South County Line Road Bridge Spanning Flat River Greenville Vicinity Montcalm County Michigan HAER No. MI-104

HAER MICH 57-GREVIY

PHOTOGRAPHS WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service Great Lakes Systems Office 1709 Jackson Street Omaha, Nebraska 68102-2571



HISTORIC AMERICAN ENGINEERING RECORD

SOUTH COUNTY LINE ROAD BRIDGE

HAER No. MI-104

Location:

Spanning Flat River, Greenville vicinity, Montcalm County,

Michigan.

UTM: 16.643520.4775430 Quad: Belding, Michigan

Date of Construction:

1880

Present Owner:

Montcalm County Road Commission

PO Box 337 619 W Main St. Stanton, MI 48888

Present Use:

The bridge is closed to all traffic.

Significance:

The South County Line Road Bridge is a Pratt through truss with pinned connections. The bridge has withstood its environment for many years, having been built in 1880. It has been considered eligible for the National Register of

Historic Places since 1992.

Project Information:

HAER documentation was undertaken in November of 1995 in accordance with the Memorandum of Agreement agreed to by the Montcalm County Road Commission and the Michigan State Historic Preservation Office. The

Memorandum of Agreement is a mitigative measure used to maintain the bridge in a different location through a sale or a transfer to an interested party, if there is one, who would use and preserve the structure. This action was successful. The Friends of the Fred Meijer Heartland Trail will take the superstructure of the bridge and place it over Fish Creek near Stanton, Montcalm County, Michigan. They will preserve and maintain the structure as a pedestrian bridge

thereafter.

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Summary Description of Bridge and Setting

The South County Line Road Bridge over the Flat River is located in Section 35 of Eureka Township, Montcalm County, Michigan. South County Line Road, also known as Bricker Road, is an east-west road situated on a 20.12-meter (66-foot) right-of-way owned by the Montcalm County Road Commission. The roadway surface in the vicinity of the bridge is gravel, averaging 6.7 meters (22 feet) in width. Berridge and Hock Roads intersect South County Line Road approximately 800 meters (0.5 miles) east of the bridge, and Godfrey and River Roads intersect South County Line Road approximately 2400 meters (1.5 miles) west of the bridge. The South County Line Road bridge served as a crossing for area residents and farmers. It also provided access for the public to the Flat River State Game Area and enhanced the management of the Game Area for the Department of Natural Resources.

The original plans for the South County Line Road Bridge cannot be located. The bridge has no nameplate. A review of road commission files has uncovered no record of construction or photographs.

Records from the Eureka Township, Montcalm County Clerk, Montcalm County Road Commission, Ionia County Road Commission and the Library of Michigan failed to uncover any record of the South County Line Road Bridge. A search of the Greenville newspapers was unsuccessful, also, at finding any record.

The bridge is a single span steel through truss with pinned connections. Each truss has five panels, each 4.90 meters (16 feet - 1 inch) wide, creating a span of 24.50 meters (80.5 feet). The clear distance between trusses is 3.72 meters (12.2 feet). The top chords and end members of the truss consist of two channels with a top plate riveted to the top flange of the channels. Four of the vertical members consist of four angles connected by lattice work. Flat steel bars are welded to the four angles to create a lattice pattern. The diagonals and remaining verticals are round steel bars. The bottom chords or the tension members are rectangular steel bars. The deck consists of 76 mm x 254 mm (3 inches x 10 inches) transverse wood planks and 51 mm (2-inch) thick longitudinal wood runners. These members are supported by 178 mm (70-inch) deep steel stringers. The floor beams, one at each panel point, are 305 mm (12-inch) deep l-beams.

The trusses are supported by cobblestone abutments, which are supplemented by cobblestone wingwalls in each quadrant. The abutments and wingwalls retain the road fill. The bridge railings are comprised of steel guardrail and are attached to each side of the truss.

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The South County Line Road Bridge is typical of most bridges built in southern Michigan around the late 19th century and early 20th century. Because of the relatively lightweight truss superstructure, the bridge was fabricated at a steel fabrication plant and shipped by rail near to the job site. The contractor constructed the substructure units, then assembled and erected the steel truss on-site.

