

# HISTORIC AMERICAN ENGINEERING RECORD

## SALINE RIVER BRIDGE

HAER NO. AR-7

**LOCATION:** Spanning the Saline River 1100 feet west of Interstate Highway 30 on County Highway 365 near the town of Benton, Saline County, Arkansas.

UTM: 15/3824385/353260

QUAD: Benton, Arkansas

**DATE OF CONSTRUCTION:** 1928

**MAJOR ALTERATIONS AND ADDITIONS:** In 1973, one of the approach spans on the west end collapsed and was replaced with a steel girder span with steel side rails.

**ENGINEER & BUILDER:** Designed by the Arkansas Highway and Transportation Department bridge engineering division under the supervision of N. B. Garver, Bridge Engineer.  
Built by the Arkansas General Construction Company of Little Rock, Arkansas.

**STYLE:** Two-span, open-spandrel, reinforced concrete deck arch bridge.

**SIGNIFICANT FEATURES** A commemorative plaque, on the right-hand side of both ends of the bridge, states "Saline River; Ark. General Const. Co.; Contractor; Arkansas; State Highway Department; 1928, Bridge No. \_\_\_\_".

**PRESENT CONDITION AND USE:** This bridge is in poor condition but is still being used for vehicular traffic.

**SIGNIFICANCE:** The Saline River Bridge is one of only ten unaltered, reinforced concrete, open-spandrel, deck arch bridges currently surviving in Arkansas. Constructed as part of a six bridge improvement project on the Benton-Malvern Road beginning two miles west of Benton, it reflects the AHTD's substantial influence in reinforced concrete bridge design and construction in Arkansas.

**HISTORIAN:** Michael Swanda  
Survey Coordinator  
Arkansas Historic Preservation Program  
Date: August 26, 1988.

### STRUCTURAL SYSTEMS

The two main arch spans, girder approach spans, and guardrails are constructed of reinforced concrete. The bridge contains 2,632 cubic feet of cast concrete, 3,580 linear feet of precast concrete piling, 3,580 linear feet of concrete railing, and 460,444 pounds of reinforced steel.

### DIMENSIONS

The total length of the Saline River Bridge is 1218 feet. The two main spans each contain two open spandrel arches that measure 110 feet in length. The arch height is approximately 33 feet above the springline of the center pier. There are six reinforced concrete spandrel columns, square in section with caps at the top and bottom, that rise from each arch rib to support stringers directly over the ribs. This system supports a 20-foot-wide road.

The concrete guardrail measures 2'-6" above the top of the curb. Reinforced concrete girders are used in the approach spans. The east approach contains two spans measuring 25 feet each. The west approach contains twenty-seven spans, each measuring 35 feet in length.

### ADDITIONAL INFORMATION

Shop Drawings for the Saline River Bridge are filed at the AHTD; Drawing No. 922, 923, 924, 925, 926, 927, 928, 929 and Standard Drawing No. 1001, and 1019. AHTD Bridge No.414, AHPP Resource No. SA0020.

SOURCES OF INFORMATION

Bridge Division Files, Arkansas Highway and Transportation Department, Little Rock.

Historic Bridge File, Arkansas Historic Preservation Program, Little Rock.

McClurkan, Burney B. Arkansas' Historic Bridge Inventory, Evaluation Procedures 1987 and Preservation Plan. Manuscript of file, Environmental Division, Arkansas Highway and Transportation Department, Little Rock.