

OCTOBER 19, 2020
INTERPOLATED WATER SURFACE ELEVATIONS - MAIN CHANNEL

MILE	WSE @ 10:00	WSE @ 13:00	LWRP 2014	LWRP DIF @ 10:00	LWRP DIF @ 13:00
182	381.88	381.89	376.38	5.50	5.51
183	382.00	382.04	376.38	5.62	5.66
183.3	382.04	382.09	376.38	5.66	5.71
184	382.04	382.09	376.38	5.66	5.71
185.1	382.04	382.09	376.38	5.66	5.71

OCTOBER 19, 2020
INTERPOLATED WATER SURFACE ELEVATIONS - OLD CHANNEL

MILE	WSE @ 10:00	WSE @ 13:00	LWRP 2014	LWRP DIF @ 10:00	LWRP DIF @ 13:00
183.3	382.04	382.09	376.38	5.66	5.71
184	383.16	383.18	376.38	6.78	6.80
184.5	383.96	383.96	376.94	7.02	7.02

WATER SURFACE ELEVATION CALCULATIONS WERE COMPLETED BY TRANSFERRING THE L&D 27 LOWER GAGE READING TO MILE 183.3.

GPS OBSERVATIONS WERE USED TO ESTABLISH WATER SURFACE ELEVATIONS IN THE OLD CHANNEL.

1. SOUNDED OCTOBER 19, 2020 BY BOWEN ENGINEERING AND SURVEYING.
2. HORIZONTAL DATUM IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83). COORDINATES SHOWN ARE MISSOURI/EAST ZONE STATE PLANE.
3. VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

Depths shown are below LWRP2014 SURFACE
 Red solid contours are 9' below LWRP2014 SURFACE
 Green dashed contours are 12' below LWRP2014 SURFACE
 Blue dashed contours are 14' below LWRP2014 SURFACE

