

1824

United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form

SEP 20 1989
National
Register

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Zumbro Parkway Bridge
other names/site number Bridge No. 3219

2. Location

street & number County Road 68 over branch of Zumbro River not for publication N/A
city, town Hyde Park Township vicinity Zumbro Falls
state Minnesota code MN county Wabasha code 157 zip code 55991

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
<input checked="" type="checkbox"/> public-local	<input type="checkbox"/> district	_____	_____ buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	_____	_____ sites
<input type="checkbox"/> public-Federal	<input checked="" type="checkbox"/> structure	_____	_____ structures
	<input type="checkbox"/> object	_____	_____ objects
		_____	_____ Total

Name of related multiple property listing: Minnesota Masonry-Arch Highway Bridges, 1870-1945
Number of contributing resources previously listed in the National Register 0

4. 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. See continuation sheet.
Nina M. Archabal 9/22/89
Signature of certifying official Nina M. Archabal Date
State Historic Preservation Officer
State or Federal agency and bureau Minnesota Historical Society

In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.
Signature of commenting or other official _____ Date _____
State or Federal agency and bureau _____

5. National Park Service Certification

I, hereby, certify that this property is:
 entered in the National Register. Robert Egan 11/6/89
 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:) _____
Signature of the Keeper _____ Date of Action _____

6. Function or Use

Historic Functions (enter categories from instructions)
Transportation, road-related (vehicular)

Current Functions (enter categories from instructions)
Transportation, road-related (vehicular)

7. Description

Architectural Classification
(enter categories from instructions)

Materials (enter categories from instructions)

other: Multi-Plate arch bridge

foundation stone, limestone

walls _____

roof _____

other steel

Describe present and historic physical appearance.

See continuation sheet

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Description: Zumbro Parkway Bridge

Located immediately south of the City of Zumbro Falls in a rural area of Wabasha County, the Zumbro Parkway Bridge is an unaltered, stone-faced, double-arch, Multi-Plate highway bridge that carries an unpaved east-west road over a tributary of the Zumbro River.

Built on a 45-degree skew, the Zumbro Parkway Bridge contains two identical arches of 25-foot span. The bridge's overall width is about 37 feet. Springing about 56 inches above grade from concrete-capped-and-footed, rubble-limestone abutments and pier, the arches consist of field-bolted, galvanized, corrugated-iron segments -- a type of modular construction known as "Multi Plate." The corrugated-metal vault supports earth fill, which, in turn, supports the roadway. Ornamented with simulated cut-stone voussoirs of cast concrete, the Multi Plate arches are anchored in place by concrete head walls and straight-back retaining walls, all faced with coursed-rubble limestone that rises above the roadway to serve as railings. The stonework incorporates Gothic Revival detailing in the form of "pointed" openings in the railings and triangular-section "buttresses" framing the arches. Extending to the top of the railing, the buttresses suggest the existence of pedestrian "refuges" along the roadway -- a common feature of medieval English bridges.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

nationally statewide locally

Applicable National Register Criteria A B C D

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance (enter categories from instructions)
Engineering

Period of Significance
1937

Significant Dates
1937

Cultural Affiliation
N/A

Significant Person

N/A

Architect/Builder

Evans, J. M.

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

See continuation sheet

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 8 Page 1Zumbro Parkway Bridge: Significance

The Zumbro Parkway Bridge embodies engineering significance in the context of Minnesota iron and steel highway bridges constructed during the period 1873 to 1945. Erected by the WPA in 1937, the structure is an excellent example of a stone-faced, Multi-Plate, arch highway bridge -- a type of decorative modular construction often employed on New Deal, work-relief, bridge projects.

Multi Plate is a galvanized, corrugated-iron product that is fabricated in curved segments so that individual pieces can be bolted together in the field to form a load-bearing arch. As the historical context points out (see Section E, pp. 19-20), Multi Plate was introduced by the Armco Culvert Manufacturer's Association in 1931, as a replacement for prefabricated corrugated-iron pipe, which had been used in culverts since the 1890s. Although corrugated-iron pipe was durable, its prefabricated lengths were difficult to handle in the field. Multi Plate alleviated this problem with its built-up modular design, permitting the construction of larger spans with thicker gauge. Although Multi Plate's chief application was backfilled culverts, Armco also aggressively marketed a low-cost bridge design using Multi-Plate arches for spans up to 30 feet. To prevent undermining and shifting of the structure, the arch generally was anchored to concrete abutments and headwalls. When decorative stone facing was used on the headwalls, the bridge took on the appearance of a stone-arch bridge, which strongly appealed to the New Deal agenda of encouraging roadside beautification, local craft skills, and labor-intensive public works projects.

In Minnesota, approximately 35 Multi Plate "stone-arch" bridges survive from the New Deal era.¹ Designed for the WPA by J. M. Evans, who apparently was an engineer with the Wabasha County Highway Department, the Zumbro Parkway Bridge is one of the finest examples of its type.² The quality of its stonework and the visual interest of its Gothic Revival design were recognized by its New Deal sponsors. When the Works Progress Administration (WPA) of Minnesota showcased its achievements with a publication in 1939, the book's "highway section" included photographs of only two stone-faced Multi-Plate bridges: a triple-arch structure in Whitewater State Park, which has been demolished, and the double-arch Zumbro Parkway Bridge, which has not been significantly altered since its completion in 1937.³ The structure's "historic name" is based on the caption in the WPA book.

Notes

1. The statistic is based upon a review of MNDOT bridge files for all structures categorized as "steel arch."
2. J. M. Evans. Plans of the Zumbro Parkway Bridge, unpublished, 1937. Wabasha County Highway Department.
3. Works Progress Administration of Minnesota. WPA Accomplishments. N. pub., 1939, n.p.

9. Major Bibliographical References

Evans, J. M. Plans of the Zumbro Parkway Bridge. Unpublished, 1937. Wabasha County Highway Department.

Minnesota Department of Transportation. Bridge Files. Unpublished.

Works Progress Administration of Minnesota. WPA Accomplishments. N. pub., 1939.

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 # _____

See continuation sheet

Primary location of additional data:

- State historic preservation office
- Other State agency
- Federal agency
- Local government
- University
- Other

Specify repository: _____

10. Geographical Data

Acreage of property Less than one acre.

UTM References

A

1	5
---	---

5	4	6	1	2	0
---	---	---	---	---	---

4	9	0	2	9	0	0
---	---	---	---	---	---	---

Zone Easting Northing

B

--	--

--	--	--	--	--	--

--	--	--	--	--	--	--

Zone Easting Northing

C

--	--

--	--	--	--	--	--

--	--	--	--	--	--	--

D

--	--

--	--	--	--	--	--

--	--	--	--	--	--	--

See continuation sheet

Verbal Boundary Description

The nominated property is defined by a rectangle measuring 59 feet east-west by 37 feet north-south, whose vertices coincide with the outside corners of the the bridge's wing walls.

See continuation sheet

Boundary Justification

Based on field measurements, as well as measurements provided by the Minnesota Department of Transportation, the boundaries enclose the bridge's superstructure and substructure, including wing walls.

See continuation sheet

11. Form Prepared By

name/title Jeffrey A. Hess, Historical Consultant
organization N/A date August 1988
street & number 305 Grain Exchange Building telephone 612-338-1987
city or town Minneapolis state Minnesota zip code 55415