

MINNESOTA HISTORIC PROPERTY RECORD

PART I. PROPERTY IDENTIFICATION AND GENERAL INFORMATION

Common Name: 5827
Bridge Number: 5827
Identification Number: WB-ZFC-011

Location:
Feature Carried: TH 60
Feature Crossed: Stream
Descriptive Location: 0.1 Miles East of Jct. TH 63
Town, Range, Section: 110N-13W-31
Town or City: Zumbro Falls
County: Wabasha

UTM:
Zone: 15
Easting: 546410
Northing: 4903260

Quad:
Zumbro Falls
7.5 Minute Series
1927

Present Owner:
State

Present Use:
Mainline

Significance Statement:

Located in a rural area within the municipal limits of Zumbro Falls, Bridge No. 5827 stands on Minnesota Trunk Highway 60, spanning a small coulee that periodically serves as a stream bed. The bridge carries a 32-foot-wide roadway on several feet of earth fill. Its location is not marked by railings. In its engineering, Bridge No. 5827 is a multi-plate arch with a 20-foot-long span and a 74-foot-long barrel. The arch is anchored by concrete sidewalls and concrete abutments buttressed by stepped, flared wingwalls. A veneer of random-coursed, ashlar, buff-colored limestone with highly rusticated surfaces covers all the concrete work. Articulated by neatly blocked ringstones of varying heights, the semi-circular arch springs from well-defined impost ledges that are half the bridge's total height. The bridge has almost no parapet; instead, the headwalls abruptly terminate in a flat coping course. Bridge No. 5827 still embodies its original design, as revealed in plans, dated 1938, on file with the Minnesota Department of Transportation.

According to Minnesota Department of Transportation records, Bridge No. 5827 was designed by the Minnesota Highway Department in March 1938 and constructed that same year by the WPA

for an approximate cost of \$2,000. The structure is an example of a stone-faced, multi-plate arch. Introduced by the Armco Culvert Manufacturers Association in 1931, multi-plate was a galvanized, corrugated-iron product fabricated in curved segments to facilitate shipping in "nested" position. For bridge construction, the segments were bolted together in the field to form an arch, which was typically anchored by concrete headwalls and abutments. Frequently, the concrete work was ornamented with stone facing in order to simulate a stone-arch bridge. Such construction found ready acceptance with work-relief planners of the 1930s, for the stone-faced, multi-plate arch bridge was highly compatible with the New Deal's agenda of promoting highway beautification, local craft skills, and labor-intensive public works projects.

Particularly noteworthy for its exceptionally crafted masonry, Bridge No. 5827 is eligible for the National Register for its design and workmanship under Criterion C, within the historic context of "Iron and Steel Bridges in Minnesota, 1873-1945." The Multiple Property Documentation Form (MPDF) associated with this context presents the following registration criteria for the multi-plate arch type:

"Since the multi-plate arch bridge is most notable for its modular corrugated-metal construction and stone headwalls and spandrels, these features should be clearly visible and relatively unaltered. And since the multi-plate arch bridge enjoyed its vogue at least partly because of the New Deal's encouragement of roadside beautification, the bridge's workmanship and design should be on the original site, harmonious with the general setting, of high aesthetic quality, and of New Deal vintage."

Bridge No. 5827 satisfies all of these criteria.

PART II. HISTORICAL INFORMATION

Date of Construction:

1938

Contractor and/or Designer (if known):

Contractor: WPA

Designer: Minnesota Highway Department

Historic Context:

Historic Iron and Steel Bridges of Minnesota; Federal Relief Construction, 1933-1941

National Register Criterion:

C

PART III. DESCRIPTIVE INFORMATION

Descriptive Information:

single-span, multi-plate arch with stone-faced concrete headwalls
stone-faced concrete abutments with flared, stone-faced wingwalls
multi-plate arch carrying bituminous-covered earth fill

PART IV. SOURCES OF INFORMATION

References:

Minnesota Department of Transportation Bridge Database; Bridge No. 5827 File, in Minnesota Department of Transportation, Waters Edge Building, St. Paul; Bridge No. 5827 File, in Wabasha County Highway Department, Wabasha, Minnesota; Fredric L. Quivik, "Iron and Steel Bridges in Minnesota," National Register of Historic Places Multiple Property Documentation Form, Sec. F, 10-11, in State Historic Preservation Office, Minnesota Historical Society, St. Paul; field inspection by Denis Gardner, 24 September 1996.

PART V. PROJECT INFORMATION

Historians:

Jeffrey A. Hess

Form Preparer:

Mead & Hunt, 2006

MHPR NO. WB-ZFC-011