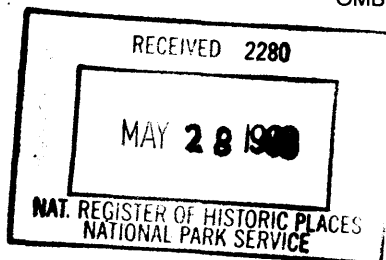


**United States Department of the Interior  
National Park Service**

**National Register of Historic Places  
Registration Form**



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions 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 Green Mill Ford Bridge

other names/site number Green Mill Road over Cedar River

**2. Location**

street & number vacated county road over Cedar River  not for publication

city or town 2.8 miles northeast of Janesville  vicinity

state Iowa code IA county Bremer code 017 zip code 50647

**3. State/Federal Agency Certification**

As the designated authority under the National Historic Preservation Act, 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. I recommend that this property be considered significant  nationally  statewide  locally. (  See continuation sheet for additional comments.)

Patricia Orlowski DSHPO 5-6-98  
Signature of certifying official/Title Date

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):

Edson H. Beall 6-25-98

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**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 include previously listed resources in the count)

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 of Iowa

**Number of contributing resources previously listed in the National Register**

0

**6. Function or Use**

**Historic Functions**  
(Enter categories from instructions)

TRANSPORTATION/road-related

**Current Functions**  
(Enter categories from instructions)

VACANT/not in use

**7. Description**

**Architectural Classification**  
(Enter categories from instructions)

other: bowstring through arch-truss

**Materials**  
(Enter categories from instructions)

foundation Timber pile

walls

roof

other Wrought iron

**Narrative Description**

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

Located 2.8 miles northeast of Janesville, the Green Mill Ford Bridge spans the Cedar River in a rural Bremer County setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 2                                      construction date: 1871  
 span length: 122.0'                                construction cost: approximately \$16,000.00  
 total length: 244.0'                              current condition: fair (bridge closed)  
 roadway wdt.: 16.0'                                alterations: trusses moved, 1902

superstructure: wrought iron, bolted bowstring through arch-truss, with timber stringer approach spans  
 substructure: timber pile bent abutments and wingwalls; concrete-filled steel cylinder piers  
 floor/decking: timber deck over timber stringers  
 other features: arch rib: 2 channels with continuous plates; lower chord: 2 forged rectangular eyebars;  
 vertical: star iron; diagonal: round rod with threaded ends, set in cast iron skewbacks at arch rib;  
 lateral bracing: round rod with threaded ends; strut: iron tube with threaded ends; floor beam: I-beam clamped to lower chord; timber guardrails

Moved to its present location in 1902, the Green Mill ford Bridge has since undergone only minor maintenance-related repairs and remains essentially unaltered. It retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.

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 continuation sheets.)

Areas of Significance

(Enter categories from instructions)

ENGINEERING

Period of Significance

1871

(The period of significance is derived from the original construction date.)

Significant Dates

1871 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Bulder

designer:

King Iron Bridge and Manufacturing Co.

fabricator:

King Iron Bridge and Manufacturing Co.

bulder:

King Iron Bridge and Manufacturing Co.

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:

**10. Geographical Data**Acreage of Property less than one acre**UTM References**

(Place additional UTM references on a continuation sheet)

1 15 546790 4724370  
zone easting northing2 15 546690 4724500  
zone easting northing**Verbal Boundary Description**

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 18 feet by 244 feet, which is centered on the UTM point(s) listed above. Included within this rectangular parcel are the bridge's superstructure, substructure, approach spans and floor system.

**Boundary Justification**

(Explain why the boundaries were selected)

The nominated structure includes the bridge's superstructure, substructure, floor system, any approach spans and the property on which they rest. These boundaries encompass, but do not exceed, all of the property that has been historically associated with the bridge.

