United States Department of the Interior National Park Service

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.

Colorado River Bridge		Mesa County, Colorado County/State		
Name of Property				
5. Classification				
Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box)	Number of (Do not count previou	Resources wit	thin Property
[] private [] public-local	[] building(s) [] district	0	0	buildings
[X] public-State [] public-Federal	[] site [X] structure [] object	0	0	sites
	[1 00,000	1	0	structures
		0	0	objects
		1	0	Total
Name of related multiple (Enter "N/A" if property is not part of a multiple			contributing in the N	
Highway Bridges in Colora	<u>do</u>	rtegister.		
		_0		
6. Function or Use				
Historic Function (Enter categories from instructions)		Current Funct (Enter categories from ins		
Road-related		Road-related	·	
7. Description				
Architectural Classification (Enter categories from instructions)	on	Materials (Enter categories from in	structions)	
truss		walls	· · · · · · · · · · · · · · · · · · ·	
		roof		
		other Steel		
		Concre		
		Asphal	t	

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

Colorado River Bridge Name of Property	Mesa County, Colorado County/State		
	County/State		
8. Statement of Significance	The state of the s		
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)		
register risurig.)	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 distinguishable entity whose components lack individual distinction.	1945-1952 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.			
[] B removed from its original location.	Cultural Affiliation N/A		
[] C a birthplace or grave.	11//		
[] D a cemetery.			
[] E a reconstructed building, object, or structure.	Architect/Builder		
	Colorado Department of Highways		
[] F a commemorative property.	Minneapolis-Moline Power Implement Co Horner, A.S.		
[] G less than 50 years of age or achieved significance within the past 50 years.	Tiomer, A.S.		
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 c	continuation sheets.)		
Previous documentation on file (NPS):	Primary location of additional data:		
[] preliminary determination of individual listing (36 CFR 67) has been requested	[X] State Historic Preservation Office [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	[] University		
[] recorded by Historic American Buildings Survey	[] Other		
# [] recorded by Historic American Engineering Record #	Name of repository: Colorado Historical Society Colorado Dept. of Transportation		

Colorado River Bridge	Mesa County, Colorado
Name of Property	County/State
10. Geographical Data	
Acreage of Property less than one	
UTM References (Place additional UTM references on a continuation sheet.)	
1. 12 741970 4358150 Zone Easting Northing	3. Zone Easting Northing
2. Zone Easting Northing	4. Zone Easting Northing
	[] See continuation 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 F	Preservation and Clay Fraser, principal
organization Colorado Historical Society and F	
street & number 1300 Broadway	telephone 303-866-4681
city or town Denver	state CO zip code 80203
Additional Documentation	
Submit the following items with the completed	form:
Continuation Sheets	
Maps A USGS map (7.5 or 15 minute series) indicating the A Sketch map for historic districts and properties have	
Photographs Representative black and white photographs of the	e property.
Additional Items (Check with the SHPO or FPO for any additional item	ns)
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.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Colorado River Bridge Mesa County, Colorado Highway Bridges in Colorado, MPS

DESCRIPTION

Location: Interstate Highway 70 Frontage Road at milepost 62.90, one mile east of De Beque

Setting: Over Colorado River

Structure length: 407 feet Structure width: 31.70 feet Roadway width: 30 feet

Main span number: 2

Main span length: 200 feet

Superstructure: Steel, rigid-connected Parker through truss

Substructure: Concrete abutments, wingwalls and piers with bullnosed cutwaters

Floor/decking: Concrete deck with asphalt overlay

Other features: Upper chord – 2 channels with cover plate and double lacing

Lower chord – 2 channels with batten plates

Vertical and diagonal - wide flange

Floor beams and stringers – steel I beam

Steel pipe quardrails

Erected: 1945

Designer: Colorado Department of Highways

Fabricator: Minneapolis-Moline Power Implement Company

Contractor: A.S. Horner

Alterations: None

NPS Form 10-900a (Rev. 8/86) OMB No. 1024-0018

United States Department of the InteriorNational Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 2

Colorado River Bridge Mesa County, Colorado Highway Bridges in Colorado, MPS

SIGNIFICANCE

The 1945 Colorado River Bridge on Interstate Highway 70 Frontage Road, 1 mile east of De Beque, 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 1945 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.

