OMB No. 1024-0018 NPS Form 10-900 (Rev. 8-86) PECEIVED United States Department of the Interior National Park Service OCT 25 1993 NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM Adda & Burnton 1. Name of Property \_\_\_\_\_\_ \_ historic name: N/A other name/site number: South Dakota Dept. of Trans. Br. No. 05-032-170 \_\_\_\_\_\_\_ 2. Location \_\_\_\_\_\_\_ street & number: Local road over Choteau Creek not for publication: city/town: Avon vicinity: X state: SD county: Bon Homme code: 009 zip code: 57315 3. Classification \_\_\_\_\_\_ Ownership of Property: public-local Category of Property: structure Number of Resources within Property: Contributing Noncontributing \_ buildings sites \_ structures \_ objects Total Number of contributing resources previously listed in the National Register: 0

Name of related multiple property listing: Historic Bridges in South

Dakota

4. State/Federal Agency Certification	
As the designated authority under the Na of 1986, as amended, I hereby certify the request for determination of eligibility standards for registering properties in Historic Places and meets the procedural set forth in 36 CFR Part 60. In my opin does not meet the National Register sheet.	tional Historic Preservation Act nomination nomination the National Register of and professional requirements nion, the property meets Criteria. See continuation
Signature of certifying official	76/12/17 Date
State or Federal agency and bureau	
In my opinion, the property meets _ Register criteria See continuation	does not meet the National sheet.
Signature of commenting or other officia	Date
State or Federal agency and bureau	
5. National Park Service Certification	
I, hereby certify that this property is:	
	Signature of Keeper Date of Action

USDI/NPS	NRHP Registration Form	Brid	ge No.	05-032-	-170 Page 3
6. Function	on or Use				
Historic:	Transportation	Sub:	road-1	celated	(vehicular)
Current :	Transportation	Sub:	road-	related	(vehicular)
•					
7. Descri	 ption 	====	======	.=====	
Architect	ural Classification:				
Other					
Other Des	cription: Pratt through truss				
Materials	foundation concrete roof walls othe		al: ste	eel	
Describe parts sheet.	present and historic physical	appe	arance.	_x_ s	See continuation

8. Statement of Significance
Certifying official has considered the significance of this property in relation to other properties:
Applicable National Register Criteria: <u>A &amp; C</u>
Criteria Considerations (Exceptions) :
Areas of Significance: Commerce Engineering
Period(s) of Significance: 1912 - 1943
Significant Dates : 1912
Significant Person(s): N/A
Cultural Affiliation: N/A
Architect/Builder:
considerations, and areas and periods of significance noted aboveX_ See continuation sheet.
9. Major Bibliographical References
_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 #

USDI/NPS NRHP Registration Form Bridge No. 05-032-170 Page 5

Primary Location of Additional Data:			
State historic preservation office  X Other state agency Federal agency Local government University Other Specify Repository: South Dakota Department of Transportation			
10 Coographical Data			
10. Geographical Data			
Acreage of Property: <u>less than 1 acre</u>			
UTM References: Zone Easting Northing Zone Easting Northing			
A 14 572960 4752490 B			
See continuation sheet.			
Verbal Boundary Description: See continuation sheet.			
<del></del>			
The nominated property consists of a rectangle, 20 feet wide by 117 feet long, 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.			
11. Form Prepared By			
Name/Title: Jennifer Traeger/Historian and Brian A. Bernhard/ PE & RLS			
Organization: Renewable Technologies, Inc. Date: August 1990/9-93			
Street & Number: 510 Metals Bank Bldg. Telephone: (406)782-0494			
City or Town: Butte State: MT ZIP: 59701			

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NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 7 Bridge No. 05-032-170 Page 6

Bridge no. 05-032-170 carries a local road over Choteau Creek about 6 miles south and 1.8 miles west of Avon. The main span (112 feet) is a pin-connected Pratt through truss. The structure rests on the original concrete abutments. Original bridge information is etched in the east abutment. The east end of the structure is a movable end consisting of a nest of rollers. The upper chord consists of two steel channel sections riveted with a continuous steel cover plate along their upper flanges and riveted with lacing bars along their lower flanges. The lower chords consist of forged rectangular eyebars. The verticals consist of two steel channels connected at both flanges with lacing bars. The diagonals are forged rectangular eyebars and the counters are forged round steel rod with turnbuckles. The portal bracing consists of two angle sections which comprise all members. Sway bracing consists of four angle sections joined with lacing bar. Top lateral bracing consists of threaded round steel rod, as does bottom lateral bracing. The plank decking rests on steel channel (exterior) and I-beam (interior) stringers which, in turn, are bolted to steel I-beam floor beams. The floor beams are bolted to the verticals. The railing is comprised of three angle sections attached to vertical members. The railing appears to be original.

The bridge's integrity is very good, as the railing appears to be original and two bridge plates remain in place at the top center of each portal.

