

HABS/HAER INVENTORY

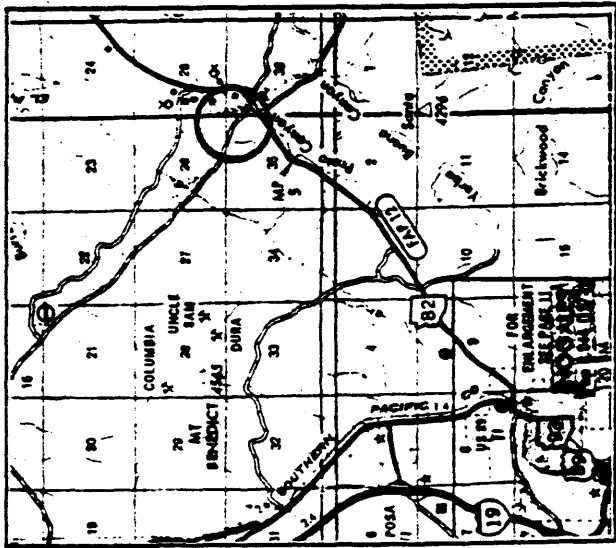
See "HABS/HAER Inventory Guidelines" before filling out this card.

<p>1. NAME(S) OF STRUCTURE Santa Cruz Bridge Number 1 (South River Road Bridge)</p> <p>2. LOCATION South River Road over the Santa Cruz River 5.5 miles northeast of Nogales; NM1/4 S36 T23S R15E Santa Cruz County, Arizona</p>	<p>3. DATE(S) OF CONSTRUCTION 1916-17</p> <p>4. USE (ORIGINAL/CURRENT) highway bridge / roadway bridge</p> <p>5. RATING NRHP eligible: state significance</p>
<p>6. CONDITION fair/good; sufficiency rating: 36.7 owner: Cochise County</p> <p>span number : 11 superstructure: reinforced concrete slab and girder (2-girder) span length : 65.0' substructure : concrete abutments and wingwalls w/ solid concrete piers total length: 457.0' floor/decking : asphalt over concrete deck roadway wdt.: 18.1' other features: concrete girders w/ incised panels; cantilevered roadways; steel pipe guard-rails</p>	
<p>7. DESCRIPTION</p> <p>In 1915, the Arizona State legislature appropriated \$12,500 from the state's General Fund for construction of a major bridge over the Santa Cruz River on the Nogales-Patagonia Highway. State Engineer B.M. Atwood located the site for this bridge almost 5½ miles northeast of Nogales and, because its construction was contingent on an equal contribution from Santa Cruz County, waited until the county appropriated it share early in 1916. Atwood then surveyed the site and engineered this concrete deck girder bridge. His design consisted of three two-girder 65' channel spans, with eight shallower 32' spans over the flood plain east of the channel. In May, a state work force began construction of the bridge under the direction of General Foreman F.W. Haynes. The crew completed the structures early the next year for a total cost of \$38,012, and although the design for the bridge was relatively simple, the workmanship of its forming, pouring and detailing was excellent. The Santa Cruz Bridge Number 1 carried highway traffic until a route realignment in 1927. It has since functioned as a county bridge in fair condition.</p>	
<p>8. HISTORICAL DATA</p> <p>One of the earliest of the major vehicular bridges undertaken by the State Engineer, the Santa Cruz Bridge was for decades a regionally important crossing in southern Arizona. Technologically, the bridge is significant as an outstanding representative of an unusual structural type. Although numerous concrete girder bridges were built throughout the state in the 1910s, 20s and 30s, most featured designs with four or more relatively shallow girders. The earliest bridges typically employed the two-girder designs, and of these only the Hell Canyon Bridge (1923), the Antelope Hill Bridge (1914) and the viaduct on the Cienega Bridge (1921) and the only two-girder structures identified in the inventory. Additionally, the Santa Cruz Bridge is the earliest and longest-span concrete girder bridge still in use on the state's road system. A visually striking structure, it is a significant early Arizona transportation-related resource.</p>	
<p>9. SIGNIFICANCE</p>	

NPS FORM 10-909 (4/88)

Historic American Buildings Survey / Historic American Engineering Record
National Park Service, U.S. Department of the Interior, P.O. Box 37127, Washington, DC 20013-7127

10. NAME(S) OF STRUCTURE
 Santa Cruz River Bridge Number 1
 11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION



LOCATION MAP
 TAKEN FROM DEPARTMENT OF TRANSPORTATION
 GENERAL HIGHWAY MAP



Bridge Record, Arizona City Streets and County Roads: 8166; Structures Section, Arizona Department of Transportation, Phoenix AZ.
 Second Biennial Report of the State Engineer of Arizona, 1914-1916 (Phoenix: The McNeal Company, 1916), pages 236, 528-533.
 Third Biennial Report of the State Engineer of Arizona, 1916-1918 (Phoenix: Arizona State Press, 1918), pages 195,202 131-133.
 Field inspection by Clayton Fraser, 23 February 1987.

13. INVENTORIED BY: Clayton B. Fraser
 AFFILIATION: Fraserdesign Loveland Colorado
 DATE: 1 April 1987



8166
SANTA CRUZ BRIDGE NO. 1
SANTA CRUZ COUNTY ARIZONA



21 VABM 4017 120 VABM 4193 119 118 117 VABM 3931