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

# National Register of Historic Places Registration Form

APR 1 7 1998

This form is for use in nominating or requesting determinations for individual propertile and the National Register of Historic Places Registration Form (National Register Bulletin 16A). Combine 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			
hist	toric name Bridge			
othe	er names/site number			_
2.	Location			
			_ □ not for p	ublication
city	or town 3.3 miles west of West Liberty		_ <b>=</b> vicinity	
stat	te <u>Iowa</u> code <u>IA</u> county <u>Muscatine</u> co	de <u>139</u>	zip code	52776
3.	State/Federal Agency Certification			
	As the designated authority under the National Historic Preservation Act, as amended, I hereby request for determination of eligibility meets the documentation standards for registering property of Historic Places and meets the procedural and professional requirements set forth in 36 CFF property meets does not meet the National Register criteria. I recommend that this property attacks are locally. (See continuation sheet for additional comments.)  Signature of certifying official/Title  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 comments.)  Signature of certifying official/Title	erties in the Part 60. In Perty be con Date	e National Register In my opinion, the sidered significant	
	Signature of certifying official, fine	Dan	<b>5</b>	•
	State or Federal agency and bureau			
4.	National Park Service Certification			
,	entered in the National Register  See continuation sheet		5·15·	98
	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)	Category of Property (Check only one box)	Number of Resources within Property (Do not include previously listed resources in the count)			
□ private	□ building(s)	Contributing	Noncontributing		
■ public-local	district	0	0	buildings	
public-State	<ul><li>site</li><li>structure</li><li>object</li></ul>	0	0	sites	
☐ public-Federal		1	0	structures	
		0	0	objects	
		1	0	Total	
Name of related multiple pr (Enter 'N/A' if property is not part o Highway Bridges of Io	f a multiple property listing)	Number of contributing resources previously liste in the National Register  ()			
6. Function or Use Historic Functions		Current Functi	one		
(Enter categories from instructions)		(Enter categories fi			
TRANSPORTATION/re	oad-related	TRANSPORTATION/road-related			
7. Description		1 44.			
Architectural Classification (Enter categories from instructions)		<b>Materiais</b> (Enter categories fr	om instructions)		
other: welded steel rig	gid frame	foundation Concrete			
		walls			
		roof			
		other	Welded steel		

#### **Narrative Description**

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

Located 3.3 miles west of West Liberty, the bridge spans an unnamed stream in a rural Muscatine County setting that has changed little since the structure's period of significance. A description of the structure follows:

span number: 1 construction date: 1937 span length: 34.0' construction cost: unknown total length: 35.0' current condition: good roadway wdt.: 19.9' alterations: none

superstructure: welded steel rigid frame, skewed substructure: concrete abutments and wingwalls

floor/decking: concrete deck

other features: concrete post-and-rail guardrails with solid concrete bulkheads and Art Moderne pylons

Other than maintenance-related repairs and alterations noted above, the bridge remains essentially unaltered as it continues to carry vehicular traffic. The bridge today retains a high degree of integrity of location, design, setting, materials, workmanship, feeling and association.

### ☐ designated a National Historic Landmark ☐ recorded by Historic American Buildings Survey recorded by Historic American Engineering Record

□ other name of repository:

Bridge		Muscatine C	County; Iowa
10. Ĝeographic	ai Data		
. Acreage of Prop	erty less than one acre		
UTM References (Place additional UTM	s I references on a continuation sheet)		
1 15 6398 zone easting	00 4603000 northing	2zone eas	ting northing
Verbal Boundary (Describe the boundary	Description ries of the property)		
The nominated centered on the	l property is a rectangular-	. Included within this	ring 22 feet by 35 feet, which is rectangular parcel are the bridge
The nominated proach spans a	nd the property on which the erty that has been historicall	ey rest. These bounds	substructure, floor system, any aparies encompass, but do not exceed bridge.
name/title	Clayton B. Fraser		
organization	Fraserdesign	date	31 August 1994
street & number	1269 Cleveland Avenue	telephor	ne _ 303-669-7969
city or town	Loveland	state	Colorado zip code 80537
Additional Docur			
_	tems with the completed form:		
Continuation Sho	eets		
	map (7½ or 15 minute series) ind map for historic districts and pre		
Photographs			

Representative black and white photographs of the property

#### **Additional Items**

(Check with the SHPO or FPO for any additional items)

					_
the request of SHPO or FPO)					
Muscatine County					
3610 Park Avenue West	telephone	ne 319-263-6351			
Muscatine	state	Iowa	zip code	52761	
	Muscatine County 3610 Park Avenue West	Muscatine County  3610 Park Avenue West telephone	Muscatine County  3610 Park Avenue West telephone 319-263	Muscatine County  3610 Park Avenue West telephone 319-263-6351	Muscatine County  3610 Park Avenue West telephone 319-263-6351

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.

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### National Register of Historic Places Continuation Sheet

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				_		• •	

Located west of West Liberty, this small-scale steel and concrete bridge carries a gravel-surfaced county road over an unnamed stream. The bridge consists of a single-span steel rigid-frame structure, supported on a skew by steel posts embedded in concrete abutments. Although its dimensions are modest - spanning only 35 feet - the structural configuration of the bridge is noteworthy. The four slightly arched beams are made up of steel plates welded continuously to form variable depth I-beams, braced by concrete beam diaphragms. The Iowa State Highway Commission designed the structure in the spring of 1937. Using the ISHC design, Muscatine County solicited competitive proposals and in June awarding a contract for this bridge and two others to Otto Wendling of Muscatine. Presumably completed later that year, this structure has functioned in place since, in unaltered condition.

With notable engineers such as Thomas McDonald and Conde McCullough on its staff, the Iowa State Highway Commission was from the beginning a leader among state highway agencies in the standardization of bridge design. Immediately after it re-organization in 1913, ISHC began developing design standards for several short-span structural types. But within this framework of standardization, ISHC was continuously experimenting with innovative applications of existing and new technologies. This diminutive bridge in Muscatine County is evidently the result of ISHC experimentation. It and the other bridges let in the June 1937 contract employed rigid-frame configurations - this one using welded steel beams and the others reinforced concrete beams. Further research is needed to determine the purpose and circumstances of this exercise, but it appears that the bridge is a formative application by ISHC in welded steel technology. It is today distinguished as the oldest welded beam bridge in Iowa - an important transportation-related resource.

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## **National Register of Historic Places Continuation Sheet**

Section Number 9 Page 2 Bridge Muscatine County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal, Structure No. 258410.

Iowa State Highway Commission, Weekly Letting Report 25:23 (9 June 1937), Weekly Letting Report 25:24 (16 June 1937), on file at Iowa Department of Transportation, Ames, IA.

Field inspection by Clayton Fraser, 15 December 1992.