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United States Department of the Interior
National Park Service

SEP 29 1989

National Register of Historic Places Registration Form

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 Bridge No. 14770

other names/site number Fountain Township Stone-Arch Bridge

2. Location

street & number Township Road 213 over Mahoney Creek

not for publication N/A

city, town Fountain Township

vicinity Fountain

state Minnesota

code MN

county Fillmore

code 045

zip code 55935

3. Classification

Ownership of Property

- private
- public-local
- public-State
- public-Federal

Category of Property

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

Contributing	Noncontributing	
_____	_____	buildings
_____	_____	sites
<u>1</u>	_____	structures
_____	_____	objects
<u>1</u>	<u>0</u>	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.

Signature of certifying official Nina M. Archabal

Date 9/22/89

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. 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:) _____

Beth Poland

11/6/89

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)

Other: Stone-arch bridge

Materials (enter categories from instructions)

foundation Stone, limestone

walls _____

roof _____

other Stone, limestone

Describe present and historic physical appearance.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number 7 Page 1

Description: Bridge L4770

Located in a rural area of Fillmore County about 2 miles west of the City of Fountain, the structure is a single-span stone-arch bridge that carries an unpaved north-south road over Mahoney Creek.

Built of gray coursed-rubble limestone, the bridge displays a nearly semicircular arch (10-foot span, 4-foot rise) springing about 7 feet above grade from well-defined impost ledges that extend outward from the intrados about 6 inches. The bridge's limestone matches regional bedrock strata, but the quarry site has not been identified. In comparison to the other, 9, surviving stone-arch highway bridges in Fillmore County, the structure's masonry is precisely cut and laid: ring stones are rectangular and uniform, measuring about 6 inches in width and 12 inches in height; corner stones are sharply squared; and masonry joints range from about one-half-inch to 1-inch thick. The spandrel walls are recessed by one course from the flared wing walls. As is common with country stone-arches throughout southeastern Minnesota, the intrados is coated with a thin cement sheath showing formwork impressions from the original centering. The bridge's overall width is 20 feet, 6 inches. On both elevations, the bridge is surmounted by a concrete parapet with angle-iron posts that have lost their rails. The parapets appear to be additions. However, they do not affect the bridge's most significant elements, which are the design of the impost ledges and the configuration of the arch itself.

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
C. 1915

Significant Dates
C. 1915

Cultural Affiliation
N/A

Significant Person
N/A

Architect/Builder
Unknown

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

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 8 Page 1Significance: Bridge No. L4770

Bridge No. L4770 embodies engineering significance in the context of Minnesota masonry-arch highway bridges constructed during the period 1870 to 1945. With its short-span, nearly semicircular arch and distinctive, 6-inch-wide impost ledges, the bridge displays the essential features of a standard stone-arch design that appears to have been developed by the Minnesota State Highway Commission (MHC) during the second decade of the twentieth century for use in rural areas of southeastern Minnesota.. Bridge No. L4770 is the only surviving example of the design in Fillmore County, and one of the few unaltered examples in the state.

As the historic context points out, the MHC was officially organized in 1905 to improve the quality of roads and bridges in the state. To fulfill its responsibilities, the MHC assigned field engineers to assist county governments with highway projects, and prepared a series of standard bridge plans, including "plans for beam spans, plate girders, low trusses and high trusses, reinforced concrete slab and girder spans."¹ Although MHC reports do not mention a stone-arch plan, the commission's field engineers apparently had at their disposal a standard short-span design appropriate for the limestone region of southeastern Minnesota. In 1912, for example, J. J. Davy, the MHC engineer for Fillmore County, supervised the construction of a "12' stone arch" in that county.² Although the structure's design is unknown, it may well have embodied the plan utilized by another MHC engineer for a 12-foot stone arch in nearby Houston County in 1915 (see National Register Documentation for the Bridge No. L4013).

The Fillmore County bridge survives in relatively unaltered condition. Its most notable features are a semicircular arch and well-defined, 6-inch-wide impost ledges, which probably served as supports for the arch centering. These same features are replicated on a nearby bridge in Houston County (Bridge No. L4009), two bridges in Wabasha County (Bridge Nos. L1122, 93741), and Bridge No. L4770 in Fillmore County. The construction history of the Fillmore County bridge is unknown -- county records do not mention the structure and township records are missing. The existence of the similar "impost-ledge" structures in Houston and Wabasha counties, however, implies that the bridge is an example of a standard, MHC, stone-arch plan. Considering that the plan was implemented in Houston County in 1915, a construction date of "c. 1915" is plausible for Bridge No. L4770. Since the Wabasha County bridges have lost their integrity, Bridge No. L4770 remains the only intact example of the state-sponsored design outside of Houston County. The bridge, therefore, significantly contributes to an understanding of the design's morphology and geography.

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

**National Register of Historic Places
Continuation Sheet**

Section number 8 Page 2

Bridge No. L-4770

Notes

1. Minnesota State Highway Commission, Report of the State Highway Commission of Minnesota for 1914 (n. pub., 1915), p. 222.
2. Entry for Bridge #400, Bridge Log, Minnesota State Highway Commission Papers, Minnesota Historical Society.

9. Major Bibliographical References

Entry for Bridge #400, 1912. Bridge Log. Minnesota State Highway Commission Papers, Minnesota Historical Society.

Minnesota State Highway Commission. Report of the State Highway Commission of Minnesota for 1914. N. pub., 1915.

Proceedings of the Fillmore County Board of Commissioners. Fillmore County Courthouse.

See continuation sheet

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 # _____

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

C

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B

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Zone Easting Northing

D

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See continuation sheet

Verbal Boundary Description

The nominated property is defined by a rectangle measuring 12 feet north-south by 26 feet east-west, whose vertices coincide with the outside corners of the bridge's wing walls.

See continuation sheet

Boundary Justification

Based on field measurements, as well as on 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 date August 1988
organization N/A telephone 612-338-1987
street & number 305 Grain Exchange Building state Minnesota zip code 55415
city or town Minneapolis

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

Minnesota Masonry-Arch Highway Bridges MPS

Fillmore Co. MINNESOTA

ADDITIONAL DOCUMENTATION Bridge No. L4770

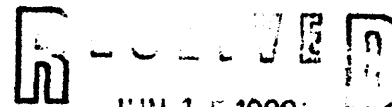
Accepted

Keeper

Shelley Beyer 7/31/90

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet



JUN 15 1990

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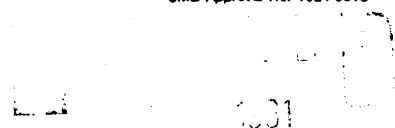
Section number 7 Page 1

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National Register of Historic Places Continuation Sheet

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Bridge No. L4770, Fountain Township, Fillmore Co., MN (89001827)

Section number 7 Page 1

Change the word "west" in the first sentence of the first paragraph to "east."

Signature of certifying official

7/1/91
date

Ian R. Stewart
Deputy State Historic Preservation Officer