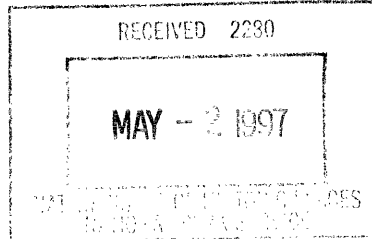


United States Department of the Interior
National Park Service

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 (Form 10-900-a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

Historic name: Crystal Bridge

Other names/site number: Cart Creek Bridge; 32PB78

2. Location

Street & number: unnamed county road not for publication

City or town: Crystal vicinity

State: North Dakota Code: ND County: Pembina Code: 067 Zip code: 58222

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, 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.)

James E. Sperry
Signature and title of certifying official James E. Sperry
State Historic Preservation Officer (North Dakota)

January 8, 1997
Date

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of the Keeper

Date of Action

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:)

Edson H. Beall
Signature of the Keeper 5/30/97
Date of Action

Crystal Bridge
Name of Property

Pembina, North Dakota
County and State

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 | |
|--------------|-----------------|------------|
| _____ | _____ | buildings |
| _____ | _____ | sites |
| <u>1</u> | _____ | structures |
| _____ | _____ | objects |
| <u>1</u> | _____ | Total |

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

Historic Roadway Bridges of N.D.

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: concrete T-beam bridge

Materials
(Enter categories from instructions.)

foundation concrete
walls _____
roof _____
other concrete

Narrative Description

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

Crystal Bridge
Name of Property

Pembina, North Dakota
County and State

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.

Areas of Significance

(Enter categories from instructions)

TRANSPORTATION

ENGINEERING

Period of Significance

1927-1946

Significant Dates

1927

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Builder: Fargo Bridge & Iron Co.

Narrative Statement of Significance

(Explain the significance of the property on one or more 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 Name of repository: # _____
- recorded by Historic American Engineering Record # _____

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Crystal Bridge
Name of Property

Pembina, North Dakota
County and State

10. Geographical Data

Acreage of Property Less than one acre.

UTM References

(Place additional UTM references on a continuation sheet.)

| | | | | | | | | | | | |
|---|------|-------------|---------------|---|------|---------|----------|-----|-----|-----|-----|
| 1 | 1 4 | 5 9 7 9 1 0 | 5 3 8 3 2 9 0 | 2 | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ |
| | Zone | Easting | Northing | | Zone | Easting | Northing | | | | |
| 3 | _ _ | _ _ | _ _ | 4 | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ | _ _ |

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared by

Name/Title: Mark Hufstetler / Historian
Organization: Renewable Technologies, Incorporated Date: December 10, 1996
Street & Number: 511 Metals Bank Building Telephone: (406) 782-0494
City or Town: Butte State: Montana Zip code: 59701

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 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: City of Crystal
Street & Number: Box 122 Telephone: (701) 265-8495
City or Town: Crystal State: North Dakota Zip code: 58222

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 the 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 Project (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

CRYSTAL BRIDGE
PEMBINA COUNTY, NORTH DAKOTA

Narrative Description:

The Crystal Bridge is located on a paved, single-lane county road in Pembina County, North Dakota. The site is located at the western edge of the small community of Crystal. The bridge, constructed on an approximate east-west axis, carries Appleton Avenue, leading from Crystal to a rural portion of the county; although undocumented, this may have been an early alignment of North Dakota Highway 66 through the area. The surrounding land is heavily cultivated, and scattered groups of farmstead buildings exist in the vicinity. A residential neighborhood of Crystal is immediately east of the structure. The bridge crosses Cart Creek, a primary watercourse in the area. Here, the creek meanders through a narrow, shallow valley dotted with trees and wetlands.

The bridge itself is a two-span concrete T-beam structure, some 66 feet long. Concrete T-beam designs saw occasional use in North Dakota during the first half of the twentieth century, as bridge builders began experimenting with the increased use of reinforced concrete in heavy load-bearing applications. Unlike steel truss designs, most small concrete bridges of the era utilized standardized plans prepared by federal or state structural engineers. Concrete T-beam bridges were relatively uncommon in most parts of North Dakota.

Design details of the bridge's substructure and superstructure are outlined below:

Structure type: 2-span, concrete T-beam

Dimensions: 66 feet long, 25 feet wide overall

Substructure: concrete abutments with wingwalls; post-and-lintel concrete piers

Superstructure:

floor system: 5 concrete T-beams; 8 drains on each side

decking: concrete covered with asphalt; sidewalk on south side

railing: 2 horizontal metal pipes with posts extending across the top of the wingwalls; single horizontal metal pipe railing separating the sidewalk and street

The bridge retains a very high level of integrity; it remains in its original location, and all major structural components appear to retain their as-built appearance. Some spalling of the concrete has taken place.

The Crystal Bridge is owned and maintained by Pembina County. It carries the state numerical designation 34-113-29.2.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 2

CRYSTAL BRIDGE
PEMBINA COUNTY, NORTH DAKOTA

Narrative Statement of Significance:

In accordance with the guidelines established in the Multiple Property Documentation form for "Historic Roadway Bridges in North Dakota," the Crystal Bridge is eligible for listing in the National Register of Historic Places with local significance under Criteria "A" and "C." The bridge is significant under Criterion A for its association for the development and improvement of North Dakota's rural roadway network. It is eligible under Criterion C because the date of construction and builder have been firmly documented and because it is one of two of the oldest documented concrete T-beams in North Dakota.

Historical information: According to the county records, the \$4,187 contract for this concrete T-beam bridge was awarded to the Fargo Bridge and Iron Company on December 20, 1927. At the same meeting, the citizens of Crystal City presented a petition requesting that a reinforced concrete railing be substituted for the metal railing specified on the original plan. The Commissioners laid the matter over until the January meeting to give them time to confer with an engineer from the Fargo Bridge and Iron Company. At the January meeting, they decided to adhere to the "standard federal plans" and made no change to the railing.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 3

CRYSTAL BRIDGE
PEMBINA COUNTY, NORTH DAKOTA

Bibliography:

"Commissioners' Minutes -- Pembina County," Dec. 20, 1927 and Jan. ?, 1928,
"Book I", pp. 283 and 285.

Johnson, Lon, et.al. "Historic Bridges in North Dakota." Bismarck: North Dakota
Department of Transportation, 1992.

State Transportation Department, "Structure Inventory & Appraisal Sheet," Bridge
No. 34-113-29.2, n.d.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 4

CRYSTAL BRIDGE
PEMBINA COUNTY, NORTH DAKOTA

Verbal Boundary Description:

The bridge is located in the Northeast quarter of Section 13, Township 159 North, Range 55 West. The boundary consists of a rectangle, measuring 116 feet east-west and 75 feet north-south, and centered on the bridge superstructure.

Boundary Justification:

The boundary is constructed to include the area occupied by the bridge superstructure and substructure, as well as a 25-foot buffer of land immediately surrounding the structure.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number Photographs Page 5

CRYSTAL BRIDGE
PEMBINA COUNTY, NORTH DAKOTA

Index to Photographs

Photographer: Mark Hufstetler

Date: April 1996

Location of original negatives: State Historical Society of North Dakota,
Bismarck.

| Photograph Number | Description | Direction of View |
|----------------------|-----------------|----------------------|
| 1 | south elevation | NNE |
| 2 | east portal | W |