NPS Form 10-900-a (8-86)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 8 Bridge No. 05-032-170 Page 7

Bridge no. 05-032-170 is being nominated to the National Register of Historic Places as part of the "Historic Bridges in South Dakota" Multiple Property Nomination. It is related to the historic context of "Historic Bridges in South Dakota, 1893-1943" and is classified with the associated property type for iron and steel frame bridges. This bridge is individually 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 only inventoried pin-connected Pratt through truss in Bon Homme County built by the Iowa Bridge Company, a long-term bridge building firm in the county. The bridge retains very 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. The 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

(continued)

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NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number <u>8 & 9</u> Bridge No. 05-032-170 Page 8

#### 8. Significance (continued)

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 dominated bridge work in Bon Homme County from 1902 to at least 1917.

Bridge No. 05-032-170 was built in 1912 by the Iowa Bridge Co. of Des Moines. This structure is the only surviving pin-connected Pratt through truss surveyed in Bon Homme County and built by the Iowa Bridge Co.

#### 9. Bibliography

Two bridge plaques attached to bridge.

### **United States Department of the Interior**National Park Service

## **National Register of Historic Places Continuation Sheet**

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#### SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: see below Date Listed: 12/09/93

Property Name: see below

County: see below State: South Dakota

Historic Bridges in South Dakota MPS

Multiple Name

The following properties are listed in the National Register of

Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Signature of the Keeper

<u>December 9, 1993</u> Date of Action

Amended Items in Nomination:

Section 3/8. State Certification/Statement of Significance. Certifying official has considered the significance of the following properties to be of state significance.

Reference	No.	Property	County
01 00			

93001295 93001287	Capa Bridge Chilson Bridge	Jones County Fall River County
		<u>-</u>
93001308	Eighth Street Bridge	Minnehaha County
93001298	Esmond Bridge	Kingsbury County
93001317	Hall Bridge	Spink County
93001274	Hay Creek Bridge	Butte County
93001264	Kemp Avenue Bridge	Codington County
93001266	Larson Bridge	Codington County
93001277	Minnesela Bridge	Butte County
93001268	Old Cochrane Bridge	Deuel County
93001281	Red Shirt Bridge	Custer County
93001300	Redwater Bridge, Old	Lawrence County

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# **National Register of Historic Places Continuation Sheet**

Section number3	Pa	age2
93001269		Dakota Dept. of Transportation Bridge No. 03-338-
93001260	100 South 008	Beadle County Dakota Dept. of Transportation Bridge No. 03-020- Beadle County
93001261		Dakota Dept. of Transportation Bridge No. 03-327- Beadle County
93001270	South 200	Dakota Dept. of Transportation Bridge No. 05-028- Bon Homme county
93001271	South 170	Dakota Dept. of Transportation Bridge No. 05-032- Bon Homme County
93001272	South 080	Dakota Dept. of Transportation Bridge No. 05-138- Bon Homme County
93001273	South 130	Dakota Dept. of Transportation Bridge No. 05-255- Bon Homme County
93001276	South	Dakota Dept. of Transportation Bridge No. 10-112- Butte County
93001275	South 360	Dakota Dept. of Transportation Bridge No. 10-109- Butte County
93001278	South 230	Dakota Dept. of Transportation Bridge No. 12-503- Charles Mix County
93001265	South	Dakota Dept. of Transportation Bridge No. 15-210- Codington County
93001279	South 054	Dakota Dept. of Transportation Bridge No. 16-570- Carson County
93001280		Dakota Dept. of Transportation Bridge No. 17-289- Custer County
93001282	South	Dakota Dept. of Transportation Bridge No. 18-040- Davison County
93001283		Dakota Dept. of Transportation Bridge No. 18-060- Davison County
93001284	South 052	Dakota Dept. of Transportation Bridge No. 18-100- Davison County
93001285		Dakota Dept. of Transportation Bridge No. 18-142- Davison County
93001286		Dakota Dept. of Transportation Bridge No. 20-153- Deuel County
93001288	South	Dakota Dept. of Transportation Bridge No. 25-218- Faulk County
93001262		Dakota Dept. of Transportation Bridge No. 25-380- Faulk County
93001289		Dakota Dept. of Transportation Bridge No. 27-000- Gregory County
93001290		Dakota Dept. of Transportation Bridge No. 27-060-

