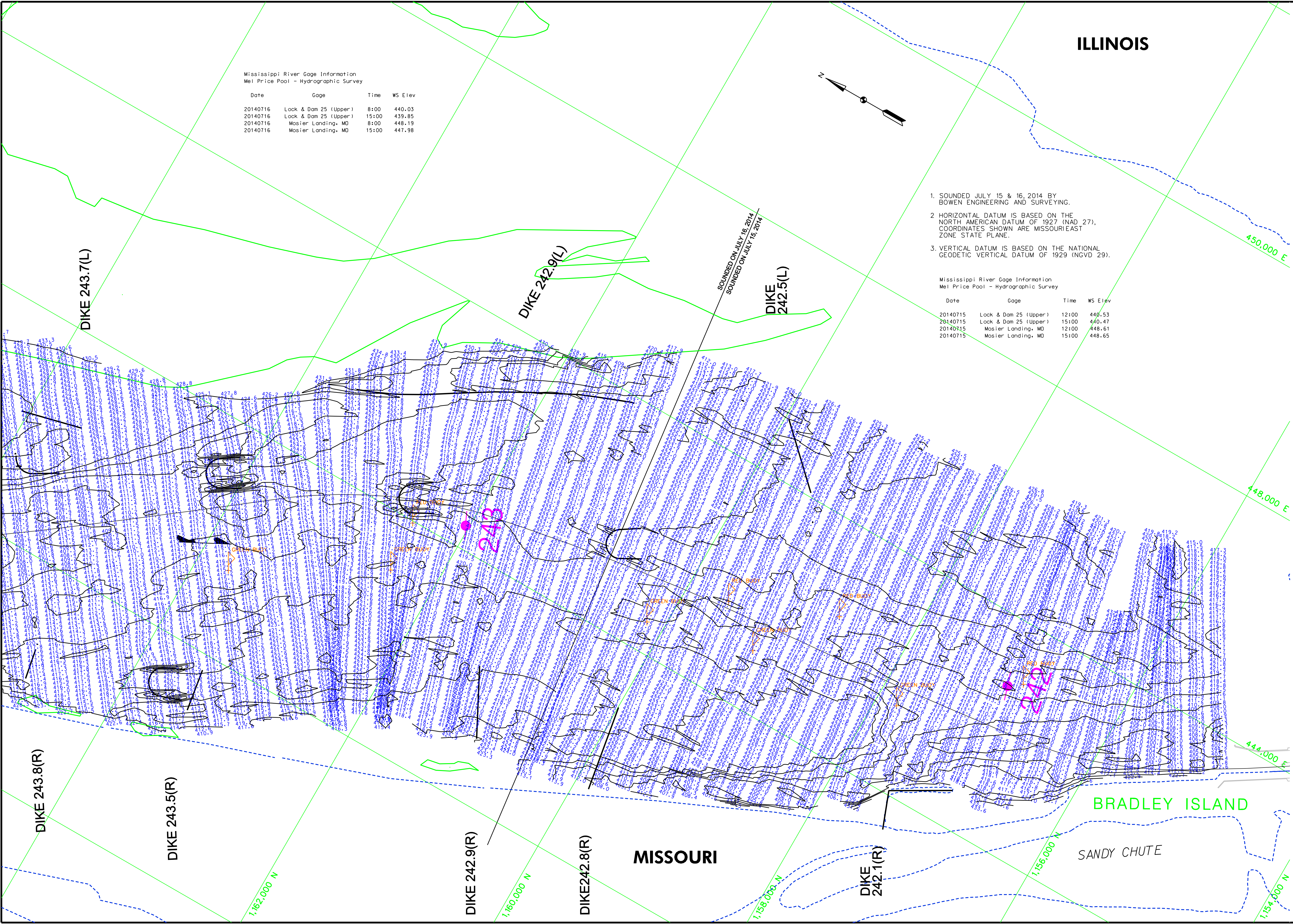
U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI	Survey Date: JUL 16, 2014	Drawn by: X	Reviewed by: X	Ckd by: X
UPPER MISSISSIPPI RIVER BASIN		SUBMITTED: X	APPROVED: X	
MISSISSIPPI RIVER	File name: ##DESIGN/##OPERATION/##	Plot date: ##DATE/##TIME		

120 0 100 240 METERS
400 0 400 800 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE OF THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONTOUR OF THE AREA.

HYDROGRAPHIC SURVEYS

MILE: 243.7 - 245.8



Mississippi River Gage Information
Mel Price Pool - Hydrographic Survey

Date	Gage	Time	WS Elev
20140716	Lock & Dam 25 (Upper)	8:00	440.03
20140716	Lock & Dam 25 (Upper)	15:00	439.85
20140716	Mosier Landing, MO	8:00	448.19
20140716	Mosier Landing, MO	15:00	447.98

1. SOUNDED JULY 15 & 16, 2014, BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1927 (NAD 27). COORDINATES SHOWN ARE MISSOURI EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

Mississippi River Gage Information
Mel Price Pool - Hydrographic Survey

Date	Gage	Time	WS Elev
20140715	Lock & Dam 25 (Upper)	12:00	440.53
20140715	Lock & Dam 25 (Upper)	15:00	440.47
20140715	Mosier Landing, MO	12:00	448.61
20140715	Mosier Landing, MO	15:00	448.65



GAUGE RECORD			
L & D 24 LOWER	WOSER	L&D 25 UPPER	
431.81	400.0	407.0	
232.2	260.3	241.5	
434.1	434.0	429.7	
48.612.007 46.6515.00	46.612.007 46.6515.00	33.512.007 33.4715.00	
15 JUL 2014	X	X	
16 JUL 2014	X	X	

U.S. ARMY ENGINEER DIVISION CORPS OF ENGINEERS ST. LOUIS, MISSOURI		Survey Date: JUL 15 & 16, 2014	
UPPER MISSISSIPPI RIVER BASIN	Drawn by:	Reviewed by:	Ckd by:
	X	X	X
	SUBMITTED:	APPROVED:	
	X	X	
MISSISSIPPI RIVER		Plot Date:	##DATE/##

HYDROGRAPHIC SURVEYS	
MILE: 241.6 - 243.7	

PLATE NUMBER
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