

1011

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 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 Stockbridge Four Corners Bridge

other names/site number _____

2. Location

street & number Vermont Route 100

not for publication

city, town Stockbridge,

vicinity

state Vermont code VT

county Windsor

code 027

zip code 05772

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:

Metal Truss, Masonry and Concrete Bridges in Vermont

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 _____

Date 9/26/91

Vermont State Historic Preservation Officer

State or Federal agency and bureau

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 Swage

11-14-91

Beth Swage Signature of the Keeper

Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)

Road-related - (vehicular)

Current Functions (enter categories from instructions)

Road-related - (vehicular)

7. Description

Architectural Classification

(enter categories from instructions)

Other-Pratt Through-Truss Bridge

Materials (enter categories from instructions)

foundation Other-rubble stone

walls

roof

other Steel

Describe present and historic physical appearance.

See continuation sheet for entire text.

See continuation sheet

**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**Section number 7 Page 1

The Stockbridge Four Corners Pratt through-truss bridge crosses the White River in a single span on Vermont Route 100, just outside the village of Stockbridge Four Corners in the town of Stockbridge, VT and is a fine and intact example of one type of bridge utilized across the state after the devastating flood of 1927. The bridge is 122 feet long by 21.7 feet wide with a portal clearance of 14.7 feet and is comprised of steel vertical channels, T-pattern I beams of a standard size, truss members and inclined end panels. The bridge's construction serves as an example of the use of standardized structural members which allowed economical and rapid fabrication by a small number of regional bridge manufacturers to answer the needs of the State of Vermont in the late 1920s following its greatest natural disaster. It retains its integrity of location, design, materials, workmanship, feeling and association.

Crossing the White River as it winds through the valley just outside the village of Stockbridge Four Corners, in Stockbridge, Vermont, on VT Route 100, this two-lane riveted steel Pratt through-truss bridge rests on rubble abutments with newer poured concrete footings 14 feet above the water. The bridge connects the village with agricultural land across the river and crosses in one span in an east - west orientation. Its length is about 122 feet with a width of 21.7 feet and a portal clearance of 14.7 feet. The bridge's top chord is made up of 12 in. x 16 in. box girders with latticed undersides and are tied together with struts and T-pattern I-beams, which are 9 in. x 9 in. as are the vertical and diagonal structural members. The sway bracing that strengthens the top chords is made up of T-section diagonal knee-braces and the portal braces at either end consist of triangular truss panels with vertical channels. The bottom chord is made up of paired channels with stay plates set 4 feet apart. Both the east and west end panels are inclined.

There are two rail guardrails on either side which are built up of angles and channels on T-section stanchions. The floor system consists of rolled I-section floor beams and four I-beam stringers with angle-section bottom cross-bracing, all of which supports a concrete slab road surface and concrete curbs. There is a sidewalk to the west side set on plate girder outriggers, which has a pipe handrail set on square stock balusters. There is a builder's plate mounted on the bridge which reads "The Berlin Cons. Co. Berlin, Conn. 1929."

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

Transportation

Period of Significance

1929

Significant Dates

1929

Cultural Affiliation

NA

Significant Person

NA

Architect/Builder

Berlin Construction Company

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

See continuation sheet for entire text.

See continuation sheet

9. Major Bibliographical References

Atwood, R.E. Stories of the Vermont Flood. Privately printed, 1927.
Johnson, Luther B. Flood Tide of 1927. Randolph, VT, Roy L Johnson, Co. 1927.
Roy L. Johnson, Co. The Challenge. Randolph, VT, 1928.
Walter, Charles. Light and Shadows of the Vermont Flood. St. Johnsbury, VT, Cowles Press, Inc., 1928.

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:

State of Vermont Agency of Transportation

10. Geographical Data

Acreeage of property Less than one acre.

UTM References

A

1	8	6	8	0	3	8	0	4	8	4	9	9	1	0
Zone				Easting				Northing						

B

Zone				Easting				Northing						

C

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D

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

See continuation sheet

Verbal Boundary Description

The boundary for this property is the bridge and its abutments. The bridge carries Vermont Route 100 across the White River in the village of Stockbridge Four Corners in the town of Stockbridge, VT, at UTM reference point 18 680380 4849910. It is 122' long and 21.7' wide.

See continuation sheet

Boundary Justification

The boundary includes all the land historically associated with the bridge.

