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: ODOM DIGIBAR S VELOCIMETER
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.

N 862,000 E 870,000
N 860,000 E 872,000
N 858,000 E 874,000
N 856,000 E 876,000
N 854,000

Osborne Chute

ILLINOIS

Buzzi Unicem Anchor Barge Fleet No. 1

Buzzi Unicem Anchor Barge Fleet No. 2

547

FIG 6s (priv)
FIG 6s (priv)

Buzzi Unicem (River Cement)
Buzzi Unicem (River Cement)

FIG

Michaels Towhead

MISSOURI

N

Scale: 1 Inch = 800.00 Feet

500 1000 2000 3000 4000 Feet

E 864,000 N 856,000
E 866,000 N 854,000
E 868,000 N 852,000
E 870,000 N 850,000

SEPTEMBER 1, 2022
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 9:00	WSE @ 14:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 14:00
145	363.56	363.48	357.98	5.58	5.50
146	364.07	363.99	358.75	5.32	5.24

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
109.9	Chester, IL	340.73	4.80	9.56	14.80	5.12
151.9	Herculaneum, MO	368.23	-1.13	14.74	14.80	-1.28

St. Louis District

DATES OF SURVEY:
SEPTEMBER 1, 2022

FILE NO.: 1450122
REQUEST NO.: W912P922F0051

SCALE:
1" = 800' (ANSI B)

FIELD BOOKS:

Approved: FIELD HYDROGRAPHER
Approved: CIVIL ENGINEERING TECHNICIAN
Approved: ASST. CHIEF OF SURVEY
Approved: CHIEF OF SURVEY
Date:

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

SURVEYED BY:
BOWEN ENGINEERING AND SURVEYING, P.C.
2121 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER BASIN
MISSISSIPPI RIVER
PRE DREDGE SURVEY
RIVER MILES 146.0 - 145.0

SHEET NO.
1 OF 1