United States Department of the Interior National Park Service

National Register of Historic Places Registration Form

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This form is for use in nominating or requesting determinations for individual properties and at step515. The properties in the step515 of the properties is and narrative items on continuation sheets (NPS Form 10-900a). Use a type writer, word processor, or computer, to complete all items.

1. Name of Property

other, (explain):

historic name	Chambers Fo	rd Bridge					
other names/site number							
2. Location							
street & number	85th Street	over Iowa	River			🔲 not for pu	ublication
city or town	4.0 miles sou	theast of	Chelsea	······································		vicinity	
state Iowa	codeIA	_ county _	Tama	code _	171	zip code	52215
3. State/Federai Agen	cy Certification						
Signature of certifying STATE HISTOF State or Federal agenc	NICAL SOCIETY OF ION	<u>) SAHPD</u> 1A			<u>4-7-</u> Date	GB neet for additional	
Signature of certifying	official/Title				Date	u	
State or Federal agenc	y and bureau						
4. National Park Servi	ce Certification		00			<u>^ 1 4</u>	
I hereby certify that the entered in the Natio See continuation determined eligible	property is: nal Register sheet for the National Regis	ster		ən // _	Be	all s	5.15-9
 See continuation determined not eligitization removed from the N 	ble for the National F	legister					

Chambers Ford Bridge

Tama County; Iowa

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 object 	Contributing)	
		0 0 1	0 0 0	buildings sites
		<u> </u>	0	structures
Name of related multiple property listing (Enter 'N/A' if property is not part of a multiple property listing) Highway Bridges of Iowa			tributing resources	Total
6. Function or Use				
Historic Functions (Enter categories from instructions)		Current Functi (Enter categories fr		
TRANSPORTATION/road-related		TRANSPO	RTATION/road-ro	elated
7. Description				
Architectural Classification (Enter categories from instructions)		Materlais (Enter categories fr		
other: pinned Pratt th	rough truss	foundation	mber pile	
		walls		·····
		roof		
		other	rought iron/	steel

Narrative Description

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

Located southeast of Chelsea, the Chambers Ford Bridge spans the Iowa River in a rural setting that has changed little since the structure's period of significance. A description of the structure follows:

span number:	2	construction date:	1890; 1902-03
span length:	160.0'	construction cost:	\$3987.00 (1902 construction)
total length:	345.0'	current condition:	fair
roadway wdt.:	15.1'	alterations:	none

superstructure: wrought iron/steel, 7-panel, pin-connected Pratt through truss, with steel stringer approach spans

substructure: timber pile bent abutments and wingwalls; concrete-filled steel cylinder piers

floor/decking: timber deck over steel stringers

other features: upper chord and inclined end post: 2 channels with cover plate and lacing, 2 channels with lacing; lower chord: 2 punched rectangular eyebars; vertical: 2 channels with lacing (2 looped square or looped round eyebars at hips); diagonal: 2 punched rectangular eyebars; counter: round eyerod with unslotted turnbuckle; lateral bracing: round rod with threaded ends; strut: 4 angles with lacing, 2 angles with knee braces; floor beam: I-beam, U-bolted to lower chord pins, tapered "fishtail" plate girders, field-bolted to verticals; guardrail: steel lattice, steel pipe; A-frame portal strut

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

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

1890

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

Significant Dates

1890 (construction date)

Significant Person

(Complete if Criterion B is marked above)

<u>N/A</u>

Cuiturai Affiliation

N/A

Architect/Builder

Clinton B&I Works; George King Bridge Co. fabricator: Lackawanna Steel; Jones & Laughlin Steel builder: Clinton B&I Works; George King Bridge Co.

Primary location of additional data:

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

Tama County; Iowa

10. Geographical Data

Acreage of Property less than one acre

UTM References

(Place additional UTM references on a continuation sheet)

1	15	555100	4636860	
	zone	easting	northing	

2 15 555190 4636940

zone easting northing

Verbal Boundary Description

(Describe the boundaries of the property)

The nominated property is a rectangular-shaped parcel measuring 17 feet by 345 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 Prepa	red By				
name/title	Clayton B. Fraser	X X X =			
organization	Fraserdesign	date	31 August 1994	<u> </u>	
street & number	1269 Cleveland Avenue	telephone	303-669-7969		
city or town	Loveland	state	Colorado zip o	code _	80537
Additional Desur					

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

- A USGS map (7% 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	Tama County					
street & number	1002 East Fifth Street	telephone _	515-484-33	341		
city or town	Tama	state	Iowa	_ zip code _	52339	

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 Chambers Ford Bridge

Tama County; Iowa

In April 1890 the Tama County Board of Supervisors received a petition from S. Wyman and other citizens of Salt Creek Township for a permanent bridge over the Iowa River southeast of Chelsea. The supervisors visited the proposed site, known locally as the Chambers Ford, the following month. They agreed to construct an iron bridge at this point if the citizens would "procure a right-of-way for said bridge and build all necessary trestle work on said right-of-way and all approaches to said bridge." The County Auditor subsequently solicited bids for the bridge's erection, and on July 11th a contract was let to the Clinton Bridge and Iron Works of Clinton, Iowa, for a single-span, pin-connected Pratt truss. Apparently completed later that year, the Chambers Ford Bridge functioned in place with only maintenancerelated repairs for ten years. By the turn of the century, however, the original timber trestle approach that the local citizens had built on one end had deteriorated beyond the point of repair. In September 1902 the board of supervisors inspected the bridge and met with representatives of bridge firms at nearby Belle Plaine. A contract for the repair work, which included the erection of a new Pratt through truss, was then let to the George E. King Bridge Company of Des Moines. Using steel fabricated in Pittsburgh by Lackawanna and Jones and Laughlin, King erected the new span during the fall and winter of 1902-03. Work was completed by April 1903, whereupon the county issued a warrant to King in the amount of \$3,987.00. Since that time, the two-span structure has carried vehicular traffic in essentially unaltered condition. The south span is part of the original 1890 structure built by the Clinton Bridge and Iron Works, while to the north is the span built by the George E. King Bridge Company in 1903.

With virtually all of the in-state and national bridge companies promoting it, the pin-connected Pratt through truss was the steel bridge of choice for medium-scale crossings in Iowa in the late 19th century. Thousands of such spans were erected on the state's road system during this period of intense bridge construction activity, and today they remain the most populous structural type remaining from the 19th century. The Chambers Ford Bridge is distinguished among these for its staged construction, two-span configuration and well-preserved physical state. United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

Section Number 9 Page 2 Chambers Ford Bridge Tama County; Iowa

Iowa Department of Transportation, Structure Inventory and Appraisal: Structure No. 316660.

Tama County Supervisors' Minutes, Book E: page 20 (9 April 1890), page 34 (3 June 1890), page 45 (11 July 1890); Book F: page 27 (10 September 1897), page 39 (30 September 1897), page 296 (26 September 1902), page 318 (6 April 1903), located at Tama County Courthouse, Toledo IA.

Field inspection by Clayton Fraser, 5 June 1990.