See instructions in *How to Complete National Register Forms*.

### 1. Name
- **Historic**: Gillespie Dam Highway Bridge
- **And/or Common**: Gila River Bridge - Gillespie Dam

### 2. Location
- **Street & Number**: Rural
- **City, Town**: Gila Bend
- **State**: Arizona

### 3. Classification
- **Category**: Structure
- **Ownership**: Public
- **Status**: Occupied
- **Present Use**: Commercial

### 4. Owner of Property
- **Name**: Maricopa County
- **Street & Number**: Administration Building, Room 603, 111 S. Third Ave.
- **City, Town**: Phoenix
- **State**: Arizona

### 5. Location of Legal Description
- **Courthouse, Registry of Deeds, etc.**: Maricopa County Recorder's Officer
- **Street & Number**: 111 S. Third Avenue
- **City, Town**: Phoenix
- **State**: Arizona

### 6. Representation in Existing Surveys
- **Title**: Arizona Historic Engineering Site Inventory
- **Date**: May 19, 1978
- **Depository for Survey Records**: History of Engineering Program, Texas Tech University
- **City, Town**: Lubbock
- **State**: Texas
The Gillespie Dam Highway Bridge is located on the Gila River, about 23 miles north of Gila Bend, Arizona. It is a nine span through truss bridge of steel and concrete construction. Five of the spans are Parker type, riveted through trusses 200 feet in length, while four of the spans are riveted, Parker type trusses that are 160 feet long. Total length of the spans is 1,640 feet. The roadway extends 30 feet 6 inches past the end of the bridge at each end, for a total length of 1,701 feet. The deck of the bridge is concrete, poured over four rows of steel stringers. The roadway is 22 feet wide, with a 21 foot clear width. The nine through truss spans rest on ten large concrete piers sunk various depths into the river bed. These piers give the bridge extremely deep and solid foundations, ranging from 10 to 40 feet in depth. The steel used in the bridge weighs approximately 1,200 tons while almost 3,200 cubic yards of concrete were used in the concrete deck and piers. The load rating of the bridge is set to accommodate two 15-ton trucks abreast, with a 30 percent allowance for impact. The bridge is still in sound physical condition although it needs painting and some other minor maintenance.
The Gillespie Dam Highway Bridge, built in 1927, is a significant structure for two major reasons; its size and its strategic function. When completed, the bridge was the longest through truss bridge in the state of Arizona, and was also one of the longest bridges of any type in the state. The Gillespie Dam Highway Bridge also transformed the Yuma-Phoenix Highway into an all-weather route. Until the bridge was built, the traffic on this major east-west transportation artery was forced to cross the Gila River on the apron of the Gillespie Dam, which is several hundred yards upstream from the bridge site. This was an unsatisfactory route, since the annual flooding of the Gila River closed this major artery for several weeks each year. The construction of the Gillespie Dam Highway Bridge eliminated this awkward and dangerous situation and allowed a steady increase in east-west traffic.

The state of Arizona began to consider constructing a bridge across the Gila River at or near Gillespie Dam as early as mid-1925. By December of 1925, the state was taking bids on the structure. In February of 1926, the Lee Moor Construction Company of Tucson was awarded the contract of approximately $330,000. Eighteen months later, on August 1, 1927 the bridge was opened to traffic. The Gillespie Dam Bridge served faithfully as a major structure on U.S. 80, the Phoenix-Yuma Highway, until 1956. In that year, U.S. 80 was realigned and the old bridge reverted to county ownership. It still serves its original function, although at a lesser scale. It is an impressive structure and is one of a dozen or so surviving through truss bridges left in Arizona. If preserved and maintained the Gillespie Dam Highway Bridge could continue to serve the state for many more decades, at a minimal cost to the county road department.
GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 4.25 acres

QUADRANGLE NAME Spring Mountain, Arizona

QUADRANGLE SCALE 7.5'

UTM REFERENCES

ZONE EASTING NORTHING ZONE EASTING NORTHING

VERBAL BOUNDARY DESCRIPTION The nominated boundaries of this nomination shall be a line and all area 50' either side of a line, between Point A and Point B. This will create a rectangle 100' wide and 1,701' long, and the structures will be within this rectangle.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE CODE COUNTY CODE

