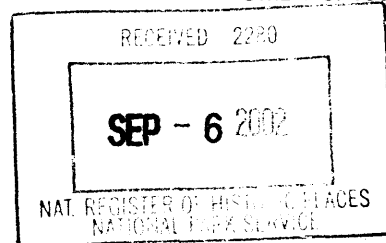


United States Department of the Interior
National Park Service

1135



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 Plum Bush Creek Bridge

other names/site number CDOT No. F-22-F; 5WN116

2. Location

street & number US Highway 36 at milepost 138.16 [N/A] not for publication

city or town Last Chance [X] vicinity

state Colorado code CO county Washington code 121 zip code

3. State/Federal Agency Certification

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.)

Georgina Centigaglia State Historic Preservation Officer August 19, 2002 Date
Signature of certifying official/Title

State Historic Preservation Office, Colorado Historical Society
State or Federal agency and bureau

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

4. National Park Service Certification

I hereby certify that the property is:

- entered 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.

Edson H. Beall Signature of the Keeper 10/15/02 Date of Action

Plum Bush Creek Bridge
Name of Property

Washington County, Colorado
County/State

5. Classification

Ownership of Property

(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property

(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

(Do not count previously listed resources.)

Contributing	Noncontributing	
0	0	buildings
0	0	sites
1	0	structures
0	0	objects
1	0	Total

Name of related multiple property listing.

(Enter "N/A" if property is not part of a multiple property listing.)

Highway Bridges in Colorado

Number of contributing resources previously listed in the National Register.

0

6. Function or Use

Historic Function

(Enter categories from instructions)

Road-related

Current Functions

(Enter categories from instructions)

Road-related

7. Description

Architectural Classification

(Enter categories from instructions)

Other: Concrete rigid frame

Materials

(Enter categories from instructions)

foundation
walls
roof
other Concrete
Asphalt

Narrative Description

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

Plum Bush Creek Bridge
Name of Property

Washington County, Colorado
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.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- 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.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

Areas of Significance

(Enter categories from instructions)

Transportation

Engineering

Periods of Significance

1938-1952

Significant Dates

N/A

Significant Person(s)

(Complete if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

Colorado Department of Highways

Peter Kiewit Sons Construction Company

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):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey

- recorded by Historic American Engineering Record

Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local Government
- University
- Other

Name of repository:

Colorado Historical Society

Colorado Dept. of Transportation

Plum Bush Creek Bridge
Name of Property

Washington County, Colorado
County/State

10. Geographical Data

Acreege of Property less than one

UTM References

(Place additional UTM references on a continuation sheet.)

1. 13 624647 4399676
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 Preservation and Clay Fraser, principal

organization Colorado Historical Society and Fraser Design date May 21, 2002

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 property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

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 USC. 470 et seq).

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Plum Bush Creek Bridge
Washington County, Colorado
Highway Bridges in Colorado, MPS

Section number 7 Page 1

DESCRIPTION

Location: US Highway 36 at milepost 138.16, two-and-one-half miles east of the junction with State Highway 71.

Setting: The east-west bridge crosses Plum Bush Creek in open high plains grasslands.

Structure length: 73 feet
Structure width: 33.5 feet
Roadway width: 30 feet

Main span number: 1
Main span length: 58 feet

Superstructure: Concrete rigid frame
Substructure: Concrete abutments and wingwalls
Floor/decking: Concrete deck with asphalt overlay
Other features: Colorado Department of Highways standard slotted concrete guardrails

Erected: 1938
Designer: Colorado Department of Highways
Fabricator: None
Contractor: Peter Kiewit Sons Construction

Alterations: None

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Plum Bush Creek Bridge
Washington County, Colorado
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SIGNIFICANCE

The 1938 Plum Bush Creek Bridge on US Highway 36, just east of Last Chance, meets the registration requirements under Criteria A and C as set forth in *Highway Bridges in Colorado*, Multiple Property Documentation Form. The bridge is eligible in the area of transportation for its association with the development of US Highway 36, an important tourist and commercial route linking Denver and the eastern plains of Colorado with communities in Kansas and the Midwest. The period of significance begins in 1938 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.

The Plum Bush Creek Bridge is also eligible in the area of engineering. The bridge is a particularly well preserved example of a concrete rigid frame bridge. Concrete rigid frame bridges could carry heavy loads and their basic design permitted modification in span length and skew. The Plum Bush Creek is a rare surviving example of the type in rural Colorado.

BRIDGE ENGINEERING

The first concrete rigid frame bridge in America was designed in 1922 by engineer Arthur G. Hayden for the park commission of Westchester County, New York. Comprised of a concrete beam superstructure tied rigidly to the abutments with steel reinforcing bars, rigid frame bridges differed materially from conventional simply supported spans. "A clear conception of a typical rigid frame concrete bridge may be obtained by first visualizing an ordinary simple span bridge supported by bearing on two abutments," a 1935 concrete manual stated. "If the bearing is replaced with concrete that continues monolithically from the abutments to the deck, the altered structure becomes a frame with rigid corners—a structure generally called a *rigid frame concrete bridge*." Because its construction was relatively labor-intensive, this bridge configuration became popular for federal relief projects during the 1930s. Both picturesque and practical, the flat-arch design appealed to proponents of urban beautification, and rigid frames found widespread use in city parks and landscaped boulevards. By 1935 more than three hundred rigid frames had been built in America, most in urban areas. Early rigid frame bridges were limited in span length, but by 1937 the Schmitz Park Bridge in Seattle featured a single 175-foot span.

