

1837

United States Department of the Interior
National Park Service

SEP 29 1989

National Register of Historic Places
Registration Form

NATIONAL
REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Bridge No. 12

other names/site number Bullard Creek Bridge

2. Location

street & number Twp. Rd. 43 over Bullard Creek

not for publication N/A

city, town Hay Creek Twp.

Red Wing vicinity

state Minnesota

code MN

county Goodhue

code 049

zip code 55066

3. Classification

Ownership of Property

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

Category of Property

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

Number of Resources within Property

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

Name of related multiple property listing:
Iron & Steel Bridges in Minnesota

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, 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.

Nina M. Archabal 9/22/89
 Signature of certifying official Nina M. Archabal Date
State Historic Preservation Officer
 State or Federal agency and bureau Minnesota Historical Society

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:)

Entered in the National Register 11/6/89

William J. Zygar
 Signature of the Keeper Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)
Transportation: road-related (vehicular)

Current Functions (enter categories from instructions)
Transportation: road-related (vehicular)

7. Description

Architectural Classification
(enter categories from instructions)

Other: Warren pony truss

Materials (enter categories from instructions)

foundation (Substructure) Concrete
walls

roof
other (Superstructure) Steel

Describe present and historic physical appearance.

Bridge No. 12 is a steel, single-span, riveted Warren (with verticals) pony truss. It carries township road 43 over Bullard Creek. Its overall length is 63 feet and its overall width is 16 feet. All parts of the superstructure--upper and lower chords, verticals and diagonals--consist of paired angle sections riveted together. (Such a design is discussed in an engineering text published in 1908.) The floor system, above the lower chord, is connected to the superstructure with floor beams riveted, via angle sections, to gusset plates on the low ends of the verticals. The floor consists of concrete slabs on I-beam stringers, which rest on angle lugs riveted to the webs of plate girder floor beams. The bridge rests on a substructure of poured concrete abutments with wingwalls. The movable end is not visible.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

nationally statewide locally

Applicable National Register Criteria A B C D

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance (enter categories from instructions)

Engineering
Transportation

Period of Significance

1908 - 1910

Significant Dates

1908

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

Engineer: Wolff, Louis P.
Builder: Glardon, William P.

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

Bridge No. 12 is eligible for the National Register under Criterion C as a representative of a type of bridge (pony truss) commonly used to span narrow obstacles in the early twentieth century. With its chord and web components all consisting of paired angle sections riveted together, it reflects a design recommended in an engineering text published in the same year as its construction. It is also eligible under Criterion A as a product of the few years at the end of the first decade of the century, when the state government first attempted standardization of the design and building of bridges, through financial aid rather than legislation. The bridge is also a product of the combined efforts of a prominent consulting engineer in St. Paul, a large iron and steel fabrication firm in Minneapolis, and a Red Wing businessman with diverse activities. This bridge is being nominated as part of the "Iron and Steel Bridges in Minnesota" Multiple Property Nomination. The bridge has good integrity.

After deciding in late 1907 to have a new bridge erected at this spot, the Goodhue County Commissioners opened bids, most for steel spans and a few proposals for concrete bridges, on 8 Jan 1908. The commissioners rejected all the bids. Four months later, Louis P. Wolff, a civil engineer from St. Paul and a partner in the firm of Loweth & Wolff, spoke at a commissioners' meeting, presenting a plan for a steel and concrete bridge complying with Minnesota Highway Commission rules and regulations. If such a bridge were built, the state would allow one-third of its road and bridge appropriations to Goodhue County to be spent on this bridge. The commissioners approved of this idea and voted to pay Wolff \$100 for plans and blueprints. The county requested new bids for the bridge's construction and in mid-June selected William P. Glardon, who owned a draying and transfer business as well as a coal and lumber dealership in Red Wing, as contractor. He in turn selected the Minneapolis Steel and Machinery Company as fabricator. At the commissioners' meeting of 22 Oct. 1908, L. P. Wolff testified that the bridge was satisfactorily completed.

See continuation sheet

9. Major Bibliographical References

"MNDOT Structure Inventory," for Br. 12, 1983.

Franklyn Curtiss-Wedge (ed.), History of Dakota and Goodhue Counties, Minnesota (Chicago: H.C. Cooper, Jr., & Co., 1910), pp 1017-1018

Bridge plans, Goodhue County Engineer's office.

"Commissioners Record, Goodhue County," vol. 7, pp. 564-565, 593-594, 601- 602, 620.

Milo S. Ketchum, The Design of Highway Bridges (New York: The Engineering News Publishing Co., 1908), pp. 199-203.

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: _____

10. Geographical Data

Acreage of property Less than 1 acre

UTM References

A

1	5
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5	4	4	5	9	0
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4	9	3	2	0	2	0
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Zone Easting Northing

B

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Zone Easting Northing

C

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Zone Easting Northing

See continuation sheet

Verbal Boundary Description

The nominated property consists of a rectangle, 63 feet long and 16 feet wide, whose vertices coincide with the outside corners of the bridge abutments at each end of the bridge, and includes only bridge superstructure and substructure.

See continuation sheet

Boundary Justification

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.

See continuation sheet

11. Form Prepared By

name/title Dale Martin, Historian

organization Renewable Technologies, Inc. date July, 1988

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