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 Smok	e Park B	ridge				
other names/site number							
2. Location	· · · · · · · · · · · · · · · · · · ·						
street & number	pedestrian pa	ath over 1	unnamed stre	am		🔲 not for pi	ublication
city or town	eastern edge	of Denis	on			vicinity	
state Iowa	code <u>IA</u>	county _	Crawford	code	047	zip code	51442
3. State/Federal Agency Co	ertification	· · · · ·					
property K meets does nationally X statewide Signature of certifying official, State or Federal agency and In my opinion, the property	locally. (See (Continuation s	heet for additional		Date	\$	
Signature of certifying official,	Title				Date		
State or Federal agency and	bureau						
4. Navional Park Service C	ertification				$\overline{\mathbf{D}}$	ΛΛ	
I hereby certify that the prop entered in the National F See continuation she	legister		Zalaa		Blæ	U G	- 28-99
☐ determined eligible for th ☐ See continuation she		ster					
 determined not eligible for removed from the Nation other, (explain): 		Register					

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OMB No. 10024-0018

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· Yellow Smoke Park Bridge

5. Classification		·····		·····	
Ownership of Property (Check as many boxes as apply) Category of Property (Check only one box)		Number of Resources within Property (Do not include previously listed resources in the count)			
 □ private ■ public-local □ public-State □ public-Federal 	 building(s) district site structure 	Contributing 0 0 1	Noncontributing 0 0 0 0 0	buildings sites	
	object	0 1	0 0 0	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 con in the Nationa 0	tributing resources Register	previously listed	
6. Function or Use		· · · · · · · · · · · · · · · · · · ·			
Historic Functions (Enter categories from instructions)		Current Functions (Enter categories from instructions)			
TRANSPORTATION/road-related		TRANSPO	RTATION/pedesti	rian-related	
7. Description		BR at a via la			
Architectural Classification (Enter categories from instructions)		Materials (Enter categories fr	om instructions)		
other: bowstring pony arch-truss		foundation	ber pile		
		walls	-		
		roof	-	2.81.27.7.7	
		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:		construction date:	
span length:		construction cost:	
total length:		current condition:	
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.)

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

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

Primary location of additional data:

- State Historic Preservation Office
- □ other State agency
- □ Federal agency
- Local government
- University
- other
 - name of repository:

Yellow Smoke Park Bridge

Crawford County; Iowa

10. Geographical Data

Acreage of Property less than one acre

UTM References

(Place additional UTM references on a continuation sheet)

1	15	307280	4653140	
	zone	easting	northing	

zone easting

2_

northina

Verbal Boundary Description

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel with unknown measurements, 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. Fraser			
organization	Fraserdesign	date	31 August 1994	
street & number	1269 Cleveland Avenue	telephone	303-669-7969	
city or town	Loveland	state	Colorado zip code80537	
Additional Deau	nentotlan			

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 location

A 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	Crawford County				
street & number _	P.O. Box 458	telephone	712-263-24	149	
city or town	Denison	state	Iowa	_ zip code _	51442

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 Yellow Smoke Park Bridge Crawford County; Iowa

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 bowstring 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 smallprofile 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.

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National Register of Historic Places Continuation Sheet

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

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).