

HABS/HAER INVENTORY

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

1. NAME(S) OF STRUCTURE

Canyon Diablo Bridge

2. LOCATION

Abandoned grade of U.S. 66 over Canyon Diablo
Two Guns: SW1/4 S14 T20N R12E
Coconino County, Arizona

3. DATE(S) OF CONSTRUCTION

1914-15

4. USE (ORIGINAL/CURRENT)

highway bridge / abandoned

5. RATING

NRHP eligible: state significance

6. CONDITION

fair

owner: Coconino County

span number : 1
span length : 128.0'
total length: 146.0'
roadway wdt.: 16.0'

superstructure: reinforced concrete Luten arch w/ cantilevered roadway
substructure : concrete abutments and wingwalls on spread footings
floor/decking : concrete deck over earth fill
other feature : paneled concrete parapet wall (upstream); pierced concrete parapet wall (downstream); plain, tapered cantilever brackets.

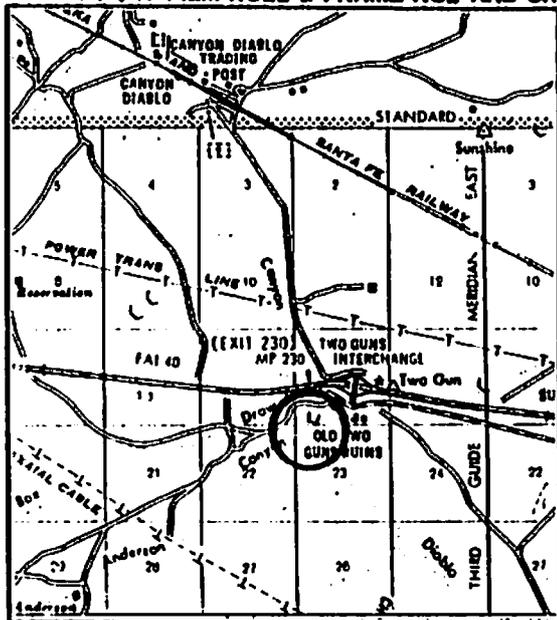
Canyon Diablo had formed a barrier to the Santa Fe Railroad, delaying its progress across northern Arizona in 1881 as the construction crew waited for bridge timbers. The Santa Fe Highway, which loosely followed the railroad, also encountered this rocky chasm just west of Two Guns. In 1914, Arizona State Engineer Lamar Cobb selected and surveyed the site for a bridge over the canyon and purchased plans and specifications from the Topeka Bridge and Iron Company of Kansas for \$500. Topeka designed a standard 128' Luten arch with a cantilevered roadway, similar to the Canyon Padre Bridge completed earlier that year. The volatile nature of the watercourse was illustrated by the concrete parapet walls; the downstream wall was pierced with slots, while the upstream wall was solid, to protect the roadway from floodwaters. Late in 1914, the state engineer's office let the construction contract to the lowest bidder, Thomas Maddock of Williams Arizona, for \$9000. Using concrete and reinforcing steel supplied by the state, Maddock built the Canyon Diablo Bridge that winter, and it was opened to traffic on March 17, 1915. It was abandoned in the 1930s.

Alternately known as the Santa Fe Highway (in Arizona) and the Old Trails Highway (its national appellation), this route has served historically as the principal east-west transcontinental route across northern Arizona. Only the Ocean-to-Ocean Highway, which passed through Yuma, Phoenix and Safford, carried more traffic in the state in the 1910s and 1920s. The Canyon Diablo Bridge is historically significant as an intact early remnant of this nationally important route. Technologically, the bridge is distinguished as only the second Luten arch built in Arizona, predated only a year by the Canyon Padre Bridge. Though now abandoned, the Canyon Diablo Bridge is an important early example of vehicular bridge construction in Arizona.

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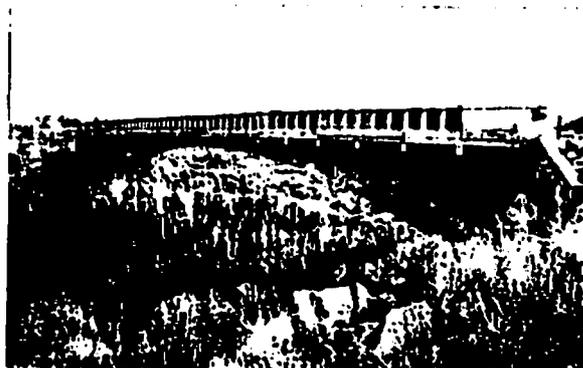
Canyon Diablo Bridge

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



LOCATION MAP

TAKEN FROM DEPARTMENT OF TRANSPORTATION
GENERAL HIGHWAY MAP



Second Biennial Report of the State Engineer of Arizona, 1914-1916 (Phoenix: The McNeil Company, 1916), pages 76-80.

Third Biennial Report of the State Engineer of Arizona, 1916-1918 (Phoenix: Arizona State Press, 1918), page 65.

Byrd Howell Granger, Arizona's Names (Tucson: Treasure Chest Publications, 1983), page 205.

Antique bridge files, Structures Section, Arizona Department of Transportation, Phoenix AZ.

Field inspection by Clayton Fraser, 7 October 1986.

13. INVENTORIED BY:

Clayton B. Fraser

AFFILIATION

Fraserdesign Loveland Colorado

DATE

1 April 1987

