

HABS/HAER INVENTORY

See "HABS/HAER Inventory Guidelines" before filling out this card.

1. NAME(S) OF STRUCTURE Sanders Bridge (Rio Puerco Bridge)	3. DATE(S) OF CONSTRUCTION 1923 4. USE (ORIGINAL/CURRENT) highway bridge / roadway bridge 6. RATING NRIIP eligible: local significance
2. LOCATION Indian Route 9402 over the Puerco River Sanders; SW1/4 S13 T21N R28E Apache County, Arizona	

6. CONDITION

fair; sufficiency rating: 29.0 owner: U.S. Bureau of Indian Affairs

7. DESCRIPTION

span number : 2	superstructure: riveted steel, 6-panel Pratt pony truss w/ outriders
span length : 75.0'	substructure : concrete abutments w/ solid concrete piers
total length: 190.0'	floor/decking : asphalt over timber deck w/ timber stringers
roadway wdt.: 14.8'	other features: upper chord: 2 channels w/ cover plate and webbing; lower chord: 2 angles w/ batten plates; vertical: 4 angles w/ continuous plate; diagonal: 2 angles w/ batten plates; lateral bracing: 1 angle; floor beam: 1 beam; steel angle guardrails

8. HISTORICAL DATA

In 1922, the Arizona Highway Department began the major reconstruction of the Holbrook-Lupton Highway between Adamana and the state line. Two critical components of the project were the erection of substantial bridges over the Rio Puerco near the small Indian settlements of Sanders and Allentown. For the Sanders Bridge, AHD staff engineers designed two medium-span pony trusses supported by continuous concrete piers. Timber stringers formed approach spans on both sides. Using money from the state road fund and an Apache County bond issue, AHD let the contracts for the Sanders and Allentown bridges and a small pony truss over Lupton Arroyo at Lupton on January 1, 1923. The Monarch Engineering Company of Denver was awarded the contract for the Sanders Bridge. Monarch began construction of the bridge on May 22, worked through the summer, and, using steel milled by Inland, completed the structure on September 10. Total construction cost: \$15,005. Both the Sanders and Allentown crossings were removed from the highway by another realignment in 1931, and the bridges have since carried local traffic on the Navajo Indian Reservation.

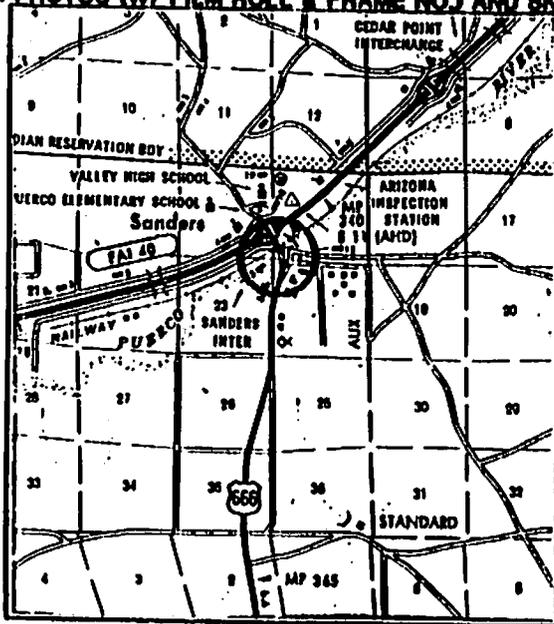
9. SIGNIFICANCE

Later designated U.S. Highway 66, the Santa Fe Highway was a major transcontinental route across northern Arizona. Before the construction of this bridge, traffic on the highway often was forced to wait up to 24 hours for the Rio Puerco to subside enough to permit fording. The Sanders Bridge thus formed an important link on a major interstate route. The bridge is further significant as one of the earliest pony trusses built by the State Engineer, erected by a regionally active bridge contractor. Technologically, the Sanders Bridge is a representative and unaltered example of a common vehicular truss configuration: one of three riveted Pratt pony trusses identified in the inventory.

10. NAME(S) OF STRUCTURE

Sanders Bridge

11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION



LOCATION MAP

TAKEN FROM DEPARTMENT OF TRANSPORTATION
GENERAL HIGHWAY MAP



Field inspection by Clayton Fraser, 9 October 1986.

Bridge Record, Arizona State Highway System: 3074; Structures Section, Arizona Department of Transportation, Phoenix Arizona.

Fifth Biennial Report of the State Engineer, Arizona, 1920-1922 (n.p., 1922), pages 54, 93-94.

Sixth Biennial Report of the State Engineer, Arizona, 1922-1924 (Phoenix: Manufacturing Stationers, Inc., 1924), pages 145, 166, 172-73.

Seventh Biennial Report of the State Engineer, Arizona, 1924-1926 (Phoenix: Kelly Print, 1926), page 51.

13. INVENTORIED BY:

Clayton B. Fraser

AFFILIATION

Fraserdesign Loveland Colorado

DATE

1 April 1987

