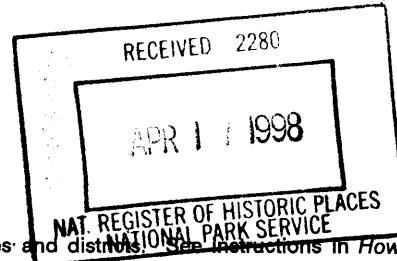


**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Registration Form**



495

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 Otranto Bridge

other names/site number _____

2. Location

street & number 480th Avenue over Big Cedar River not for publication

city or town 6.5 miles northwest of St. Ansgar vicinity

state Iowa code IA county Mitchell code 131 zip code 50472

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 Osterking DSITPO 4-7-98
Signature of certifying official/Title Date

STATE HISTORICAL SOCIETY OF IOWA

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 5.15.98

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)

Table with 2 columns: Contributing, Noncontributing. Rows for buildings, sites, structures, objects, 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: Camelback through truss

Materials (Enter categories from instructions)

foundation Concrete and Stone, walls, roof, other Steel

Narrative Description

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

Located 6.5 miles northwest of St. Ansgar, the Otranto Bridge spans the Big Cedar River in a rural Mitchell County setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 1, span length: 170.0', total length: 170.0', roadway wdt.: 16.0', construction date: 1899, construction cost: \$3257.00, current condition: fair, alterations: bridge closed

superstructure: steel, 10-panel, pin-connected, Camelback through truss with subdivided panels; substructure: concrete and stone abutments and wingwalls; floor/decking: asphalt-covered timber deck over wood stringers; other features: upper chord and inclined end post: 2 channels with cover plate and lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing (2 looped round eyerods at the hips), 2 channels with lacing from upper chord to pin, 2 looped, square-section rods below; diagonal: 2 punched rectangular eyebars; counter: 2 looped square eyebars; portal bracing: 2 angles with single-angle struts; sway bracing: 2 angles with round-section rod diagonals; floor beam: I-beam pinned to superstructure; railing: channel upright with channel and angle rails; timber curbs, raised above deck

Other than maintenance-related repairs, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The Otranto Bridge today 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

1899

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

Significant Dates

1899 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

designer:

Chicago Bridge and Iron Company

fabricator:

Chicago Bridge and Iron Co.; Carnegie Steel

builder:

Chicago Bridge and Iron Company

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 501460 4811460
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 170 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 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 Mitchell Countystreet & number Route 2 - Box 6C telephone 515-732-5849city or town Osage state Iowa zip code 50461

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 Otranto Bridge Mitchell County; Iowa

The Otranto Bridge carries an abandoned county road across the Big Cedar River just east of the hamlet of Otranto in Mitchell County. On January 3, 1899, the Chicago Bridge and Iron Company signed a contract with the Mitchell County Board of Supervisors to build two bridges near Otranto and Osage for the aggregate sum of \$5000.00. The Otranto Bridge accounted for \$3257.00 of that amount. According to an undated proposal for the construction project, "old bridges in each case [were] to be carefully taken down and piled at a convenient place on [the] bank." CB&I was established in 1899 by Horace E. Horton, a civil engineer who first began building iron and steel bridges for Mitchell County during the late 1870s, while practicing in Rochester, Minnesota. The Otranto Bridge illustrates Horton's penchant for the unusual in his truss design. A Camelback through truss with subdivided panels, this structure is supported by concrete and stone abutments and features pinned connections throughout. Functioning in place today, the Otranto Bridge is a structurally sound example of this peculiar bridge configuration.

Straight-chorded Pratt through trusses were used extensively throughout Iowa for medium-span crossings in the late 19th and 20th centuries. For longer crossings, however, bridge companies could develop greater efficiency with polygonal-chorded Pratt variants - primarily Parker, Pennsylvania and Camelback trusses. With its distinctive five-faceted upper chords, the Camelback configuration was disdained by some engineers (including the redoubtable J.A.L. Waddell, who called it "uncompromisingly ugly") for its tendency under certain circumstances to reverse compressive and tensile forces acting on their individual members. As a result, Camelback trusses never received widespread acceptance. Relatively few were ever built on Iowa's roads, and only a handful has survived to the present. The Otranto Bridge is technologically significant as a well-preserved example of this uncommon Pratt variant.

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

**National Register of Historic Places
Continuation Sheet**

Section Number 9 Page 2 Otranto Bridge Mitchell County; Iowa

Contracts for the Otranto Bridge, included in the Mitchell County Engineer's Records, 1875-1910, located at the Mitchell County Auditor's Office, Mitchell County Courthouse, Osage IA.

Victor C. Darnell, *Directory of American Bridge-Building Companies, 1840-1900* (Washington, D.C.: Society for Industrial Archaeology, 1984).

Field inspection by Charlene Roise, 16 July 1991.