Because the existing De Beque Bridge at the crossing was already beginning to form a bottleneck to interstate traffic, the Colorado Highway Department (CHD) wanted to replace it in the early 1940s, but the embargo on strategic materials during World War II prevented construction. After the war ended, CHD was finally able to fund a replacement bridge under Federal Aid Project 210-C(I) and contracted with A.S. Horner to erect the bridge. Using steel superstructures fabricated by the Minneapolis-Moline Power Implement Company, Horner built the bridge in 1945. The Colorado River Bridge, now functioning as a portion of Interstate Highway 70's frontage road, remains in place at this rural crossing in an essentially unaltered condition.

One of the first major bridge projects undertaken by the State Engineer's Office was a long-span, wrought iron truss bridge over the Colorado River at De Beque. Built in 1891-1892 by the Missouri Valley Bridge & Iron Works, its 250 foot span distinguished it among Colorado's early wagon bridges, and it served as a regionally important crossing of the Colorado River in the late 19th and early 20th centuries. In 1911, when the newly formed Colorado Highway Commission designated its first state road system, it recognized the De Beque Bridge as a pivotal point on State Primary Road No. 11.

In 1922, the US Bureau of Public Roads approved Colorado's first federal aid highway system. Of the 48,000 miles of roads in the state, some 3,360 were declared as state highways, under the aegis of CHD. State Primary Road No. 11 was redesignated as State Highway 4. Three years later, CHD again renumbered the state's routes to integrate with the newly designated federal highway network, and State Highway 4 was incorporated into US Highway 40 South from Colorado Springs to Grand Junction. When CHD upgraded the highway in the 1930s and 1940s, it further bolstered the road's importance. As an integral part of this endeavor, the 1945 Colorado River Bridge is important for its contribution to Colorado transportation history.

Engineering

The bridge is technologically noteworthy as an intact example of CHD standard truss design. The highway department erected numerous Parker trusses between 1922 and 1945 at highway river crossings throughout the state, ranging in span length from 125 to 200 feet.

NPS Form 10-900a (Rev. 8/86) OMB No. 1024-0018

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 3

Colorado River Bridge Mesa County, Colorado Highway Bridges in Colorado, MPS

Subsequent attrition of these long span bridges has been severe, and only eight Parker through trusses remain in place on Colorado's highways. The well-preserved Colorado River Bridge is one of the few surviving examples of what was once a mainstay structural type.

The original De Beque Bridge consisted of a 250 foot pin-connected Baltimore truss and a 150 foot pinned Pratt truss, that made up an overall length of 400 feet. For the new bridge, CHD engineers delineated a pair of 200 foot trusses, with an overall length of a little more than 400 feet and a roadway width of 30 feet. Its rigid-connected Parker trusses were supported by reinforced concrete abutments and piers with bullnosed cutwaters. The trusses' upper chords and inclined end posts consisted of two back-to-back 12 inch steel channels, covered by a continuous 3/8 inch steel plate on top and joined by bar lacing underneath. The verticals, diagonals and sub-struts were 10 inch wide flanges, braced laterally by a laced two angle member that extended horizontally across two of the central panels. The lower chords were made up of two back-to-back 12 inch channels with batten plates. All of these web members were field riveted, using 3/8 inch steel gusset plates.

To brace the two webs laterally, overhead struts extended 16 feet above the roadway at the panel points. The interior struts consisted of two back-to-back pairs of 3x5 inch angles, joined by bar lacing and braced underneath by latticed panels. The portal struts were heavily gusseted, steel angle lattices, with the lower chords angled downward toward the end posts to form integral kneebraces. Wide flange floor beams were riveted to the verticals at the panel points; these supported wide flange stringers, on which the concrete slab deck rested. This 8 inch thick deck was flanked on each side by an integrally poured concrete curb and steel lattice guardrail with steel plate hub rail. The truss was simply supported on its four corners by heavy cast steel bearing shoes, which were fixed on one end and rocking on the other and anchor bolted to the abutments.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 4

Colorado River Bridge Mesa County, Colorado Highway Bridges in Colorado, MPS

BIBLIOGRAPHY

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- Eaton, William R. "Across the Continental Divide Three Times in One Day." *Colorado Highways 4*:0, September 1925.
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- "News of the Month." Colorado Highways 9:6, June 1931.
- Waddell, J.A.L. Bridge Engineering. New York: John Wiley and Sons, 1916.
- Wiley, Marion C. The High Road. Denver: Colorado Highway Department, 1976.