Concrete rigid frame bridges were well suited to urban applications with large traffic volumes and moderate span lengths, where rigidity under load was of prime importance. Their basic design was easily modified. Using a standard profile and reinforcing configuration, a series of bridges could be built over a fairly wide range of span lengths. They could be readily skewed to accommodate angled intersections. Their flat or slightly arched undersides provided adequate under-bridge clearance. And they could be subsequently widened to accommodate

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Plum Bush Creek Bridge
Washington County, Colorado
Highway Bridges in Colorado, MPS

Section number 8 Page 3

increased traffic. Further, the bridges could be cast plainly or adorned with a variety of applied concrete or metal ornamentation.

The City of Denver was the first government entity known to construct rigid frame bridges in Colorado, with a few two-span structures over Cherry Creek built in the 1920s. In the late 1930s the Colorado Highway Department experimented with rigid frame design, building relatively small-scale structures at rural locations around the state. However, rigid frame bridges were never commonly built in Colorado outside of Denver. Only ten such structures were identified by the 2000 statewide historic bridge inventory. Of these the West Plum Bush Creek Bridge is distinguished by its handsome proportions and excellent state of preservation.

CONSTRUCTION HISTORY

Beginning with the Omaha-Lincoln-Denver Highway and continuing with the Lincoln Highway, the Midland Trail, the Ocean-to-Ocean Highway, and the Old Trails Highway, several east-west transcontinental highways crossed Colorado's eastern plains in the 1910s. In the 1920s, the State Highway Commission tied these with the national highway system, forming (from north to south) US Highways 38, 40 North, 40 South and 50. The last of the national east-west routes designated in eastern Colorado was US Highway 36, which extended due east from Denver, across Adams, Washington and Yuma counties to the Kansas state line. US 36 had first been established in the 1920s as State Highway 102.

In western Washington County in 1926 local entrepreneurs Essa Harbert and Archie Chapman opened a gas station along the road equidistant from Brush, Strasburg and Limon. They put up signs advertising their business as the last chance to buy gas for some distance and soon started attracting tourist business. From this the small town of Last Chance developed.

In the mid-1930s the State Highway Department undertook a major improvement of the route, upgrading it from a dirt road to a graded highway. For bidding purposes, CHD divided construction into relatively short sections under the umbrella of Federal Aid Project 351. FAP 351-E(I) involved several miles of highway construction through Last Chance. Included in the work were several bridges over Beaver Creek, Plum Bush Creek and their tributary streams. One of these spanned Plum Bush Creek just east of town. The crossing was comprised of a single concrete rigid frame span, 58 feet in length, rigidly tied to supporting concrete abutments. The concrete deck was flanked on both sides by integrally poured concrete curbs and CHD standard slotted guardrails. CHD awarded the contract to build the Plum Bush Creek Bridge to the Peter Kiewit Sons Construction Company. Kiewit completed the bridge in 1938. It has functioned in place since in essentially unaltered condition.

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**National Register of Historic Places
Continuation Sheet**

Plum Bush Creek Bridge
Washington County, Colorado
Highway Bridges in Colorado, MPS

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BIBLIOGRAPHY

Fraser, Clayton B. "Plum Bush Creek Bridge, 5WN116," Historic Bridge Inventory, 31 March 2000.

Fraser, Clayton B. Field inspection November 1998.

Fraser, Clayton B. "Highway Bridges in Colorado," National Register of Historic Places Multiple Property Documentation Form, March 30, 2000.

Colorado Department of Transportation, Structure Inventory and Appraisal: Structure No. F-22-F. Located at CDOT, Denver, Colorado.

Colorado Highway Department. Bridge Kardex File. Located at CDOT Bridge Division, Denver, Colorado.

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The Plum Bush Creek Bridge is located on US Highway 36 at milepost 138.16. 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 1-2:

Name of Property: Plum Bush Creek Bridge
Location: Washington County, Colorado
Photographer: Clayton Fraser
Date of Photographs: November 1998
Negatives: Colorado Department of Transportation

Photo No. Photographic Information

- 1 Looking across bridge and down highway; view to the east.
- 2 View to the northeast from the west bank of Plum Bush Creek Bridge.

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Plum Bush Creek Bridge
Washington County, Colorado
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USGS TOPOGRAPHIC MAP
Last Chance Quadrangle, Colorado
7.5 Minute Series, 1973

UTM: Zone 13 / 624647E / 4399676N
PLSS: 6th PM, T3S, R55W, Sec. 33, SW SW SE Qtr.
PLSS: 6th PM, T4S, R55W, Sec. 4, NW NW NE Qtr.
Elevation: 4,780 feet

