



St. Louis District

SURVEY NOTES:

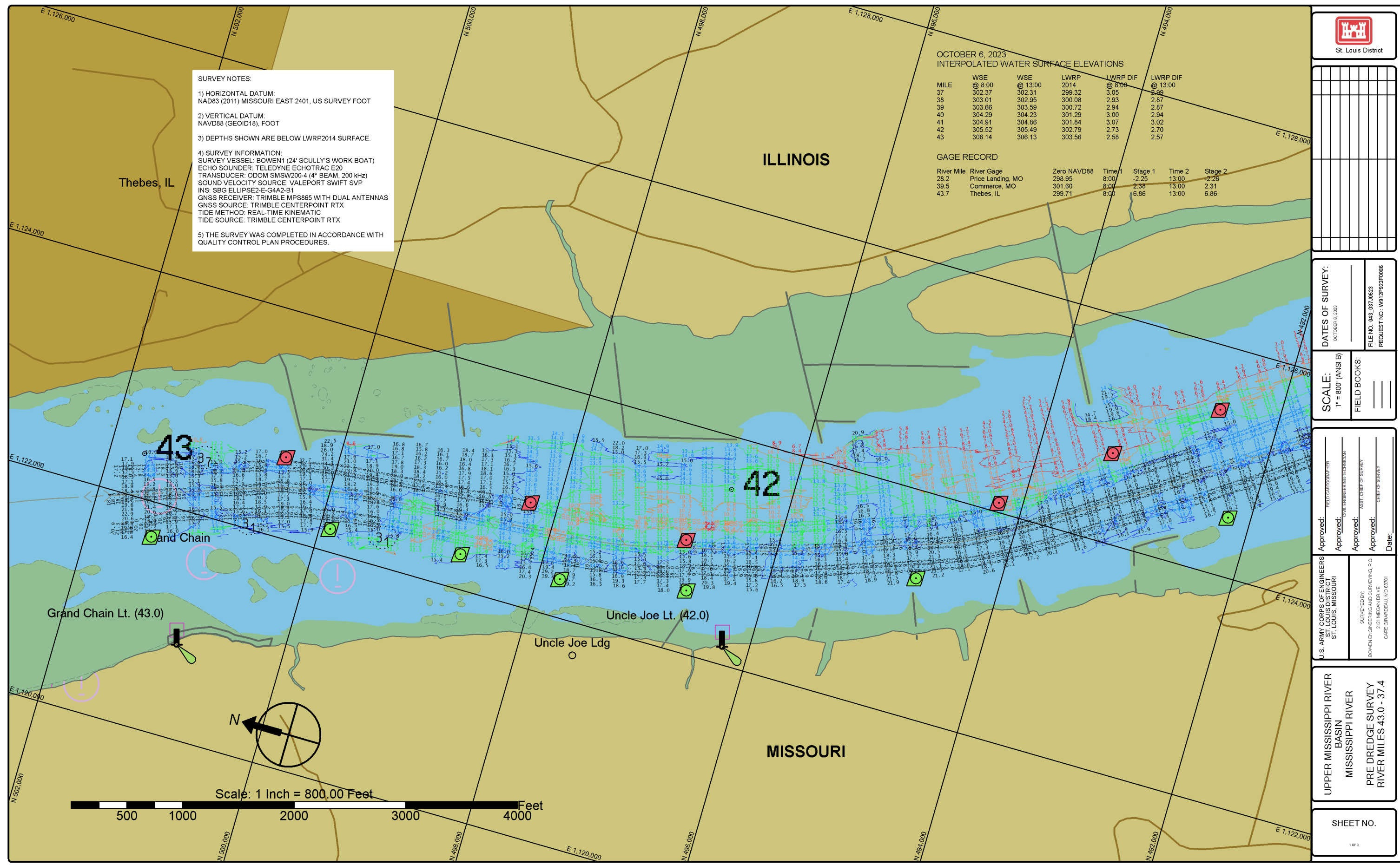
- 1) HORIZONTAL DATUM:
NAD83 (2011) MISSOURI EAST 2401, US SURVEY FOOT
- 2) VERTICAL DATUM:
NAVD88 (GEOID18), FOOT
- 3) DEPTHS SHOWN ARE BELOW LWRP2014 SURFACE.
- 4) SURVEY INFORMATION:
SURVEY VESSEL: BOWEN1 (24' SCULLY'S WORK BOAT)
ECHO SOUNDER: TELEDYNE ECHOTRAC E20
TRANSDUCER: ODOM SMSW200-4 (4" BEAM, 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.