See continuation sheet

11. Form Prepared By

name/title Lisa Phinney, Historic Preservation Program
organization University of Vermont date 4/17/91
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**United States Department of the Interior
National Park Service****National Register of Historic Places
Continuation Sheet**Section number 8 Page 1

Constructed in 1929, the Pratt through-truss bridge crosses the White River on VT Route 100 in the village of Stockbridge Four Corners, in the town of Stockbridge, Vermont, qualifies for statewide significance under National Register criteria A and C and as part of the Multiple Property Documentation Form: Metal Truss, Masonry and Concrete Bridges in Vermont as part of the property type for metal truss bridges as an example of the Pratt through-truss bridge distinguished by its parallel chords with vertical members acting in compression and diagonal members acting in tension. For criterion A, this bridge is an example of those bridges constructed during Vermont's mammoth and celebrated rebuilding effort following the 1927 flood, a major natural disaster in Vermont's history. For criterion C, the bridge serves as a example of the innovative engineering and construction techniques exhibited by manufacturers such as this bridge's fabricator, the Berlin Construction Company of Berlin, Connecticut, in response to the needs of the state to replace over 1200 bridges after the flood. The loss of the village's covered bridge along with the railroad tracks in the village of Stockbridge Four Corners left it isolated. The state's response to the plight of towns such as Stockbridge was a huge road and bridge rebuilding effort which was undertaken over the next three years. Money for this project came from many sources, but primarily from the state. This was a fundamental change in the way such projects were funded and represented a shift in the types of bridges being built and in the power of the state in matters of bridge and road construction and maintenance. The Stockbridge Four Corners Bridge and its surroundings have remained relatively unchanged since the bridge was constructed in 1929. The bridge maintains great integrity in its design, materials, workmanship, location, feeling and association.

The steel Pratt through-truss bridge in Stockbridge, Vermont was built in 1929 to span the White River on VT Route 100 connecting the village of Stockbridge Four Corners with the surrounding agricultural land. The only other means of travel through the village was the White River Railroad, which had been constructed in the late 19th century to serve the quarrying and agricultural interests in the region. The railroad tracks were completely destroyed in Vermont's devastating flood of November 1927 and the railroad subsequently abandoned in 1930. The flood also destroyed the village's locally-constructed covered bridge.

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

**National Register of Historic Places
Continuation Sheet**

Section number 8 Page 2

Designed, fabricated and assembled by Berlin Construction Company, of Berlin, Connecticut which had, from the turn of the century, constructed metal truss bridges in Vermont, the Pratt through-truss metal bridge that replaced it is significant as an example of the many bridges constructed after the flood between 1928 and 1930 in Vermont's intensive bridge rebuilding program. The bridge is a significant example of the effort to repair and replace damaged and destroyed bridges and highways with the least expenditure of time and money. Such constraints called for innovative engineering to produce economical and standardized bridge design, easy to fabricate and assemble.

Vermont's rebuilding effort was much admired in the press of the time and the engineering feat and advances in technology which such rapid bridge construction represented put the state in the forefront of structural engineering.

Prior to this disaster, each town in the state had been responsible for its own road and bridge construction and repair, but the magnitude of the flood damage made local action alone inadequate. The Vermont Flood Survey Committee's report to Governor John Weeks in December of 1927 listed 1,258 highway bridges lost at a cost of \$4,579,082.¹ In a booklet entitled The Challenge, the Roy L. Johnson Co. reported that 30 bridges in the upper White River Valley alone were lost to the flood,² including the covered bridge in the village of Stockbridge Four Corners. Though the Winooski Valley was hardest hit of all the regions in Vermont, with the highest amount of rainfall and the most in property damage expenses, the narrow configuration of the upper White River Valley made the flood waters a raging torrent with great destructive force. Though much of the village of Stockbridge Four Corners was saved despite the fact that the Tweed and White Rivers meet there, the nearby village of Gaysville, also in the town of Stockbridge, was virtually destroyed.³

After the flood, many small towns raised, what was for them, huge sums of money to pay for repair of flood damage but it was not enough. In 1928 the State of Vermont took the unprecedented step of issuing an \$8 million bond for the repair of the State's bridges and roads. It was Vermont's first public debt and the move started a continued shift in control of bridge and road construction from local governments to the state.⁴ In 1929 the Federal government also invested money in the effort to repair bridges and roads damaged by the flood.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 3

Patented in 1844, the Pratt through-truss became one of the standards for bridge design in the 1870s and was utilized almost exclusively for spans between 110' and 150'. By the 1890s, with improved methods of steel manufacture, most bridges were constructed of steel rather than wrought or cast iron, and many were riveted rather than held together by pins, an innovation which gave them greater rigidity. Further improvements which affected the strength and efficiency of the Pratt through-truss in the early 20th century included use of rolled I-beams of a standard size rather than built-up members and T-pattern top bracing and use of channels rather than built-up members in the portal brace, further reducing fabrication costs and complexity in production and assembly. These innovations allowed the beleaguered state to replace over 1,600 bridges in a short amount of time at a reasonable cost.

Stockbridge Four Corner's Pratt through-truss bridge is virtually intact on its original road alignment, the rural character of the bridge and road remains much as they were in the late 1920s. Work on the bridge, aside from maintenance, has been confined to stabilization of the original stone rubble abutments with new concrete footings. The bridge represents a fine and intact example of a major engineering and construction effort utilizing standardized design and manufacturing processes which allowed a determined but impoverished Vermont to quickly rebound from a great natural disaster.

1. R.E. Atwood. Stories of the Vermont Flood. 1927, p. 67.
2. Roy L. Johnson Co. The Challenge, 1928, p. 9.
3. Ibid, p. 7.
4. Metal Truss, Concrete and Masonry Bridges in Vermont - Multiple Property Documentation Form.