



800

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 Yellow Smoke Park Bridge

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

2. Location

street & number \_\_\_\_\_ pedestrian path over unnamed stream  not for publication

city or town eastern edge of Denison  vicinity

state Iowa code IA county Crawford code 047 zip code 51442

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 Chalkley DSTPO 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):

John A. 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)

Table with 3 columns: Contributing, Noncontributing, and Resource Type (buildings, sites, structures, objects, Total). Values range from 0 to 1.

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/pedestrian-related

7. Description

Architectural Classification

(Enter categories from instructions)

other: bowstring pony arch-truss

Materials

(Enter categories from instructions)

foundation: Timber pile

walls: -

roof: -

other: Steel

Narrative Description

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

Located on at the eastern edge of Denison, the Yellow Smoke Park Bridge spans an unnamed stream in a rural Crawford County setting. A description of the structure follows:

span number: 1, construction date: c1945, span length: unknown, construction cost: unknown, total length: unknown, current condition: fair, roadway wdt.: unknown, alterations: truss moved, c1986

superstructure: steel, 14-panel, rigid-connected bowstring pony arch-truss
substructure: timber pile bent abutments and piers, with timber backwalls
floor/decking: timber deck over steel stringers
other features: arch rib: 2 angle; lower chord: 2 angles; vertical: 2 angles with 2-angle outriders; diagonal: 1 angle; lateral bracing: round rod with threaded ends; floor beam: I-beam; no guardrails

Other than its recent move and maintenance-related repairs, the bridge remains essentially unaltered. The Yellow Smoke Park Bridge today retains a high degree of integrity of design, 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

c1945

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

Significant Dates

c1945 (construction date)

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Bullder

designer:

H. Gene McKeown and Associates

fabricator:

Des Moines Steel Company, Des Moines IA

builder:

county work force

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:



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

**National Register of Historic Places  
Continuation Sheet**

Section Number 8 Page 1 Yellow Smoke Park Bridge Crawford County; Iowa

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During World War II the War Department developed a "Priorities Critical List" of materials deemed essential to the war effort. As a component of almost every major piece of war materiel, steel was, of course, included on the list, making the construction of steel bridges problematic for Iowa's counties. In response, most of the counties reverted to timber construction for their small-scale bridges, and timber pile bridges outnumbered all other types by a substantial margin in the 1940s. Crawford County, too, relied on timber construction, until heavy flooding in May 1945 washed out 27 bridges and culverts in the county. The county board of supervisors resolved to build new bridges using emergency funds, purchasing several steel superstructures from the Des Moines Steel Company as replacement spans. Apparently designed by Council Bluffs civil engineer H. Gene McKeown, these structures featured a bow-string arch-truss configuration, with the upper chord in compression and the lower chord in tension to resist the springing action of the curved upper chord (although the all-riveted construction made this action structurally indeterminate). The trusses employed only small-profile steel angles for the web members. They employed angled gusset plates to which the vertical and diagonal members were riveted to the chords. Each web was fabricated in the shop in two halves and field-bolted at the site by a county work force. The trusses were carried by relatively simple bearing shoes, and angle outriders provided lateral support for the truss webs. This span, recently moved to a county park, was one of several such hybrid trusses built by Crawford County during the war years. It, like the five other, almost identical spans that remain in Crawford County, is a noteworthy example of wartime bridge construction in Iowa.

**United States Department of the Interior  
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**National Register of Historic Places  
Continuation Sheet**

Section Number   9   Page   2   Yellow Smoke Park Bridge Crawford County; Iowa

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Crawford County Board of Supervisors' Minutes, Book T: page 175 (7 May 1945), located at Crawford County Courthouse, Denison IA.

Correspondence among Lowell J. Soike, Iowa State Historic Preservation Office; David L. Cook, Iowa Department of Transportation; and H. Dale Wight, Crawford County Engineer (5 April 1985, 9 April 1985, 13 June 1985, 9 July 1985, 22 July 1985, 29 July 1985, 6 August 1985).