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 26, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 9:00	WSE @ 15:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 15:00
41	307.28	307.22	301.84	5.44	5.38
42	307.87	307.81	302.79	5.08	5.02
43	308.46	308.40	303.56	4.90	4.84

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
39.5	Commerce, MO	301.60	9:00	4.79	15:00	4.74
43.7	Thebes, IL	299.71	9:00	9.16	15:00	9.10

Thebes, IL
ILLINOIS
MISSOURI
Grand Chain
Uncle Joe Ldg
Uncle Joe Ldg
FIG 4s
FIG 4s
BARGE
BARGE
ROCKS
43
42
41
37
31
31
N 502,000
N 500,000
N 498,000
N 496,000
N 494,000
N 492,000
N 490,000
E 1,126,000
E 1,128,000
E 1,124,000
E 1,122,000
E 1,120,000
N
Scale: 1 Inch = 800.00 Feet
500 1000 2000 3000 4000 Feet

St. Louis District

DATES OF SURVEY:
JUNE 26, 2023

FILE NO.: 042F5623
REQUEST NO.: W912P923F0086

SCALE:
1" = 800' (ANSI B)

FIELD BOOKS:

Approved: FIELD CARTOGRAPHER
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 42.7 - 41.0

SHEET NO.
1 OF 1