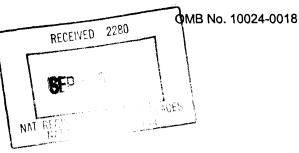
1149



National Register of Historic Places Registration Form

This form is for use in nominating or requesting determination for individual properties and districts. See instruction in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking ``x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter ``N/A" for ``not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property		
historic name Santa Fe Avenue Bridge		
other names/site number <u>CDOT No. K-18-R; 5PE3938</u>	······································	
2. Location		
street & number <u>US Business Highway 50 at milepost 1.33</u> city or town <u>Pueblo</u>		[N/A] vicinity
state Colorado code CO county Pueblo c	code <u>101</u>	zip code
3. State/Federal Agency Certification		
As the designated authority under the National Historic Preservation Act, as amend [X] nomination [] request for determination of eligibility meets the documentation National Register of Historic Places and meets the procedural and professional remy opinion, the property [X] meets [] does not meet the National Register of considered significant [] nationally [] statewide [X] locally. ([] See continuation Signature of certifying official/Title State Historic Preservation Office, Colorado Historical Society State or Federal agency and bureau	n standards for equirements se riteria. I recor n sheet for add	r registering properties in the et forth in 36 CFR Part 60. In mmend that this property be itional comments.)
In my opinion, the property [] meets [] does not meet the National Register criter ([] See continuation sheet for additional comments.)	ria.	
Signature of certifying official/Title		Date
State or Federal agency and bureau		·
4. National Park Service Certification I hereby certify that the property is: [Ventered in the National Register [] See continuation sheet. [] determined eligible for the National Register [] See continuation sheet. [] determined not eligible for the National Register. [] removed from the National Register [] other, explain [] See continuation sheet.	Beall	Date of Action

anta Fe Avenue Bridge		Pueblo County, Colorado			
lame of Property		County/State			
i. Classification					
Ownership of Property Check as many boxes as apply)	Category of Property (Check only one box)	(Do not count previous)	y listed resources.)	thin Property	
] private] public-local	[] building(s) [] district	Contributing	Noncontributing	buildings	
[X] public-State [] public-Federal	[] site [X] structure [] object	0	0	sites	
	[] object	1	0	structures	
		0	0	objects	
		1	0	Total	
Name of related multiple (Enter "N/A" if property is not part of a multiple	property listing. property listing.)		contributing listed in the I		
Highway Bridges in Colorado		Negister.			
		_0			
6. Function or Use					
Historic Function (Enter categories from instructions)		Current Functi (Enter categories from inst		·	
Road-related		Road-related			
	·				
7. Description					
Architectural Classificati (Enter categories from instructions)	on	Materials (Enter categories from inst	tructions)		
Other: Steel, rigid-connec	ted Pennsylvania	foundation			
through truss		walls			
		roof			
		other Steel			
		Concret			
		Asphalt			

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

DESCRIPTION

Location: US Business Highway 50 at milepost 1.33 in Pueblo

Setting: Over Arkansas River

Structure length: 286 feet Structure width: 40.80 feet Roadway width: 26.80 feet

Main span number: 1

Main span length: 280 feet

Superstructure: Steel, rigid-connected Pennsylvania through truss

Substructure: Concrete abutments

Floor/decking: Concrete deck with asphalt overlay

Other features: Upper chord - 2 built-up channels with cover plate and double lacing

Lower chord - 2 built-up angles with batten plates

Vertical - built-up I-beam

Diagonal – 2 channels with lacing Floor beams and stringers steel I-beam

Steel flex beam guardrails

Erected: 1924

Designer: H.S. Crocker

Fabricator: Virginia Bridge & Iron Company

Contractor: Pueblo Bridge & Construction Company

Alterations: Guardrails replaced with flex beams circa 1980.

