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
KTD FILE: LWRP RM 0 to 200_250x250.KTD

5) THE SURVEY WAS COMPLETED IN ACCORDANCE WITH QUALITY CONTROL PLAN PROCEDURES.

JANUARY 13, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 10:00	WSE @ 14:00	LWRP 2014	LWRP DIF @ 10:00	LWRP DIF @ 14:00
172	377.42	377.29	372.21	5.21	5.08
173	377.97	377.84	372.95	5.02	4.89
174	378.51	378.39	373.73	4.78	4.66

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
168.7	Jefferson Barracks, MO	377.34	10:00	-1.72	14:00	-1.85
176.8	Engineers Depot, MO	378.98	10:00	1.06	14:00	0.94

ILLINOIS

MISSOURI

BARGE

BARGE

BARGE

BARGE

BARGE

BARGE

174

173

N

Scale: 1 Inch = 800.00 Feet

500 1000 2000 3000 4000 Feet

St. Louis District

DATES OF SURVEY:
JANUARY 13, 2023

FILE NO.: 173A1323
REQUEST NO.: W912P923F0004

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 173.5 - 172.8

SHEET NO.
1 OF 1