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.

Angelo Towhead
Cairo, IL

Cairo, IL

Fort Defiance State Park

ILLINOIS

MISSOURI

981

Cairo Point Junction Lt. (0.8)

BARGE

N 420,000
N 422,000
N 424,000
N 426,000
N 418,000
N 416,000
N 414,000
E 1,210,000
E 1,212,000
E 1,214,000
E 1,216,000
E 1,218,000
E 1,220,000

N

Scale: 1 Inch = 800.00 Feet

500 1000 2000 3000 4000 Feet

AUGUST 1, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 9:00	WSE @ 11:00	LWRP 2014	LWRP DIF @ 9:00	LWRP DIF @ 11:00
0	281.64	281.79	279.41	2.43	2.38
1	282.33	282.28	279.91	2.42	2.37
2	282.82	282.77	280.38	2.44	2.39

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
0.0	Ohio River (Est)	0.00	9:00	281.84	11:00	281.79
2.0	Birds Point, MO	273.91	9:00	8.91	11:00	8.88
20.2	Thompson Landing, MO	279.03	9:00	12.72	11:00	12.81

St. Louis District

DATES OF SURVEY:
AUGUST 1, 2023

FILE NO.: 001H0123
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
POST DREDGE SURVEY
RIVER MILES 1.7 - 0.8

SHEET NO.
1 OF 1