HISTORIC BRIDGE INVENTORY

Mill Avenue Bridge

PROPERTY IDENTIFICATION

county	Maricopa	inventory number	09954
milepost	0.00	inventory route	Mill Avenue SB
location	0.2 mi S of Curry Road	feature intersected	Salt River
city/vicinity	Tempe	USGS quadrangle	Tempe
district	78	UTM reference	12.412480.3699692

STRUCTURAL INFORMATION

main span number	10	main span type	211
appr. span number	2	appr. span type	204
degree of skew	0	guardrail type	4
main span length	150.0	superstructure	concrete two-rib open spandrel arch
structure length	1577.0	substructure	concrete abutments and spill-through piers on spread footings
roadway width	36.0	floor/decking	concrete deck with asphalt overlay
structure width	46.8	other features	moulded concrete guardrails w/ pierced parapet walls and paneled bulkheads; decorative concrete vestibules beside roadway; cantilevered deck w/ moulded cantilever brackets

HISTORICAL INFORMATION

construction date	1931	designer/engineer	Arizona Highway Department
project number	FAP 2-B	builder/contractor	Lynch Canon Engineering Co., Los Angeles CA
information source	ADOT bridge records	structure owner	City of Tempe
alteration date(s)		alterations	

NATIONAL REGISTER EVALUATION

For additional information, see "Vehicular Bridges in Arizona 1880-1964" National Register Multiple Property Documentation Form

inventory score	86	NRHP eligibility	listed
		NRHP criteria	A x B ____ C x
		signif. statement	one of Arizona's most historically and technologically significant bridges

FORM COMPLETED BY

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31 October 2004

PHOTO INFORMATION

date of photo.: April 2002 view direction: north northeast photo no.: 02.04.27 02.04.24

CONSTRUCTION HISTORY

One of the first bridges undertaken by Territorial Engineer J.B. Girand was a major multiple-span structure over the Salt River in Tempe. Consisting of eleven 125-foot concrete arch spans, it was built in 1911-1913 by convict laborers from the territorial prison at Florence. The Tempe Bridge provided an all-weather crossing of the Salt to connect Phoenix with the eastern part of the state. Additionally, the bridge formed a pivotal link on the north-south territorial highway then under construction. The original Tempe Bridge functioned in place with occasional repairs, but its 18-foot width eventually proved to be an impediment to traffic at this congested crossing. In May 1928 a delegation of Tempe businessmen appeared before the Arizona Highway Commission with a request to replace the bridge with another parallel structure. The Commission, which had previously considered the matter, quickly concurred. Later that year AHD bridge engineer Ralph Hoffman designed a multi-span open spandrel concrete arch along the same lines of the earlier structure. The bridge was later realigned slightly to place the footings on a granite dike that extended beneath the river. With 16 spans of 150 feet, it extended almost 1600 feet, and its 36-foot deck width was double that of the earlier structure. Its superstructure was comprised of concrete arches, each with two open spandrel arch rings supported by solid concrete piers with bullnosed cutwaters.

On January 20, 1930, AHD let a contract to the Lynch-Canon Engineering Company to build the immense structure under Federal Aid Project 2B for almost $400,000. The Los Angeles contractors began work on the abutments and piers immediately and progressed steadily through the rest of the year. Completed and dedicated formally in July 1931, the Mill Avenue Bridge has since carried heavy traffic with only minor alterations. It has more recently been turned over to Maricopa County for use by local traffic.

SIGNIFICANCE STATEMENT

As the crossroads for three of Arizona's major highways, located as the principle all-weather crossing over the Salt River in the state's largest metropolitan area, both the 1913 and 1931 Tempe bridges have provided a pivotal link in the state's transportation system. Their importance to vehicular traffic in Arizona can thus hardly be overstated. The Mill Avenue Bridge is technologically significant as having the longest total and span lengths among the four open spandrel vehicular arches in Arizona and, at the time of its completion, was the longest highway bridge in the state. It is one of Arizona's most historically and technologically significant vehicular structures.

