



**SURVEY NOTES:**

- 1) HORIZONTAL DATUM:  
NAD83 (2011) MISSOURI EAST 2401, US SURVEY FOOT
- 2) VERTICAL DATUM:  
NAVD88 (GEOID18), FOOT
- 3) DEPTHS SHOWN ARE BELOW LWRP2014 SURFACE.
- 4) SURVEY INFORMATION:  
SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)  
ECHO SOUNDER: TELEDYNE ECHOTRAC E20  
TRANSDUCER: ODOM SMSW200-4 (4" BEAM, 200 kHz)  
SOUND VELOCITY SOURCE: VALEPORT SWIFT SVP  
INS: SBG ELLIPSE2-E-G4A2-B1  
GNSS RECEIVER: TRIMBLE MPS865 WITH DUAL ANTENNAS  
GNSS SOURCE: TRIMBLE CENTERPOINT RTX  
TIDE METHOD: REAL-TIME KINEMATIC  
TIDE SOURCE: TRIMBLE CENTERPOINT RTX
- 5) THE SURVEY WAS COMPLETED IN ACCORDANCE WITH QUALITY CONTROL PLAN PROCEDURES.

JUNE 29, 2023  
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 8:00	WSE @ 12:00	LWRP 2014	LWRP DIF @ 8:00	LWRP DIF @ 12:00
112	344.67	344.75	341.52	3.15	3.23
113	345.18	345.26	342.00	3.18	3.26
114	345.68	345.77	342.49	3.19	3.28

**GAGE RECORD**

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
109.9	Chester, IL	340.73	8:00	2.87	12:00	2.96
151.9	Herculeanum, MO	368.23	8:00	-3.28	12:00	-3.28

**St. Louis District**


**DATES OF SURVEY:**  
JUNE 29, 2023  
FILE NO.: 113F2923  
REQUEST NO.: W01P023F086

**SCALE:**  
1" = 800' (ANSI B)  
**FIELD BOOKS:**

<b>Approved:</b> _____ <small>FIELD CARTOGRAPHER</small>	<b>Approved:</b> _____ <small>CIVIL ENGINEERING TECHNICIAN</small>
<b>Approved:</b> _____ <small>ASST. CHIEF OF SURVEY</small>	<b>Approved:</b> _____ <small>CHIEF OF SURVEY</small>
<b>Date:</b> _____	

**U.S. ARMY CORPS OF ENGINEERS  
ST. LOUIS DISTRICT  
ST. LOUIS, MISSOURI**

**SURVEYED BY:  
BOWEN ENGINEERING AND SURVEYING, P.C.  
2131 MEGAN DRIVE  
CAPE GIRARDEAU, MO 63701**

**UPPER MISSISSIPPI RIVER BASIN  
MISSISSIPPI RIVER  
PRE DREDGE SURVEY  
RIVER MILES 113.4 - 112.7**

**SHEET NO.**  
1 OF 1