

STONO RIVER BRIDGE (S.C. Route 700 Bridge)
Spanning the Stono River between James and Johns Islands
Charleston
Charleston County
South Carolina

HAER No. SC-24

HAER
SC
10-CHAR,
366-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Southeast Region
Department of the Interior

HISTORIC AMERICAN ENGINEERING RECORD

STONO RIVER BRIDGE (S.C. Route 700 Bridge) HAER No. SC-24

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Location: Spanning the Stono River on S.C. Route 700
in Charleston County, South Carolina

UTM: 17.592680.3624110
Quad: Johns Island, South Carolina

Date of Construction: 1929. Altered (widened) 1951.

Builder: Greenville Steel & Iron Co., Greenville, SC

Present Owner: South Carolina Department of Transportation
Post Office Box 191
Columbia, South Carolina 29202

Present Use: Vehicular Bridge

Significance: The Stono River Bridge is identified as
"Charleston 3" in the South Carolina Department of
Transportation's Metal Truss Highway Bridge
Inventory. This bridge is noteworthy in that it
represents the only swing span in South Carolina
which utilizes a pony truss configuration (all other
swing spans are through trusses). It was
determined to be eligible for the National Register
of Historic Places in January, 1983.

Project Information: This documentation was undertaken in February,
1997 in accordance with the Memorandum of
Agreement by the South Carolina Department of
Transportation, the Federal Highway
Administration, the State Historic Preservation
Officer, and the Advisory Council on Historic
Preservation as a means to mitigate the
replacement of this historic pony truss swing span
bridge.

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Date: March, 1998

The Stono River Bridge (S.C. Route 700 Bridge) is a pony truss, swing span structure that carries east and west bound vehicular traffic over the Stono River between James and Johns Islands in Charleston County, South Carolina (see Location Map on page 4). The swing span also facilitates the passage of water craft by opening (rotating horizontally) for those vessels that exceed its vertical navigational clearance. The bridge design appears conventional in most respects; however, the bridge is noteworthy in that it represents the only swing span in the state of South Carolina which utilizes a pony truss configuration (all other swing spans are through trusses).

The pony truss, swing span structure generally extends across the channel of the Stono River, which is bounded on either side by *Spartina alterniflora* dominated salt marsh, as is typical of the coastal regions of South Carolina. Conventional low-level concrete trestles connect the swing span to the shore on both sides by traversing the balance of river basin and the adjacent salt marsh, approximately 720 feet (219 meters) to the west, and approximately 534 feet (163 meters) to the east.

The pony truss, swing span is 156 feet (47.55 meters) long, 24 feet (7.32 meters) wide (accommodating two traffic lanes, one in each direction), and provides a vertical clearance of 14 feet (4.27 meters). The vertical navigational clearance under the bridge in the closed position is approximately 10 feet (3 meters). The vertical navigational clearance in the open position is unlimited. The horizontal navigational clearance through the bridge opening is 55 feet (16.76 meters).

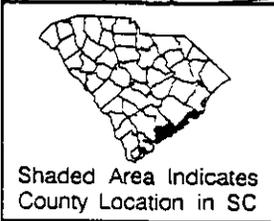
This 156-foot pony truss swing span, presently owned by the South Carolina Department of Transportation, was built originally in 1929 by the Greenville Steel and Iron Company of Greenville, South Carolina, for the Stono Bridge Company. When a new approach to the bridge was built in 1951, the original swing span was widened and used as part of the new bridge. Welded doubler plates on webs of several members of the present bridge reveal areas that were strengthened when the bridge was widened. The reconstruction of the old bridge was performed by C.Y. Thomason Company of Greenwood, South Carolina. The date 1951 is inscribed in a concrete post at the approach to the bridge, indicating the date of construction of the new approach.

The bridge was part of a statewide survey of metal truss highway bridges. This study, conducted by Clemson University in conjunction with the South Carolina Department of Transportation, resulted in the identification of 38 metal truss bridges statewide with sufficient historic interest to merit nomination to the National Register of Historic Places. The S.C. Route 700 Bridge, which is identified as "Charleston 3" in the study, was formally determined eligible for the National Register of Historic Places on January 28, 1983.

Primary and Unpublished Source:

South Carolina Department of Transportation. "Metal Truss Highway Bridge Inventory,"
prepared by Dr. Rudolf E. Elling and Professor Gayland B. Witherspoon, 1981.

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Shaded Area Indicates
County Location in SC

LOCATION MAP

S. C. Route 700 Bridge (Stono River)
Charleston County, S. C.