NATIONAL REGISTER EVALUATION

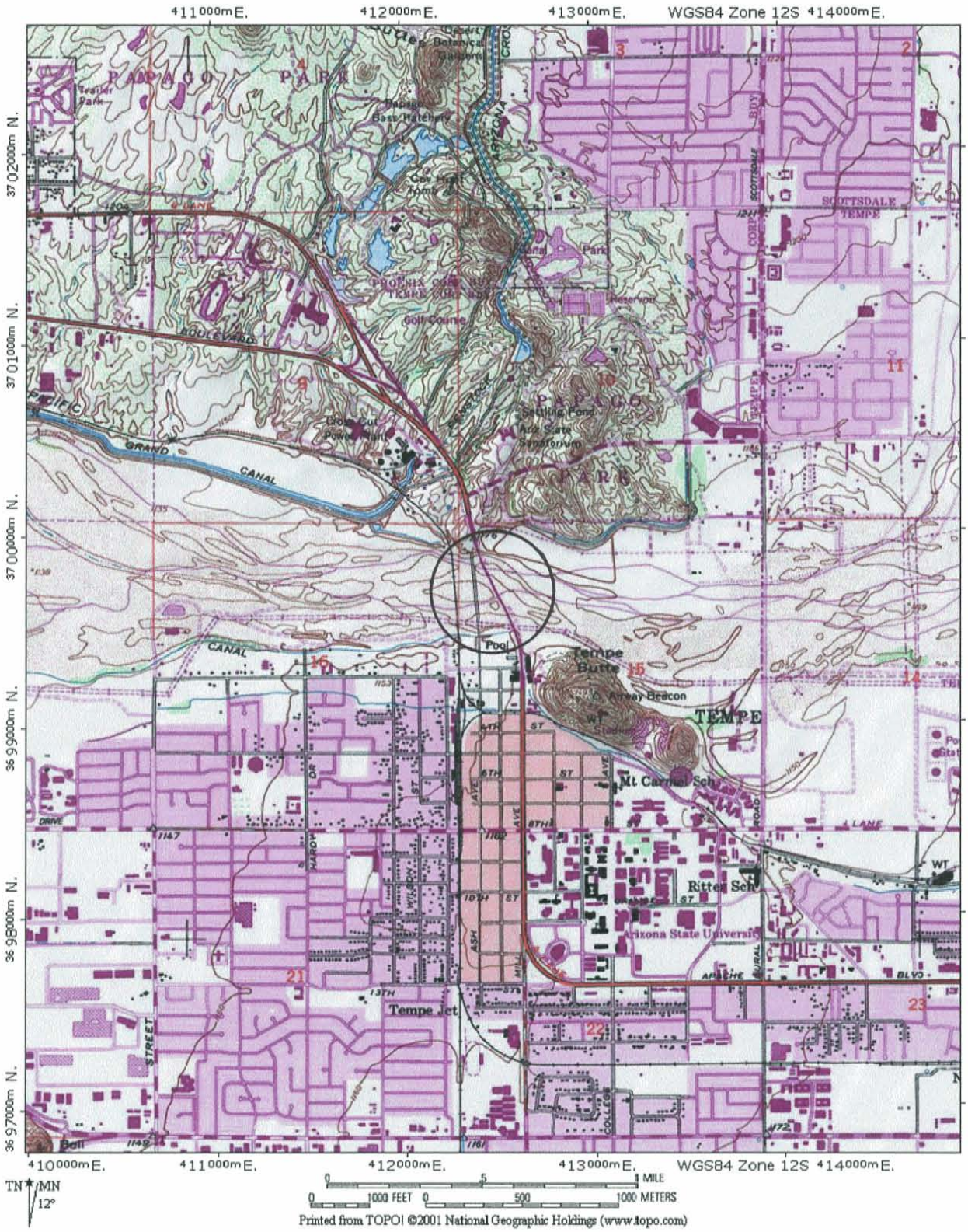
TECHNOLOGICAL SIGNIFICANCE
___ represents the work of a master
___ possesses high artistic values
_x_ represents a type, period or method of construction

HISTORICAL SIGNIFICANCE
___ associated with significant persons
_x_ associated with significant events or patterns
___ contributes to historical district

NATIONAL REGISTER CRITERIA
_x_ Criterion A
___ Criterion B
_x_ Criterion C

NATIONAL REGISTER ELIGIBILITY
individually eligible _x_ yes ___ no
contributes to district ___ yes _x_ no

AREA OF SIGNIFICANCE: Transportation; Engineering
PERIOD OF SIGNIFICANCE: 1931-1964
THEME(S): Transportation: Highways



Location Map