**11. Form Prepared By**name/title Clayton B. Fraserorganization Fraserdesign date 31 August 1994street & number 1269 Cleveland Avenue telephone 303-669-7969city or town Loveland state Colorado zip code 80537**Additional Documentation**

Submit the following items with the completed form:

**Continuation Sheets****Maps**A **USGS map** (7½ or 15 minute series) indicating the property's locationA **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/title Bremer Countystreet & number 415 East Bremer Avenue telephone 319-352-5040city or town Waverly state Iowa zip code 50677

**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 U.S.C. 470 *et seq.*).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

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

**National Register of Historic Places  
Continuation Sheet**

Section Number 8 Page 1 Green Mill Ford Bridge Bremer County; Iowa

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In 1869 the Bremer County Board of Supervisors delegated a committee to study the condition of roads and bridges in the county. "We find on examination our bridges and roads to be in a most deplorable condition all over the county," the committee reported in January 1870. "Some of the bridges are decayed and in such a condition as to render them unsafe for use." The committee mentioned three bridges in particular that needed replacement, one of which was the existing timber structure over the Cedar River in Waverly, the county seat. This was reinforced in June when the Waverly City Council petitioned the supervisors for the bridge, stating, "The bridge across the Cedar River in Waverly is nearly worn out and the needs of the people of the whole county demand the completion of a strong permanent bridge at the place above named of such a character as will not need to be rebuilt for a long term of years." To finance the bridge, the supervisors proposed a special mill levy on the county property tax; that year the citizens of the county passed the initiative.

This left it to the supervisors to build the bridge, which they did only after months of delays. Finally, in spring 1871 the county contracted with John R. Price and Brothers for \$5000.00 to build the bridge's substructure. Using stone from the Anamosa quarries east of Cedar Rapids, the Price brothers completed this work in June. The board then contracted with William Crickett for the construction of the superstructure. An agent for the King Iron Bridge and Manufacturing Company, Crickett was to provide "one of Z. King's Wrought Iron Bridges of three spans of 125 feet each in length, width of bridge 18 feet in the clear, 2 side walks 6 feet each in the clear." Contract cost: \$11,000.00. King fabricated and erected the trusses that year; on January 5, 1872, the Board accepted the structure. The Waverly Bridge served in its original location until 1898 when it was replaced by a new girder bridge erected by the Toledo Bridge Company. Three years later, in May 1902, the old bowstring trusses were dismantled. One of its three spans was moved to a site across the Cedar River in Franklin Township; the remaining two spans were placed over the Cedar River in Jefferson Township. Known locally as the Green Mill Ford Bridge, these latter spans still stand in this location.

The bowstring arch-truss was the iron span of choice for Iowa counties in the late 1860s and 1870s. Marketed extensively throughout the Midwest by such industry giants as the King Iron Bridge and Manufacturing Company and the Wrought Iron Bridge Company, these often-patented bridge forms featured a wide range of span lengths, economical fabrication cost and relatively quick erection. The proliferation of the bowstring corresponded with the initial development of Iowa's road system; as a result, perhaps thousands of these prototypical iron spans were erected throughout the state. The bowstring had some rather severe structural flaws, however, relating primarily to lateral stability of the arches, and it was largely superseded by the pin-connected truss in the early 1880s. Despite this, some bowstrings were still erected in Iowa in the 1880s, although the number dwindled precipitously by the decade's end. Through subsequent attrition, almost all of Iowa's bowstrings have since been replaced and demolished. Now less than twenty remain in place. Although it no longer carries traffic, the Green Mill Ford Bridge is historically and technologically significant as one of the last remaining examples in the state of what was once a mainstay structural type.

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

**National Register of Historic Places  
Continuation Sheet**

Section Number   9   Page   2   Green Mill Ford Bridge Bremer County; Iowa

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Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 078890.

Bremer County Supervisors' Record Book A, page 438 (9 June 1869), page 470 (18 October 1869), page 478 (6 January 1870), page 494 (1 June 1870), page 495 (2 June 1870), page 526 (October 1870), page 539 (6 January 1871), page 552 (April 1871), page 570 (26 June 1871), page 573 (September 1871); Book D, page 490 (5 April 1898), page 496 (1 June 1898), page 511 (18 October 1898), page 521 (4 January 1899), Book E, page 64 (5 May 1902).

Field inspection by Clayton Fraser, 13 July 1990.