

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

OMB No. 1024-0018

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United States Department of the Interior  
National Park Service

OCT 25 1993

NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM

NATIONAL  
REGISTER

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1. Name of Property

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historic name: N/A

other name/site number: South Dakota Dept. of Trans. Br. No. 03-338-100

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2. Location

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street & number: Local road over Shue Creek

not for publication:     

city/town: Cavour

vicinity: X

state: SD county: Beadle

code: 005

zip code: 57324

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3. Classification

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Ownership of Property: public-local

Category of Property: structure

Number of Resources within Property:

Contributing	Noncontributing	
_____	_____	buildings
_____	_____	sites
<u>  1  </u>	_____	structures
_____	_____	objects
<u>  1  </u>	_____	Total

Number of contributing resources previously listed in the National Register:     

Name of related multiple property listing: Historic Bridges in South Dakota

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this 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 meets does not meet the National Register Criteria. See continuation sheet.

Signature of certifying official [Handwritten Signature] Date 10/12/97

State or Federal agency and bureau SO SHPO

In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

Signature of commenting or other official Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby certify that this 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):

[Handwritten Signature] 12/9/93

Signature of Keeper Date of Action

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6. Function or Use  
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Historic: Transportation Sub: road-related (vehicular)

Current : Transportation Sub: road-related (vehicular)

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7. Description  
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Architectural Classification:

Other \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Other Description: Warren pony truss

Materials: foundation concrete roof \_\_\_\_\_  
walls \_\_\_\_\_ other metal: steel  
\_\_\_\_\_

Describe present and historic physical appearance. X See continuation sheet.

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8. Statement of Significance  
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Certifying official has considered the significance of this property in relation to other properties: \_\_\_\_\_.

Applicable National Register Criteria: A & C

Criteria Considerations (Exceptions) : \_\_\_\_\_

Areas of Significance: Commerece  
Engineering  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Period(s) of Significance: 1917-1943

Significant Dates : 1917 \_\_\_\_\_

Significant Person(s): N/A  
\_\_\_\_\_

Cultural Affiliation: N/A

Architect/Builder: Iowa Bridge Company  
\_\_\_\_\_  
\_\_\_\_\_

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.  
X See continuation sheet.

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9. Major Bibliographical References  
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X See continuation sheet.

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 -- Specify Repository: South Dakota Department of Transportation

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10. Geographical Data

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Acreage of Property: less than 1 acre

UTM References: Zone Easting Northing      Zone Easting Northing

A	<u>14</u>	<u>578200</u>	<u>4926205</u>	B	<u>    </u>	<u>    </u>	<u>    </u>
C	<u>    </u>	<u>    </u>	<u>    </u>	D	<u>    </u>	<u>    </u>	<u>    </u>

     See continuation sheet.

Verbal Boundary Description:      See continuation sheet.

The nominated property consists of a rectangle, 55 feet long and 23 feet wide, whose vertices coincide with the outside corners of the bridge abutments at each end of the bridge, and includes only the bridge superstructure and substructure.

Boundary Justification:      See continuation sheet.

Because the bridge is located on a public road, there are no legal boundary lines for the ends of the bridge. Therefore, these boundaries are drawn to encompass only the superstructure and substructure of the bridge itself.

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11. Form Prepared By

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Name/Title: Mary McCormick/Historian and Dale Martin/Historian

Organization: Renewable Technologies, Inc.

Date: March 1990/9-93

Street & Number: 510 Metals Bank Bldg.

Telephone: (406)782-0494

City or Town: Butte

State: MT ZIP: 59701

United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Section number 7 Bridge No. 03-338-100 Page 6  
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Bridge no. 03-338-100 is located 8 miles north and 0.8 miles east of Cavour and carries a local road over Shue Creek. This single-span, 50-foot, riveted Warren pony truss bridge rests on concrete abutments with concrete wing walls (the southeast abutment wing wall has a wood pile and plank extension). The superstructure is composed as follows: the upper chords consist of two channel sections riveted with a continuous cover plate along the upper flanges and with batten plates along the lower flanges; the lower chords consist of two channel sections riveted with batten plates; the vertical members which intersect with diagonal members at the upper panel points consist of an angle section while the vertical members which intersect with the diagonal members at the lower panel points consist of paired angle sections riveted with batten plates; and the diagonal members consist of two angle sections riveted with batten plates. The plank deck is supported by steel I-beam stringers with channel section bridging. The stringers sit atop the steel I-beam floor beams which are bolted to the vertical below the lower chord. Sway bracing is provided by paired angle section knee-braces riveted to the tops of the vertical members which intersect with the diagonals at the lower panel points and with extensions of the corresponding floor beams. Bottom lateral bracing is round rod cross-braces. Two angle sections form the railings along each side of the bridge.

The bridge has good integrity.

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Section number 8 Bridge No. 03-338-100 Page 7  
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Bridge No. 03-338-100 is eligible for the National Register under Criterion A as a representative example of important patterns of bridge construction in South Dakota during the 1890s and through the first two decades of the 20th century, in which a different out-of-state bridge builder tended to dominate bridge construction in each county. It is also eligible for the National Register under Criterion C as the oldest example of a riveted Warren pony truss in Beadle County built by the Iowa Bridge Company, a long-term bridge building firm in the county. The bridge retains good integrity.

Around the turn of the 20th century, the homesteading boom west of the Missouri River coupled with the expanded agri-business east of the river led to an increased demand for reliable bridges in South Dakota. Accompanying the increase in bridge construction was the emergence of a pattern of business wherein almost every county in the state seemed to be dominated by a different bridge builder. This pattern began to be evident in the late-19th century. It grew even stronger after the turn of the century when the counties began turning to the system of awarding annual contracts for bridge work. Most typically, the counties awarded annual contracts to the same firm year after year. This relationship between the counties and the bridge firms was probably due to "pooling," an illegal but common practice across the country at this time. Under pooling arrangements, various bridge-building firms agreed to divide states among themselves, assigning particular counties to specific firms. Most such firms operating in South Dakota at this time were based out-of-state. This pattern of business remained strong in South Dakota until about 1920 when the State Highway Commission strengthened its control over bridge construction practices in the counties.

The activities of the Iowa Bridge Company of Des Moines are typical of the bridge-building business in South Dakota during this era. President of the company was James S. Carpenter, who had been a travelling agent for the N.M. Stark Company of Des Moines in the 1890s. Carpenter started the Iowa Bridge Company in Des Moines in about 1902 and was immediately successful in obtaining annual bridge contracts in South Dakota counties such as Bon Homme, Brookings, and Sanborn where his former employer had been active. During the first two decades of the 20th century, the company became the most active bridge-builder to operate in South Dakota and dominated bridge contracts in at least 11 counties. It held the annual contract in Beadle County from 1903 through 1919.  
(continued)

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Section number 8 & 9 Bridge No. 03-338-100 Page 8  
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8. Significance (continued)

Several riveted Warren truss bridges built by the Iowa Bridge Company survive in Beadle County. Bridge no. 03-338-100, which was built in 1917, however, is the oldest. The Warren truss became popular for steel bridges in the early 20th century, after the riveted connection replaced the pin-connection as standard practice. From about 1910 until the early 1920s, the riveted Warren pony truss replaced the Pratt pony truss as the most commonly used metal-truss type in South Dakota for short bridges.

9. Bibliography

Beadle County, "Commissioners Record," Book 5, p. 578, Auditor's Office, Beadle County Courthouse, Huron.