**OCTOBER 6, 2023
INTERPOLATED WATER SURFACE ELEVATIONS**

MILE	WSE @ 8:00	WSE @ 13:00	LWRP 2014	LWRP DIF @ 8:00	LWRP DIF @ 13:00
37	302.37	302.31	299.32	3.05	3.05
38	303.01	302.95	300.08	2.93	2.87
39	303.66	303.59	300.72	2.94	2.87
40	304.29	304.23	301.29	3.00	2.94
41	304.91	304.86	301.84	3.07	3.02
42	305.52	305.49	302.79	2.73	2.70
43	306.14	306.13	303.56	2.58	2.57

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time	Stage 1	Time 2	Stage 2
26.2	Price Landing, MO	299.95	8:00	-2.25	13:00	-2.26
39.5	Commerce, MO	301.60	8:00	2.38	13:00	2.31
43.7	Thebes, IL	299.71	8:00	6.66	13:00	6.66



DATES OF SURVEY:
OCTOBER 6, 2023
FILE NO.: 043_037J0623
REQUEST NO.: W91P2023F0086

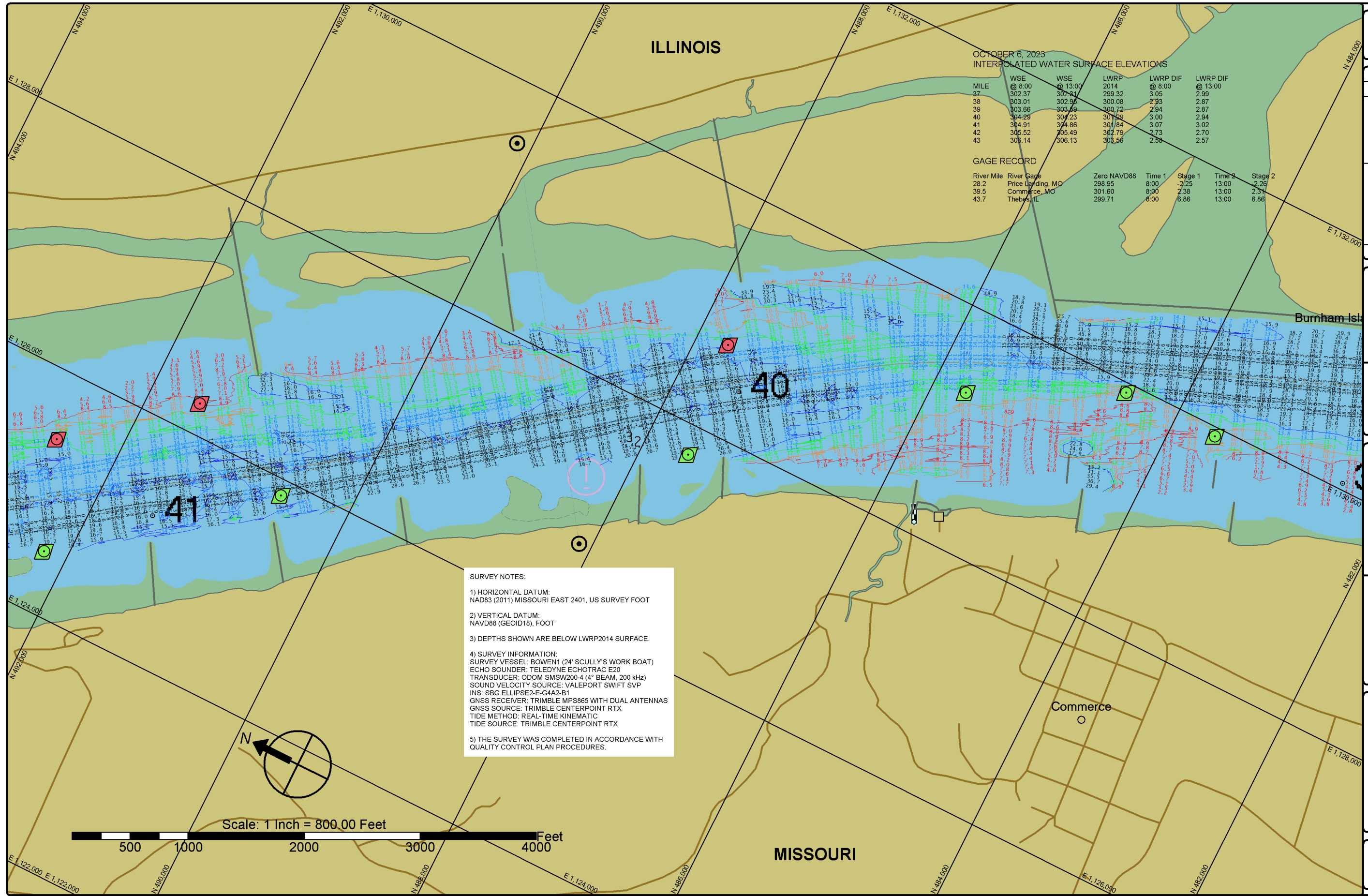
SCALE:
1" = 800' (ANSI B)
FIELD BOOKS:

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 43.0 - 37.4

SHEET NO.
1 OF 3



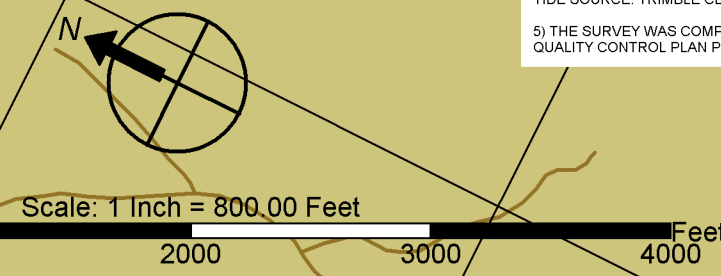
OCTOBER 6, 2023
INTERPOLATED WATER SURFACE ELEVATIONS

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St. Louis District

DATES OF SURVEY:
OCTOBER 6, 2023

FILE NO.: 043_037J0623
REQUEST NO.: W91P2023P086

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.
2131 MEGAN DRIVE
CAPE GIRARDEAU, MO 63701