Santa Fe Avenue Bridge	Pueblo County, Colorado	
Name of Property	County/State	
8. Statement of Significance		
Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)	Areas of Significance (Enter categories from instructions)	
DA A Donarda in a consiste desirab consiste de la basica consiste	Transportation	
[X] A Property is associated with events that have made a significant contribution to the broad patterns of our history.	Engineering	
[] B Property is associated with the lives of persons significant in our past.	Periods of Significance	
[X] C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and	1924-1952	
distinguishable entity whose components lack individual distinction.	Significant Dates	
[] D Property has yielded, or is likely to yield, information important in prehistory or history.	N/A	
Criteria Considerations (Mark ``x" in all the boxes that apply.)	Significant Person(s) (Complete if Criterion B is marked above).	
Property is:	N/A	
[] A owned by a religious institution or used for religious purposes.	O. M I. A CCU. (1)	
[] B removed from its original location.	Cultural Affiliation N/A	
[] C a birthplace or grave.	<u>N/A</u>	
[] D a cemetery.		
[] E a reconstructed building, object, or structure.	Architect/Builder	
	Crocker, H.S.	
[] F a commemorative property.	Virginia Bridge & Iron Company Pueblo Bridge & Construction Company	
[] G less than 50 years of age or achieved significance within the past 50 years.	Tuebio Bridge & Constituction Company	
Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)		
9. Major Bibliographical References		
Bibliography (Cite the books, articles and other sources used in preparing this form on one or more	continuation sheets.)	
Previous documentation on file (NPS):	Primary location of additional data:	
•	[X] State Historic Preservation Office	
[] preliminary determination of individual listing (36 CFR 67) has been requested	[X] Other State Agency	
[] previously listed in the National Register	[] Federal Agency	
[] previously determined eligible by the National Register	[] Local Government	
[] designated a National Historic Landmark [] recorded by Historic American Buildings Survey	[] University	
#	[] Other	
[] recorded by Historic American Engineering Record #	Name of repository: Colorado Historical Society Colorado Dept. of Transportation	

National Register of Historic Places Continuation Sheet

Section number 8 Page 2

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

SIGNIFICANCE

The 1924 Santa Fe Avenue Bridge located on US Business Highway 50, in Pueblo, meets the registration requirements under Criterion A in the area of Transportation and under Criterion C in the area of Engineering as set forth in the *Highway Bridges in Colorado*, Multiple Property Documentation Form. The period of significance begins in 1924 with the completion of the bridge and extends through its historic use to 1952, a date fifty-years-of-age in keeping with National Register criteria.

A disastrous flood in 1921 represented a pivotal point in Pueblo County history. The extent of flood damage was well beyond the city's means to repair, and in April 1922 Colorado Governor Oliver Shoup convened a special session of the state legislature to plot the state's participation in the relief efforts. The legislature approved the establishment of the Pueblo Conservancy District to build an extensive flood control system in and around Pueblo. Despite some opposition against the district and the flood control strategy, plans continued for its implementation. Undertaken over a three year period, the \$4.5 million rechanneling of the Arkansas River and the replacement of numerous structures sparked a revitalization of Pueblo that remains evident in the city's urban fabric today. The construction of the Santa Fe Avenue Bridge was as an integral part of this massive public works program.

In March 1923 the Dayton Morgan Engineering Company of Dayton, Ohio issued its "Official Plan" for flood control, which called for extensive channelization of the river in a concrete-lined canal. Under Morgan's plan, the bridges destroyed by the flood would be reconstructed over the new channel. The plan described the proposed new structure for Santa Fe Avenue:

A single span steel highway bridge will be erected on Santa Fe Avenue where it will cross the new channel. The bridge will be 280 feet long, and have a 22 foot roadway with 6 foot sidewalks. Each abutment will be built on a solid rock foundation and within lines of the levee, entirely outside of the waterway. Three feet of clearance will be provided between the extreme high water line and the bridge.

For the actual design of the bridge, the Pueblo Conservancy District hired Denver consulting engineer H.S. Crocker. In November 1923 the district issued a call for bids. The substructure and the superstructure of the Santa Fe Bridge were included as separate line items in a forty-nine item list of projects. After receiving the contract for both portions of the bridge, the Pueblo Bridge & Construction Company began work early the next year. The contractor used a steel truss fabricated by Virginia Bridge Company. The essentially unaltered Santa Fe Avenue Bridge continues to carry traffic on what is now US Business Highway 50. An adjacent bridge on Interstate Highway 25 now serves as the primary highway crossing of the Arkansas River in Pueblo.

