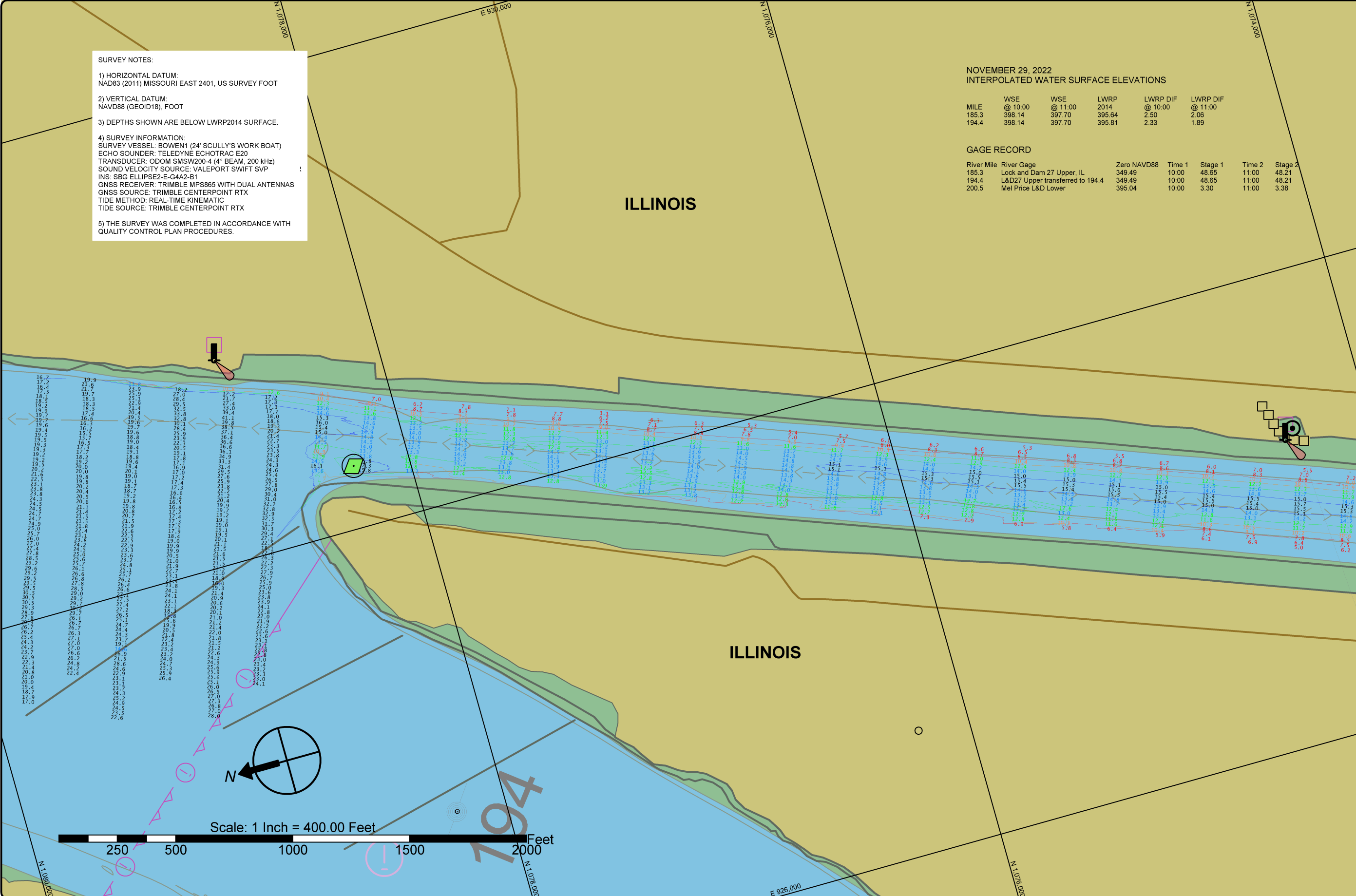




SURVEY NOTES:

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.

NOVEMBER 29, 2022
INTERPOLATED WATER SURFACE ELEVATIONS

MILE	WSE @ 10:00	WSE @ 11:00	LWRP 2014	LWRP DIF @ 10:00	LWRP DIF @ 11:00
185.3	398.14	397.70	395.64	2.50	2.06
194.4	398.14	397.70	395.81	2.33	1.89

GAGE RECORD

River Mile	River Gage	Zero NAVD88	Time 1	Stage 1	Time 2	Stage 2
185.3	Lock and Dam 27 Upper, IL	349.49	10:00	48.65	11:00	48.21
194.4	L&D27 Upper transferred to 194.4	349.49	10:00	48.65	11:00	48.21
200.5	Mel Price L&D Lower	395.04	10:00	3.30	11:00	3.38



St. Louis District

DATES OF SURVEY:
NOVEMBER 29, 2022

FILE NO.: 194K2922
REQUEST NO.: W812922F004

SCALE:
1" = 400' (ANSI B)

FIELD BOOKS:

Approved:

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

Approved:

CIVIL ENGINEERING TECHNICIAN

Approved:

ASST. CHIEF OF SURVEY

Approved:

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

Date:

UPPER MISSISSIPPI RIVER
BASIN
MISSISSIPPI RIVER
POST DREDGE SURVEY
RIVER MILES 194.2 - 193.3

SHEET NO.