298 Gregory County

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Section number	3 Page3	
93001291	South Dakota Dept. of Transportation Bridge No. 29-223	1-
93001292	South Dakota Dept. of Transportation Bridge No. 29-279	9-
93001293	Olo Hamlin County South Dakota Dept. of Transportation Bridge No. 30-257	7-
93001294	400 Hand County South Dakota Dept. of Transportation Bridge No. 31-115 110 Hanson County	5-
93001297	110 Hanson County South Dakota Dept. of Transportation Bridge No. 39-000 070 Kingsbury County	6 <b>-</b>
93001299	South Dakota Dept. of Transportation Bridge No. 39-176 100 Kingsbury County	6 <b>-</b>
93001301	South Dakota Dept. of Transportation Bridge No. 44-028 220 McCook County	8 –
93001302	South Dakota Dept. of Transportation Bridge No. 44-212 090 McCook County	2-
93001303	South Dakota Dept. of Transportation Bridge No. 47-215 363 Meade County	5 <b>-</b>
93001263	South Dakota Dept. of Transportation Bridge No. 47-153 389 Meade County	1-
93001305	South Dakota Dept. of Transportation Bridge No. 48-244 204 Melette County	4 –
93001306	South Dakota Dept. of Transportation Bridge No. 49-095	5 <b>-</b>
93001267	South Dakota Dept. of Transportation Bridge No. 50-200 035 Minnehaha County	0-
93001310	South Dakota Dept. of Transportation Bridge No. 56-090 096 Sanborn County	0-
93001312	South Dakota Dept. of Transportation Bridge No. 56-174	4 –
93001311	South Dakota Dept. of Transportation Bridge No. 56-117 123 Sanborn County	7 –
93001313	South Dakota Dept. of Transportation Bridge No. 58-010 376 Spink County	0-
93001314	South Dakota Dept. of Transportation Bridge No. 58-023	1-
93001315	South Dakota Dept. of Transportation Bridge No. 58-029 370 Spink County	5-
93001316	South Dakota Dept. of Transportation Bridge No. 58-062 270 Spink County	2-
93001318	South Dakota Dept. of Transportation Bridge No. 58-120 231 Spink County	0-
63001319	South Dakota Dept. of Transportation Bridge No. 58-140 224 Spink County	0-

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63001320 South Dakota Dept. of Transportation Bridge No. 58-218360 Spink County
63001321 South Dakota Dept. of Transportation Bridge No. 62-220512 Tripp County
63001322 South Dakota Dept. of Transportation Bridge No. 64-061199 Union County
93001309 Split Rock Park Bridge Minnehaha County
93001304 Stamford Bridge Miner County
93001307 Summit Avenue Viaduct Minnehaha County
93001296 Van Metre Bridge Jones County

#### Section 8: Applicable Criteria

93001266 Larson Bridge Codington County

Criterion C should be checked and not A to be consistent with bridge's significance in engineering for its method of construction.

### Section 8: Period of Significance

93001266 Larson Bridge Codington County

Period of significance is amended to read "1917" to indicate date of construction and to be consistent with significance in engineering.

93001281 Red Shirt Bridge Custer County

Period of significance is amended to read "1943-1944" to cover the period of construction.

93001278 South Dakota Dept. of Transportation Bridge No. 12-503-230 Faulk County

Due to typographical error, period of significance is corrected to read " 1920-1943."

93001265 South Dakota Dept. of Transportation Bridge No. 15-210-136 Codington County

Period of significance is amended to read "1917" since significance is under criterion C in engineering and the date of construction should be entered.

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## **National Register of Historic Places Continuation Sheet**

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93001262 South Dakota Dept. of Transportation Bridge No. 25-380-142 Faulk County

Period of significance is amended to read "1902" because the area of significance is engineering and the period of significance should be based on the date of construction. The bridge was moved from its original site in 1955.

#### Section 8: Date of Significance

93001308 Eighth Street Bridge Minnehaha County

"1977" is deleted because the date lies outside the period of significance.

93001317 Hall Bridge Spink County

"1904" is deleted because bridge is significant under criterion C for engineering and the move in 1904 falls outside the period of significance which is based on the date of construction and does not appear to have particular importance.

93001286 South Dakota Dept. of Transportation Bridge No. 20-153-210 Deuel County

"1960" is deleted because the date lies outside the period of significance.

93001262 South Dakota Dept. of Transportation Bridge No. 25-380-142 Faulk County

"1955" is deleted because the date lies outside the period of significance.

93001302 South Dakota Dept. of Transportation Bridge No. 44-212-090 McCook County

"1960" is deleted because the date lies outside the period of significance.

### **United States Department of the Interior** National Park Service

## **National Register of Historic Places Continuation Sheet**

Section number	3 Page6
93001267	South Dakota Dept. of Transportation Bridge No. 50-200-035 Minnehaha County
	5" is deleted because the date lies outside the period ignificance which is based on the date of construction.
93001311	South Dakota Dept. of Transportation Bridge No. 56-117- 123 Sanborn County
of s	5" is deleted because the date lies outside the period ignificance and does not appear to have particular rtance.

Melissa Dirr, architectural historian, of the South Dakota State Historic Preservation Office was notified of the above-mentioned amendments by telephone on December 09, 1993.

#### DISTRIBUTION:

National Register property file Nominating Authority (without nomination attachment)