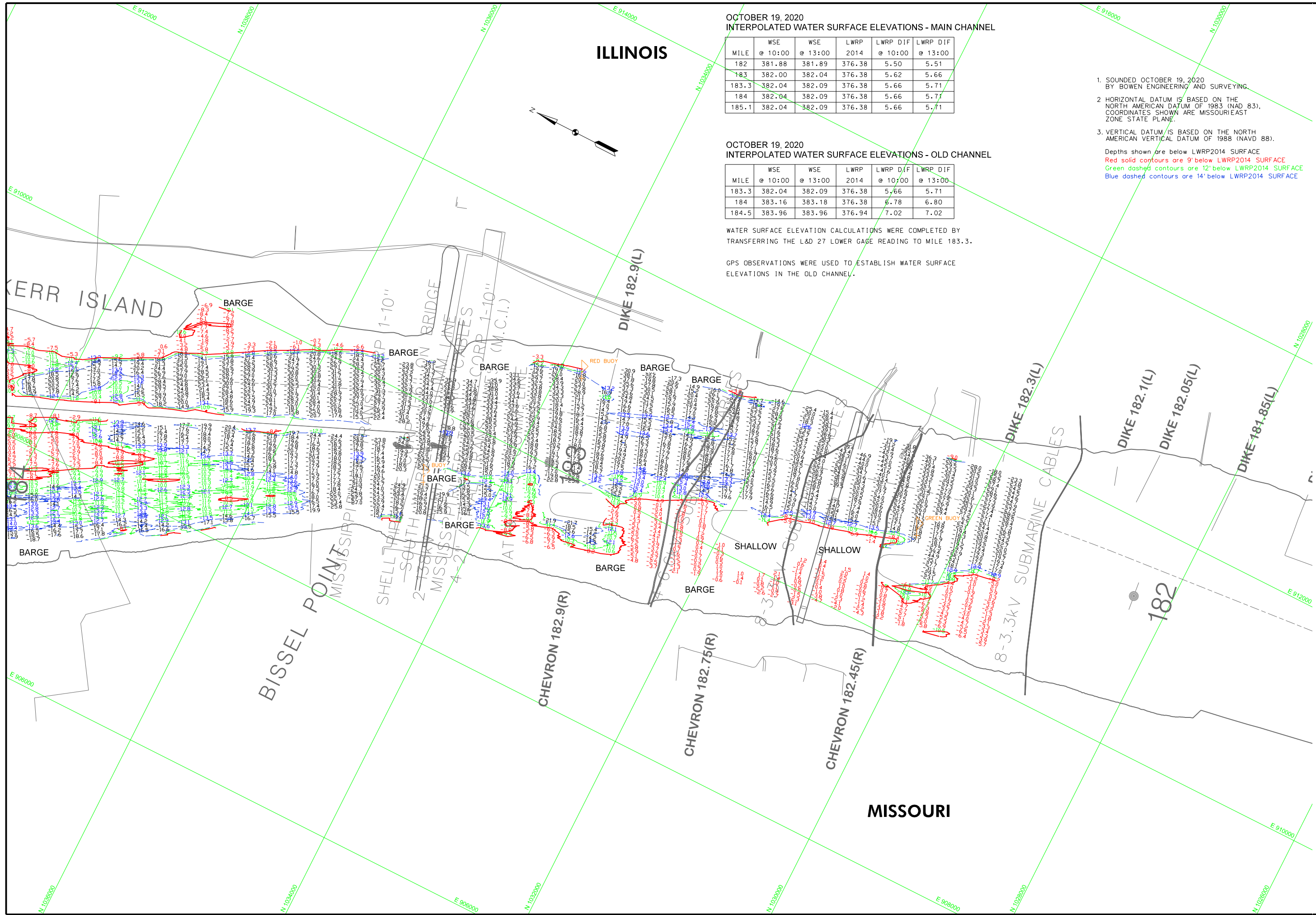


GAGE RECORD		ST. LOUIS NO.	
L&D 27 LOWER	379.58	L&D 27 LOWER	379.58
GPS OBSERVATION 1	349.49	GPS OBSERVATION 1	349.49
GPS OBSERVATION 2	349.49	GPS OBSERVATION 2	349.49
GPS OBSERVATION 3	349.49	GPS OBSERVATION 3	349.49
GPS OBSERVATION 4	349.49	GPS OBSERVATION 4	349.49
GPS OBSERVATION 5	349.49	GPS OBSERVATION 5	349.49
GPS OBSERVATION 6	349.49	GPS OBSERVATION 6	349.49
GPS OBSERVATION 7	349.49	GPS OBSERVATION 7	349.49
GPS OBSERVATION 8	349.49	GPS OBSERVATION 8	349.49
GPS OBSERVATION 9	349.49	GPS OBSERVATION 9	349.49
GPS OBSERVATION 10	349.49	GPS OBSERVATION 10	349.49
GPS OBSERVATION 11	349.49	GPS OBSERVATION 11	349.49
GPS OBSERVATION 12	349.49	GPS OBSERVATION 12	349.49
GPS OBSERVATION 13	349.49	GPS OBSERVATION 13	349.49
GPS OBSERVATION 14	349.49	GPS OBSERVATION 14	349.49
GPS OBSERVATION 15	349.49	GPS OBSERVATION 15	349.49
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GPS OBSERVATION 19	349.49	GPS OBSERVATION 19	349.49
GPS OBSERVATION 20	349.49	GPS OBSERVATION 20	349.49
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GPS OBSERVATION 91	349.49	GPS OBSERVATION 91	349.49
GPS OBSERVATION 92	349.49	GPS OBSERVATION 92	349.49
GPS OBSERVATION 93	349.49	GPS OBSERVATION 93	349.49
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GPS OBSERVATION 97	349.49	GPS OBSERVATION 97	349.49
GPS OBSERVATION 98	349.49	GPS OBSERVATION 98	349.49
GPS OBSERVATION 99	349.49	GPS OBSERVATION 99	349.49
GPS OBSERVATION 100	349.49	GPS OBSERVATION 100	349.49

U.S. ARMY ENGINEER DIVISION		CORPS OF ENGINEERS		ST. LOUIS, MISSOURI	
UPPER MISSISSIPPI RIVER BASIN	MISSISSIPPI RIVER	UPPER MISSISSIPPI RIVER BASIN	MISSISSIPPI RIVER	UPPER MISSISSIPPI RIVER BASIN	MISSISSIPPI RIVER
Survey Date: OCTOBER 19, 2020	Drawn by: X	Checked by: X	Reviewed by: X	Submitted: X	Approved: X
Plot Date: 10/19/2020	File Name: 184.5-182.3.dwg				

240 METERS
 800 FEET
 400 FEET
 0 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER THE GENERAL CONDITIONS SET FORTH IN THE PRE DREDGE SURVEY RIVER MILES 184.5 - 182.3



ILLINOIS

MISSOURI

OCTOBER 19, 2020
INTERPOLATED WATER SURFACE ELEVATIONS - MAIN CHANNEL

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US Army Corps of Engineers
St. Louis District

GAGE RECORD		ST. LOUIS NO.	
GPS OBSERVATION 1	L&D 27 LOWER	379.58	
ZERO N.A.V.D.	0.00	349.49	
MILE	184.5 (OLD CHANNEL)	184.1	180.0
LWRP 2014	X	376.38	376.38
19 OCT 2020	383.96(2:00)	32.55(0:00)	32.60(0:00)
		1.99(1:00)	

U.S. ARMY ENGINEER DIVISION		SURVEY DATA	
CORPS OF ENGINEERS		OCTOBER 19, 2020	
ST. LOUIS, MISSOURI		Drawn by:	Reviewed by:
UPPER MISSISSIPPI RIVER BASIN		X	X
MISSISSIPPI RIVER		SUBMITTED:	APPROVED:
		X	X
Plot date: 10/19/2020		File name: 182DREDGE.DWG	

240 METERS
 800 FEET
 400 FEET
 0 FEET

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER THE GENERAL CONDITIONS SET FORTH IN THE PRE DREDGE SURVEY RIVER MILES 184.5 - 182.3