STATE CODE COUNTY CODE

FORM PREPARED BY

NAME / TITLE Don Abbe, Project Manager

ORGANIZATION History of Engineering Program

Texas Tech University

DATE July 16, 1980

STREET & NUMBER P.O. Box 4089

TELEPHONE (806) 742-3591

CITY OR TOWN Lubbock

STATE Texas

STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE X LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

TITLE Acting State Historic Preservation Officer

DATE 19 MAR 81

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

REGISTERED BY:

DATE 5/5/81

ATTEST:

CHIEF OF REGISTRATION
<table>
<thead>
<tr>
<th>Continuation sheet</th>
<th>Bibliography</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item number</td>
<td>9</td>
</tr>
</tbody>
</table>


"Renovated Old Bridge Might Combat Floods. The Gila River Crossing Bridge May Be Replaced by a Bridge Five Times Its Size Which Might Cause Flooding on the Maricopa Road 22 Miles South of Phoenix." *Arizona Republic*. August 1, 1927.

"Seventeen Hundred Foot Bridge Over the Gila Near Gillespie Dam is Opened for Use." *Arizona Republic*. August 1, 1927.
Gillespie Dam Bridge (Gila River Bridge)

Old U.S. Highway 80 over the Gila River
6.7 miles south of Arlington; NE1/4 S28 T2S R5W
Maricopa County, Arizona

1926-27

Highway bridge / roadway bridge

Individually listed on NRHP; state significance

Superstructure: girders, riveted steel, through trusses
Substructure: concrete piers

Maricopa County, Arizona
6.7 miles south of Arlington; NE1/4 S28 T2S R5W
Old U.S. Highway 80 over the Gila River

The Arizona Highway Department began planning for a concrete girder bridge over the Gila River at this point even before Frank Gillespie completed his dam in 1921. In the interim, a novel crossing was devised in which autos were pulled by horse teams across an apron poured at the dam's downstream toe. Mindful of the problems encountered at other large-scale concrete bridges over the Gila, AHD in April 1925 contracted for sounding's and borings and then hired a consulting engineer to help locate and design the structure. For its superstructure, the engineers designed a series of Camelback through trusses weighing a total of 1175 tons. Each truss was composed of two 200-foot girders, a 120-foot girder, and an 80-foot girder. The piers could be placed on bedrock at a 25' depth. The total cost of $320,000 was exceeded when contractors bid over the original estimate. In January 1926, 11 contractors bid for the construction. AHD let the contract to the low bidder, Lee Moor Construction Company of El Paso, Texas. Moor began work on the piers immediately and completed the immense structure in July. Total cost: $370,000. After a routine reevaluation in 1956, the Gillespie Dam Bridge reverted to county bridge status, under which it now functions.

Prior to 1927, traffic on the Ocean-to-Ocean Highway at this point was often halted by flooding on the Gila River. The Gillespie Dam Bridge was thus strategically important to Arizona as it finally allowed all-weather travel over this vital transcontinental route. Technologically, the bridge is noteworthy as one of the longest vehicular structures in the state. The Gillespie Dam Bridge was the only steel structure in the state. The state of the art of the time called for multi-span vertical truss bridges in Arizona. The Gillespie Dam Bridge was therefore a novel design in the state.

The condition of the Gillespie Dam Bridge is good; sufficiency rating: 56.3. The bridge is 6.7 miles south of Arlington, NE1/4 S28 T2S R5W. Old U.S. Highway 80 over the Gila River. The bridge is 1926-27. The name of the structure is Gillespie Dam Bridge (Gila River Bridge). The owner is Maricopa County. The bridge is individually listed on the National Register of Historic Places and is of state significance.
10. NAME(S) OF STRUCTURE
Gillespie Dam Bridge (Gila River 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, 26 March 1987.

Bridge Record, Arizona City Streets and County Roads: 8021; Structures Section, Arizona Department of Transportation, Phoenix AZ.


13. INVENTORIZED BY:
Clayton B. Fraser

AFFILIATION
Fraserdesign Loveland Colorado

DATE
1 April 1987