National Register of Historic Places Continuation Sheet

Section number 8 Page 3

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

Engineering

The bridge is technologically significant for its long span truss design. The Colorado Highway Department erected numerous polygonal chorded trusses ranging in span length from 125 to 200 feet between 1922 and 1945. With its 1924 construction date and 280 foot span, the Santa Fe Avenue Bridge is distinguished as the oldest and the longest such truss remaining in the state.

As delineated by consulting engineer H.S. Crocker, the Santa Fe Avenue Bridge was configured as a rigid-connected Pennsylvania through truss, supported by reinforced concrete abutments. The truss extended 280 feet between the bearing pins and carried a 26 foot wide roadway. It was subdivided into eight 35 foot long panels. The upper chords and inclined endposts consisted of two back-to-back, built up steel channels, covered by a continuous steel plate on top and joined by double bar lacing underneath. Each vertical was comprised of four angles, riveted to a continuous plate to form a built-up I-beam. The diagonals were two front-to-front channels with double lacing, while the lower chords included two built-up angles with batten plates. All of these web members were field riveted using heavy steel gusset plates. To brace the two webs laterally, overhead struts extended above the roadway at the panel points. The interior and portal struts were made up of steel lattices. Wide flange floor beams were riveted to the verticals at the panel points; these were supported wide flange stringers, on which the concrete slab deck rested. A pedestrian sidewalk cantilevered outside of the north web on bracket extensions of the floor beams. The massive truss consumed over 480,000 pounds of structural steel.

Historical Background

Spanish for "town," the settlement of Pueblo started out as an adobe trading post built in the 1840s near the confluence of Fountain Creek and the Arkansas River. Located where the Santa Fe trail intersected the Cherokee and Trappers Trails, the fortified post became known as Fort Pueblo by prospectors who congregated there for protection from the Indians in 1858-1859. The town itself was established with Colorado's first gold rush, and it grew rapidly as a supply point for miners headed into the mountains. Pueblo's future was assured in 1872 when General William Palmer laid narrow gauge tracks for his Denver & Rio Grande Railroad south from Colorado Springs.

Although the railroad did not create Pueblo as it had Colorado Springs, it did expand the town to suit its own purposes. Built by a D&RG subsidiary, the Central Colorado Improvement Company, a new settlement called South Pueblo "rose like magic" south of the Arkansas River. In South Pueblo, Palmer built the Colorado Fuel & Iron plant to produce materials for his expanding railroad empire. The location of Pueblo and South Pueblo on either side of the

National Register of Historic Places Continuation Sheet

Section number 8 Page 4

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

Arkansas River meant that residents were compelled to cross the river frequently, and bridges were soon built at major crossings. The town's principal thoroughfare over the Arkansas was Santa Fe Avenue.

In 1874, Pueblo undertook its first major river revetment project, straightening and redirecting the Arkansas into a new channel. The result was that the existing bridges were no longer functional and the city's two halves were isolated. "The want of a bridge over this new channel is a serious detriment to those doing business on Santa Fe Avenue and in fact, to almost all of the businessmen of our city," the *Pueblo Chieftain* complained in November 1874. After studying the matter, the city concluded that the bridge was actually the responsibility of Pueblo County. After receiving an urgent petition, the county commissioners agreed to build a new bridge. Made of timber, it was subject to damage each time the Arkansas flooded. Finally, a multiple-span, all-metal truss bridge was built. After the turn of the 20th century, the Santa Fe Avenue Bridge remained the principal link between Pueblo and South Pueblo. It formed a pivotal point when in 1910 the State Highway Commission designated State Primary Routes 4 and 26 through town. During the 1910s, the bridge carried increasingly heavy vehicular traffic on the Great North and South Road.