NPS Form 10-900a (Rev. 8/86) OMB No. 1024-0018

United States Department of the InteriorNational Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 5

Colorado River Bridge Mesa County, Colorado Highway Bridges in Colorado, MPS

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The bridge is located on Interstate Highway 70 Frontage Road at milepost 62.90. 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: Colorado River Bridge

Location: Mesa County, Colorado

Photographer: Clayton Fraser Date of Photographs: September 1998

Negatives: Colorado Department of Transportation

Photo No. Photographic Information

- 1 View to south of roadway
- 2 View to northeast through bridge
- 3 View to southeast through bridge

United States Department of the Interior National Park Service

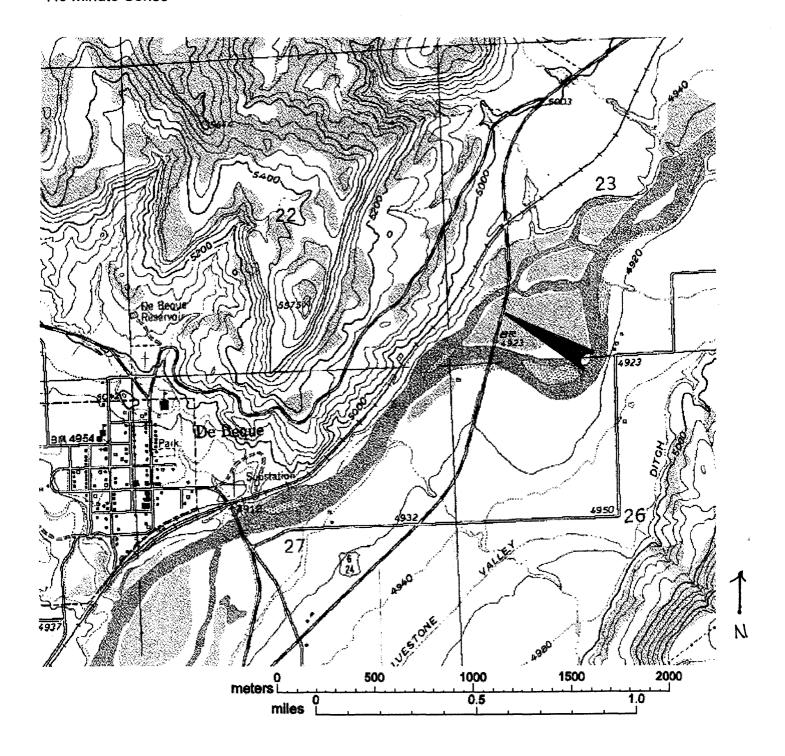
National Register of Historic Places Continuation Sheet

Section number ___ Page 6_

Colorado River Bridge Mesa County, Colorado Highway Bridges in Colorado, MPS

USGS TOPOGRAPHIC MAP

De Beque Quadrangle, Colorado 7.5 Minute Series



UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: ADDITIONAL DOCUMENTATION
PROPERTY Colorado River Bridge NAME:
MULTIPLE Highway Bridges in Colorado MPS NAME:
STATE & COUNTY: COLORADO, Mesa
DATE RECEIVED: 5/07/03 DATE OF PENDING LIST: DATE OF 16TH DAY: DATE OF 45TH DAY: 6/21/03 DATE OF WEEKLY LIST:
REFERENCE NUMBER: 02001154
REASONS FOR REVIEW:
APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N
COMMENT WAIVER: N
ABSTRACT/SUMMARY COMMENTS:

Additional Documentation Accepted

RECOM./CRATERIA	NI A
REVIEWER Calou () eal ()	DISCIPLINE / tolowy
TELEPHONE	DATE $\frac{6/20/33}{}$

 $\hbox{\tt DOCUMENTATION see attached comments Y/N see attached SLR Y/N}$

UTM References

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Zone

1.

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

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Section number 10 Page 1

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Colorado River Bridge Mesa County/ Colorado Highway Bridges in Colorado MPS

This additional documentation corrects an erroneous UTM reference contained in the original nomination. The boundary justification remains unchanged.

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [X] nomination [] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [] nationally [] statewide [X] locally. ([] See continuation sheet for additional comments.)
Signature of celtifying official/Hitle Deputy State Historic Preservation Officer Offi
In my opinion, the property [] meets [] does not meet the National Register criteria. ([] See continuation sheet for additional comments.)
Signature of certifying official/Title Date
State or Federal agency and bureau