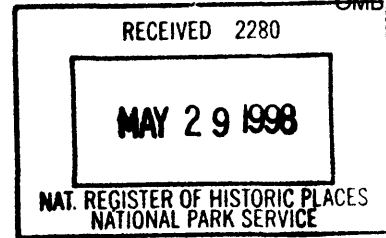


**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Registration Form**



789

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 Okoboji Bridge

other names/site number _____

2. Location

street & number 180th Avenue over branch of Little Sioux River not for publication

city or town 6.0 miles southwest of Milford vicinity

state Iowa code IA county Dickinson code 059 zip code 45302

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 Churking DSNPO 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: Pratt/Warren pony truss

Materials

(Enter categories from instructions)

foundation Timber

walls _____

roof _____

other Steel

Narrative Description

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

Located 6.0 miles southwest of Milford, the bridge spans branch of Little Sioux River in a rural Dickinson County setting that has changed little since the structure's period of significance. A description of the structure follows:

span number:	1	construction date:	1909; moved c1930
span length:	80.0'	construction cost:	\$1550.00
total length:	83.0'	current condition:	fair
roadway wdt.:	15.8'	alterations:	truss moved, c1930; bridge closed to traffic

superstructure: steel, 5-panel, rigid-connected Pratt/Warren pony truss
 substructure: timber pile bent abutments and backwalls timber pile piers under floor beams
 floor/decking: timber deck over steel stringers
 other features: upper chord and inclined end post: 2 channels with lacing on top and bottom; lower chord: 2 channels with lacing; vertical: 4 angles with lacing; diagonal: 2 channels with lacing; portal bracing: 2 angles through deck; floor beam: I-beam, bolted to vertical; bottom lateral bracing: round rod with threaded ends; guardrail: 2 angles

Other than its move around 1930, at which time it was changed from a center-pivot to a fixed span, the Okoboji Bridge remains essentially unaltered. It retains a high degree of integrity of location, materials, workmanship 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

1909

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

Significant Dates

1909 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

designer:

Clinton Bridge and Iron Works, Clinton IA

fabricator:

Clinton Bridge & Iron Wks.; Illinois Stl. Co.

builder:

Clinton Bridge and Iron Works, Clinton IA

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 DataAcreage of Property less than one acre**UTM References**

(Place additional UTM references on a continuation sheet)

1 15 319040 4791980
zone easting northing2 _____
zone easting northing**Verbal Boundary Description**

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 18 feet by 83 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 Byname/title Clayton Fraser and John Lauberorganization 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 Dickinson Countystreet & number 1810 Ithaca Avenue telephone 712-336-2944city or town Spirit Lake state Iowa zip code 51360

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 Okoboji Bridge Dickinson County; Iowa

Soon after the initial settlement of Dickinson County, a system of roads began to develop to link the farms and towns of the region. The first county roads included a route extending westward from Spirit Lake toward Sioux City, one running south from Spirit Lake to Gar Outlet and one starting at Spirit Lake and running east between East Okoboji and Spirit Lakes, then south and west to Gar Outlet. Establishing the latter two routes involved bridging the county's two most strategic crossings: the straits between East and West Okoboji Lakes and between East Okoboji and Spirit Lakes. Prior to construction of bridges, travelers were faced either with fording the crossings or with journeying several miles around the lakes. In December 1859 Dickinson County hired local contractors to build the county's first bridges at these points. As described in the minutes of the county board of supervisors, the contracts called for "one [bridge] across Lake Okoboji at the narrows east of Spirit Lake and one across the straits which connect East and West Okoboji lakes."

Predictably short-lived, the two wooden structures were rebuilt in 1874-75. By this time, local sentiment was growing that steamboats should be able to navigate between East and West Okoboji Lakes. Draw bridges were proposed at both locations to permit boats to pass beneath. L.W. Waugh, a county supervisor, subsequently erected such a bridge between East and West Okoboji Lakes. A pulley system with a block-and-tackle affixed to a derrick was built to raise and lower the structure, but it proved too cumbersome. With great difficulty, the bridge was raised only once or twice in this fashion before it was lowered permanently. Under pressure to allow navigation between the two lakes in the early 1880s, the Dickinson County Board of Supervisors contracted for the construction of a new timber swing-span bridge here in 1883. After little more than a decade, it, too, began showing signs of decay. In June 1897 the county supervisors appointed a committee to oversee erection of a new swing span. After some delay, the supervisors proceeded with the construction late that year. Completed early in 1898, the new swing bridge featured stone masonry piers in place of the earlier timber pile bents. Otherwise, it was little changed from its predecessors.

A decade later, the Okoboji swing bridge once again had deteriorated to the point of replacement. This time, finally, the board of supervisors opted for a more permanent solution. On June 15, 1909, the board contracted with the Clinton Bridge and Iron Works of Clinton, Iowa, to fabricate and erect a new steel bridge. Completed that year for \$1550.00, the new swing span consisted of an 80-foot, rigid-connected pivot truss with a six-foot-wide sidewalk, resting on concrete and masonry abutments. The bridge and the adjacent county road were later incorporated into a U.S. highway and placed under the aegis of the Iowa State Highway Commission (ISHC). Both would carry heavy traffic over the next twenty years. The 1909 truss was replaced with a fixed-span concrete girder structure in 1929. Sometime after that, Dickinson County moved the 1909 truss to this rural crossing in Okoboji Township, erecting it on a timber pile bent substructure. Here it has functioned in place as a fixed-span truss. Timber piles have been inserted under the truss's panel points, and the bridge has recently been closed to traffic, but the truss itself remains unaltered.

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

**National Register of Historic Places
Continuation Sheet**

Section Number 8 Page 2 Okoboji Bridge Dickinson County; Iowa

The Okoboji Bridge is historically significant for its pivotal role in the development of Dickinson County. One of the county's earliest crossings, it clearly encouraged settlement and contributed to the region's socioeconomic development. As the fifth bridge to span the straits between East and West Okoboji Lakes, the 1909 truss represents a continuum of bridge construction stretching back fifty years. During this time, the Okoboji bridge site has witnessed a remarkable progression of bridge construction. From its first rudimentary timber span in 1860, through timber and steel lift and swing spans, the Okoboji Bridge illustrates five decades of technological evolution. The truss itself is technologically noteworthy as a small-scale swing span - the only one of its kind known to remain in Iowa. The bridge's atypical bearing condition is reflected in the truss's web configuration. The center panel, upon which the bridge rested on its pivot pier, features an inverted V diagonal pattern. The truss is thus effectively a hybridization of Pratt and Warren technologies. Although its locational and structural integrity have been compromised substantially by the move, this steel superstructure is still a significant remnant of early transportation.

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

**National Register of Historic Places
Continuation Sheet**

Section Number 9 Page 3 Okoboji Bridge Dickinson County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 144820.

Hattie P. Elston, **White Men Follow After** (Iowa City [IA]: Athens Press, 1946) pages 37-38.

Dickinson County Engineer's Bridge Records, located at Dickinson County Courthouse, Spirit Lake IA.

Dickinson County Supervisors' Minutes, Book D: pages 45 (21 July 1891) and 73 (April 1892), located at the Dickinson County Courthouse, Spirit Lake IA.

Field inspection by Charlene Roise, 8 July 1991.