On the night of June 3, 1921, floodwaters roared down the Arkansas and St. Charles rivers and their tributary streams throughout Pueblo County. A wall of water some 13 feet high swept through Pueblo's downtown, killing almost 300 people and causing \$10 million in property damage in Pueblo and an additional \$15 million in damage further along the Arkansas River to the Kansas state line. Most of the existing vehicular and railroad bridges in the county and virtually all of the major bridges in the city were severely damaged, destroyed, or washed away.

One of the casualties of the flood was the Santa Fe Avenue Bridge, which lost several of its spans into the river. "When dawn streaked the eastern skies on the morning of June 4,1921, Puebloans saw human lives and property drifting down the mile-wide stretch of thick, muddy waters of the Arkansas," *Pueblo Star-Journal* staff writer Ralph Taylor reported.

While the nightmare of a dozen uncontrollable fires lighted up the vast stream of destruction which was filled with screaming and terror-stricken men, women and children, man became serious as never before. It was unanimously agreed that the Pueblo flood should never recur.

The city quickly began to regroup and consider an appropriate course of action. "Pueblo's great flood throws upon the people of this city the necessity of rebuilding about one-seventh of its present area," the *Pueblo Chieftain* stated. "The choice was between indefinite and purposeless reconstruction and building in accordance with a definite purpose and plan." In September, the city council hired the Dayton Morgan Engineering Company of Dayton, Ohio,

NPS Form 10-900a (Rev. 8/86)

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number	8	Page	5	
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Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

to prepare a comprehensive study of flood control measures. That winter the city undertook stopgap repairs while the studies were underway. One salvageable truss span from the old Santa Fe Avenue Bridge was moved and incorporated into the Stockyards Bridge, which itself had been crippled by the flood.

National Register of Historic Places Continuation Sheet

Section number 9 Page 6

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

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National Register of Historic Places Continuation Sheet

Section number 9 Page 8

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

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Santa Fe Avenue Bridge Name of Property	Pueblo County, Colorado County/State	
10. Geographical Data		
Acreage of Property less than one		
UTM References (Place additional UTM references on a continuation sheet.)		•
1. 13 534450 4233880 Zone Easting Northing	3. Zone l	Easting Northing
2. Zone Easting Northing	4. Zone	Easting Northing
	[] See conf	tinuation sheet
Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)		
Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)		
11. Form Prepared By		
name/title Office of Archaeology and Historic Pres	ervation and Cla	ay Fraser, principal
organization Colorado Historical Society and Fras	er Design	date May 21, 2002
street & number_1300 Broadway		telephone 303-866-4681
city or town Denver s	tate CO	zip code <u>80203</u>
Additional Documentation		
Submit the following items with the completed for	n:	
•	11.	
Continuation Sheets		
Maps A USGS map (7.5 or 15 minute series) indicating the prop	perty's location.	
A Sketch map for historic districts and properties having		nerous resources.
Photographs Representative black and white photographs of the pro-	perty.	
Additional Items (Check with the SHPO or FPO for any additional items)		
Property Owner		
(Complete this item at the request of SHPO or FPO.)		
name Colorado Department of Transportation	·	
street & number 4201 E. Arkansas Avenue		telephone
city or town Denver	state CO	zip code 80222

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.

National Register of Historic Places Continuation Sheet

Section number 10 Page 9

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The bridge is located on US Business Highway 50 at milepost 1.33. The boundaries of this nomination consist of a rectangle of land 10 feet out in each direction from the footprint of the bridge.

BOUNDARY JUSTIFICATION

The nomination includes all the land directly and historically associated with the bridge.

PHOTOGRAPH LOG

The following information pertains to photograph numbers 1-3:

Name of Property: Santa Fe Avenue Bridge

Location: Pueblo County, Colorado

Photographer: Clayton Fraser Date of Photographs: March 2000

Negatives: Colorado Department of Transportation

Photo No. Photographic Information

- 1 View to southeast through bridge
- 2 View to north of roadway
- 3 View to north of bridge plate

National Register of Historic Places Continuation Sheet

Section number ___ Page 10_

Santa Fe Avenue Bridge Pueblo County, Colorado Highway Bridges in Colorado, MPS

USGS TOPOGRAPHIC MAP

Northeast Pueblo Quadrangle, Colorado 7.5 Minute Series

