NPS Form 10-900 (Rev. 8-86)	OMB No. 1024-0018
United States Department of the International Park Service	ior CECEIVED
NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM	OCT 25 1993
	WATIONAL
1. Name of Property	<b>:</b>
historic name: N/A	·
other name/site number: South Dakota I	Dept. of Trans. Br. No. 29-279-010
2. Location	
street & number: Local road over Stray	y Horse Creek
	not for publication:
city/town: Castlewood	vicinity: X
state: <u>SD</u> county: <u>Hamlin</u>	code: <u>057</u> zip code: <u>57223</u>
***************************************	
3. Classification	
Ownership of Property: <a href="mailto:public-local">public-local</a>	
Category of Property: <u>structure</u>	
Number of Resources within Property:	
Contributing Noncontributing	
Number of contributing resources previ Register: _0	iously listed in the National
Name of related multiple property list	ing: <u>Historic Bridges in South Dakota</u>

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	tional Historic Preservat this nomination meets the documentation the National Register and professional requirements the property	vation Act n on of irements meets
Signature of certifying official  State or Federal agency and bureau	10/12/5. Date	3
In my opinion, the property meets _ Register criteria See continuation	sheet.	National
Signature of commenting or other official State or Federal agency and bureau	1 Date	
5. National Park Service Certification		
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):		
	Signature of Keeper	Date of Action

USDI/NPS NRHP Registration Form	Bridge No. 29-279-010 Page 3
6. Function or Use	
Historic: Transportation	Sub: road-related (vehicular)
Current : Transportation	Sub: road-related (vehicular)
7. Description	
Architectural Classification:	
Other	
Other Description: Warren through tru	<u>188</u>
Materials: foundation concrete rock walls oth	of metal: steel
Describe present and historic physica sheet.	al appearanceX_ See continuation

8. Statement of Significance
Certifying official has considered the significance of this property in relation to other properties:
Applicable National Register Criteria: C
Criteria Considerations (Exceptions):
Areas of Significance: Engineering
Period(s) of Significance: 1903
Significant Dates : 1903
Significant Person(s): N/A
Cultural Affiliation: N/A
Architect/Builder: _ King, G.E.
State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.  _X_ 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 Buildings Survey # recorded by Historic American Engineering Record #

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. Geographical Data
Acreage of Property: <u>less than 1 acre</u>
UTM References: Zone Easting Northing Zone Easting Northing
A 14 664030 4961490 B
See continuation sheet.
Verbal Boundary Description: See continuation sheet.
The nominated property consists of a rectangle, 23 feet wide by 85 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 Fred Quivik/Architectural Historian

Organization: Renewable Technologies, Inc. Date: <u>August 1990/9-93</u>

Telephone: (406)782-0494 State: MT ZIP: 59701 Street & Number: 510 Metals Bank Bldg. City or Town: Butte

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

OMB Approval No. 1024-0018

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 7 Bridge No. 29-279-010 Page 6

Bridge no. 29-279-010 is located 4.9 miles east and 4 miles north of Castlewood and carries a local road over Stray Horse Creek. This 80-foot, single span, steel pin-connected Warren through truss bridge rests on concrete abutments of the standard State Highway Commission design, and has a rocker at the west end. The four-panel superstructure is composed as follows: the upper chords consist of two steel channel sections riveted with a continuous steel cover plate along the upper flanges and batten plates along the lower flanges; the lower chords for panels 1 and 4 consist of forged steel bars and for panels 2 and 3 consist of punched steel eye-bars; the diagonal members nearest the ends of the truss consist of punched steel eye-bars; the four other diagonal members consist of two angle sections starred and riveted with batten plates. There are no vertical members. The timber plank deck rests on steel I-beam stringers which in turn sit on the top flange of the floor beams. The floor beams are built-up girders which are variable in depth and composed of four angle sections riveted with a continuous steel plate. The floor beams are riveted to plate hangers suspended from the pin-connections along the lower chords. Portal bracing consists of paired angle sections riveted with lattice bars while sway bracing is provide by a strut composed of paired angle sections. Top and bottom lateral bracing consist of round steel rod cross-braces. Three angle sections on vertical angle section posts form the railing along both sides of the bridge.

The bridge retains good integrity.

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

OMB Approval No. 1024-0018

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number 8 & 9 Bridge No. 29-279-010 Page 7

#### 8. Significance

Bridge no. 29-279-010 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 C as a rare example of pin-connected Warren through truss bridge. It is one of only three bridges of this type known to survive in South Dakota. Although this bridge has been moved, the superstructure retains its original condition and the bridge's current setting across a creek is comparable to the setting of its original location. The bridge retains good integrity.

Bridge no. 29-279-010 was built in 1903 by George E. King about four miles south-southwest of its current location. It was moved to this crossing about 1930, replacing a small concrete bridge that was built in 1920.