UPPER MISSISSIPPI RIVER
BASIN
MISSISSIPPI RIVER
PRE DREDGE SURVEY
RIVER MILES 43.0 - 37.4

SHEET NO. _____

2 OF 3



St. Louis District

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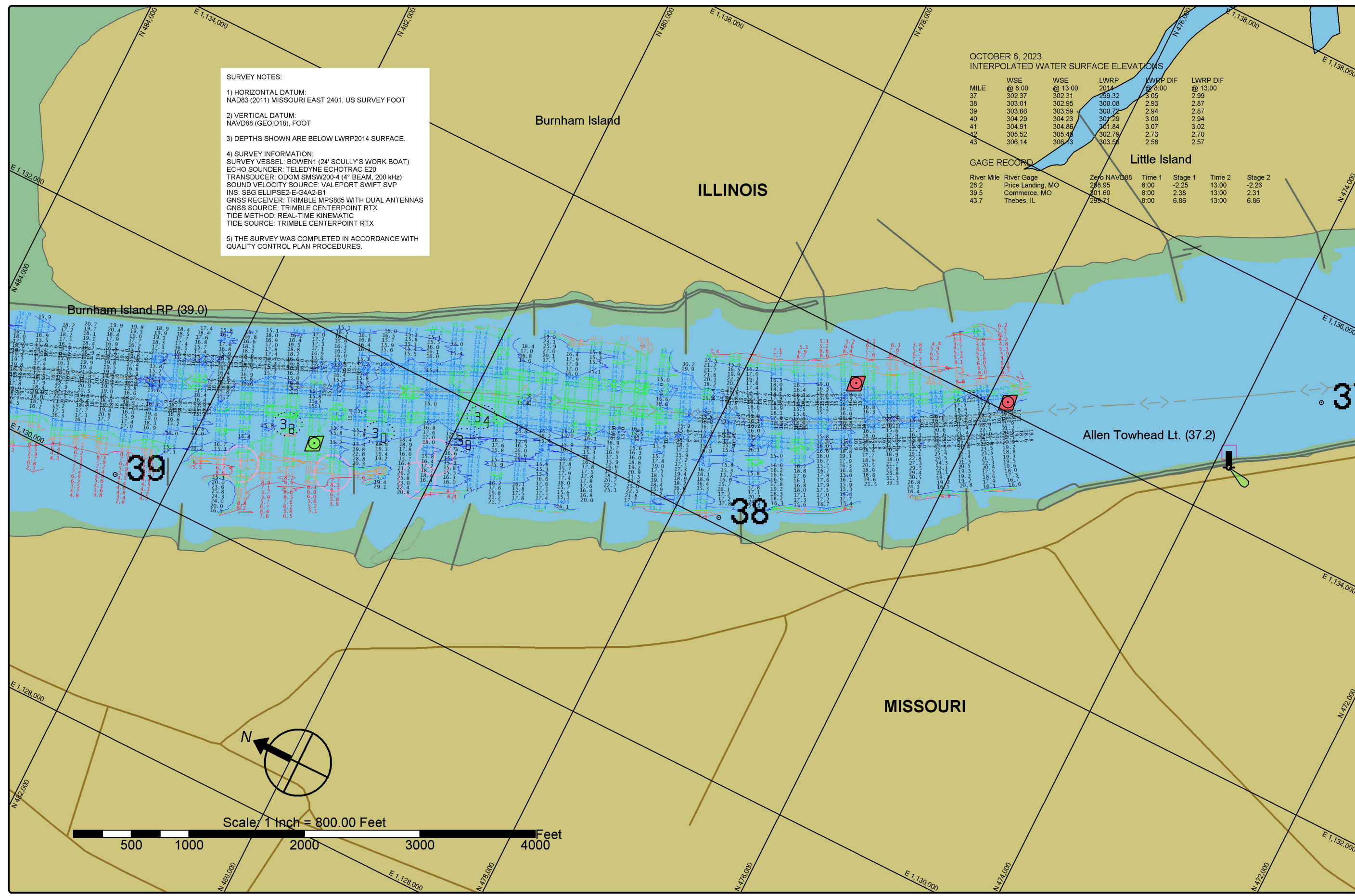
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Scale: 1 inch = 800.00 Feet

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OCTOBER 6, 2023

SCALE:
1" = 800' (ANSI B)

FIELD BOOKS:

FILE NO. 043_037J0623
REQUEST NO. W91P230F086

APPROVED:

FIELD CHARTERER: _____
CIVIL ENGINEERING TECHNICIAN: _____
ASST. CHIEF OF SURVEY: _____
CHIEF OF SURVEY: _____

Date: _____

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

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3 OF 3