



**Matsell Bridge**

**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 Matsell Bridge

other names/site number \_\_\_\_\_

**2. Location**

street & number \_\_\_\_\_ county road over Wapsipinicon River  not for publication

city or town 5.8 miles northeast of Springville  vicinity

state Iowa code IA county Linn code 113 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.)

\_\_\_\_\_  
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): \_\_\_\_\_  
\_\_\_\_\_

**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)

TRANSPORTATION/road-related

**7. Description**

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

other: steel plate through girder

**Materials**  
(Enter categories from instructions)

foundation N/A  
walls N/A  
roof N/A  
other N/A

**Narrative Description**

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

Located 5.8 miles northeast of Springville, the Matsell Bridge spans the Wapsipinicon River in a rural Linn County setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 3                      construction date: 1938-39  
span length: 140.0'                construction cost: \$22,300.00 (approximate)  
total length: 303.0'                current condition: excellent  
roadway wdt.: 20.0'                alterations: none

superstructure: steel plate through girder  
substructure: concrete abutments with solid concrete piers  
floor/decking: concrete floor and curb  
other features: curved concrete bulkheads with incised vertical lines; rocker bearings; transverse angle iron bracing

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

TRANSPORTATION

Period of Significance

1938-39

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

Significant Dates

1938-39 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

designer:

Iowa State Highway Commission

fabricator:

Illinois Steel Bridge Co., Jacksonville IL

builder:

Public Works Admin.; Amos Melberg

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 633600 4665280  
zone easting northing2 15 633690 4665365  
zone easting northing**Verbal Boundary Description**

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 22 feet by 303 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 Robert Hybben, Charlene Roise and Michelle Crow-Dolby  
 organization Fraserdesign date 31 August 1994  
 street & number 1269 Cleveland Avenue telephone 303-669-7969  
 city 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 Linn County  
 street & number 1888 County Home Road telephone 319-398-3445  
 city or town Marion state Iowa zip code 52302

**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

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This steel plate girder crosses the Wapsipinicon River some six miles northeast of Springville in eastern Linn County. The structure replaced a substantial earlier bridge consisting of a 100-foot through truss, a 140-foot bowstring truss, a 50-foot pony truss, and a 12-foot approach span, erected in stages by the county between 1870 and 1906. When a replacement structure was being considered in July 1938, two possibilities were evaluated. One called for two through trusses with a 50-foot stringer approach span, at a cost of about \$23,800.00. The other option was a through plate girder, estimated at \$22,290.00. E.W. Blumenschein, bridge design engineer for the Iowa State Highway Commission, recommended the latter because the plans would take half as long to prepare, the structure would be easier to maintain, and "it would also be almost impossible to wreck this bridge by hitting it with a truck as sometimes happens with trusses." William H. Behrens, Linn County Engineer, concurred. Blumenschein sent plans to Behrens in mid-September, which Behrens, in turn, submitted to Clifford Shoemaker, District Engineer of the Federal Bureau of Public Roads in Omaha, Nebraska. Shoemaker approved the plan for "Iowa PWA Docket 1229-F." In February 1939, Blumenschein reviewed the bridge's steel fabrication at the Illinois Steel Bridge Company's plant in Jacksonville, Illinois: "The two girders were completely assembled for their entire length with floor beams in position and sufficient laterals to insure all main parts in correct position." He concluded that the material and workmanship was "very satisfactory." After his inspection, the members were disassembled and shipped to Linn County for erection. Since its construction, the Matsell Bridge, or Wapsie Bridge as it is locally known, continues to serve local residents while maintaining excellent structural integrity.

In the 1930s the state-highway commission began using variable depth plate girders for its long-span beam bridges. These typically employed straight girders with arched or curved haunches at the abutments and piers to help withstand the increased sheer forces at the bearing points. The girders were rigidly joined to form a continuous-span structure. ISHC built several such beam bridges with spans in excess of 100 feet in the 1930s and 1940s. With a span length of 140 feet, the Matsell Bridge in Linn County represents the longest example of steel beam bridge design identified by the historic bridge inventory. It is thus distinguished as the ultimate extension of this relatively common structural type.

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

**National Register of Historic Places  
Continuation Sheet**

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Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 222050.

Letter from E.W. Blumenschein to William H. Behrens, 16 July 1938.

Letter from W.N. Adams to William H. Behrens, 19 July 1938; letter from William H. Behrens to W.N. Adams, 21 July 1938.

Letter from E.W. Blumenschein to William H. Behrens, 15 September 1938.

Letter from Clifford Shoemaker to William H. Behrens, 7 October 1938.

Letter from E.W. Blumenschein, Shop Inspection Report, 13 February 1939.

Illinois Steel Bridge Company, Shop Drawings, approved by the Iowa State Highway Commission, 26 January 1939, located at the Linn County Engineer's Office, Cedar Rapids IA.

Field inspection by Charlene K. Roise, 27 September 1991.