When this bridge was built in 1903, the pin-connected Pratt truss was the most widely used metal-truss type in South Dakota. The Warren truss type was rarely used in the state because it was not as well adapted for pin-connections as was the Pratt truss, the most commonly used bridge type at this time. Not until about 1910, after the riveted connection replaced the pin-connection as standard practice, did the Warren truss become more frequently used for steel bridges. The riveted Warren truss was the preferred bridge type for short spans until about 1920. The pin-connected Warren configuration of this bridge, therefore, represents an type of which only a few are known to survive in the state.

#### 9. Bibliography

Hamlin County "Commissioners Record," Book 2, pp. 551 and 587; and Book 5, p. 19, Auditor's Office, Hamlin County Courthouse, Hayti.

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

## National Register of Historic Places Continuation Sheet

	Section r	number	3	Page	1
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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

<u>Historic Bridges in South Dakota MPS</u>

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

December 9, 1993 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 <u>state</u> significance.

Reference No. Property County

93001295	Capa Bridge	Jones County
93001287	Chilson Bridge	Fall River County
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

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

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

Section number	_3	Page	2
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ction number	Pi	age
93001269	South 100	Dakota Dept. of Transportation Bridge No. 03-338- Beadle County
93001260		Dakota Dept. of Transportation Bridge No. 03-020- Beadle County
93001261		Dakota Dept. of Transportation Bridge No. 03-327- Beadle County
93001270		Dakota Dept. of Transportation Bridge No. 05-028- Bon Homme county
93001271		Dakota Dept. of Transportation Bridge No. 05-032- Bon Homme County
93001272		Dakota Dept. of Transportation Bridge No. 05-138- Bon Homme County
93001273		Dakota Dept. of Transportation Bridge No. 05-255-
93001276	South	Dakota Dept. of Transportation Bridge No. 10-112- Butte County
93001275		Dakota Dept. of Transportation Bridge No. 10-109- Butte County
93001278	South	Dakota Dept. of Transportation Bridge No. 12-503- Charles Mix County
93001265		Dakota Dept. of Transportation Bridge No. 15-210- Codington County
93001279		Dakota Dept. of Transportation Bridge No. 16-570- Carson County
93001280	South	Dakota Dept. of Transportation Bridge No. 17-289- Custer County
93001282		Dakota Dept. of Transportation Bridge No. 18-040- Davison County
93001283		Dakota Dept. of Transportation Bridge No. 18-060- Davison County
93001284		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		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- Gregory County

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

### National Register of Historic Places Continuation Sheet

Section number	3 P	age3					
93001291	South 060	Dakota Hamlin		Transportation	Bridge	No.	29-221-
93001292			Dept. of	Transportation	Bridge	No.	29-279-
93001293			Dept. of	Transportation	Bridge	No.	30-257-
93001294			Dept. of	Transportation	Bridge	No.	31-115-
93001297		Dakota		Transportation	Bridge	No.	39-006-
93001299	South 100	Dakota		Transportation	Bridge	No.	39-176-
93001301			Dept. of	Transportation	Bridge	No.	44-028-
93001302			Dept. of	Transportation	Bridge	No.	44-212-
93001303	South 363	Dakota Meade C		Transportation	Bridge	No.	47-215-
93001263	South 389	Dakota Meade C	-	Transportation	Bridge	No.	47-151-
93001305	204	Melette	County	Transportation	_		
93001306	South 190	Dakota Miner C		Transportation	Bridge	No.	49-095-
93001267	South 035		Dept. of tha County	Transportation	Bridge	No.	50-200-
93001310	South 096		Dept. of County	Transportation	Bridge	No.	56-090-
93001312	South 090		Dept. of County	Transportation	Bridge	No.	56-174-
93001311	South 123		Dept. of County	Transportation	Bridge	No.	56-117-
93001313	South 376	Dakota Spink C	-	Transportation	Bridge	No.	58-010-
93001314	South 400	Dakota Spink C		Transportation	Bridge	No.	58-021-
93001315	South 370	Dakota Spink C		Transportation	Bridge	No.	58-025-
93001316	South 270	Dakota Spink C		Transportation	Bridge	No.	58-062-
93001318			Dept. of	Transportation	Bridge	No.	58-120-
63001319			Dept. of	Transportation	Bridge	No.	58-140-

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

## National Register of Historic Places Continuation Sheet

Section number	3 Page4
63001320	South Dakota Dept. of Transportation Bridge No. 58-218-360 Spink County
63001321	South Dakota Dept. of Transportation Bridge No. 62-220-512 Tripp County
63001322	South Dakota Dept. of Transportation Bridge No. 64-061-199 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.

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

## National Register of Historic Places Continuation Sheet

Section number	3	Page	5
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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 Page 6	
93001267	South Dakota Dept. of Transportation Bridge No. 50-200-035 Minnehaha County	•
	5" is deleted because the date lies outside the period significance which is based on the date of construction.	
93001311	South Dakota Dept. of Transportation Bridge No. 56-117-123 Sanborn County	
of s	95" is deleted because the date lies outside the period significance and does not appear to have particular prtance.	

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)