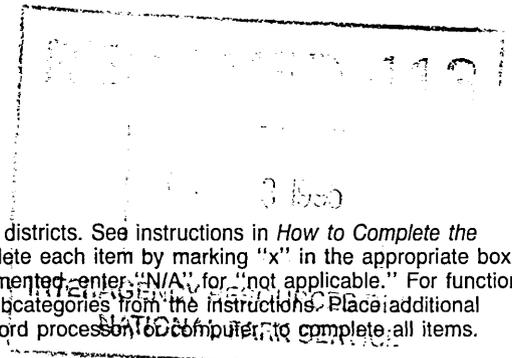


United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form



This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer to complete all items.

1. Name of Property

historic name Rice Farm Road Bridge

other names/site number Highway 62 Bridge

2. Location

street & number Town Highway 62 N/A not for publication

city or town Dummerston N/A vicinity

state Vermont code VT county Windham code 025 zip code 05301

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, 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. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Elva Gilbertson, National Register Specialist September 29, 1995
Signature of certifying official/Title Date
Vermont State Historic Preservation Office

State of Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of commenting official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the 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): _____

Edson H. Beall
Signature of the Keeper

Date of Action

11-7-95

Entered in the
National Register

Rice Farm Road Bridge
Name of Property

Windham County, Vermont
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

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

Category of Property
(Check only one box)

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

Number of Resources within Property
(Do not include previously listed resources in the count.)

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

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

Historic Metal Truss, Masonry, and Concrete
Bridges in Vermont

Number of contributing resources previously listed in the National Register

0

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: Warren Through Truss Bridge

Materials
(Enter categories from instructions)

foundation granite
walls _____
roof _____
other other

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Rice Farm Road Bridge

Dummerston, Windam, Co., Vermont

Carrying Rice Farm Road (Town Highway 62) across the West River, two miles south of Dummerston, Vermont is a rare, intact quadruple intersection Warren (Hilton) through-truss bridge, built by the Berlin Iron Bridge Company and dating to 1892. The 14.2 foot wide single span stretches 198 feet in sixteen panels across the river 24 feet below, and has a portal clearance of 21.4 feet. The Hilton Truss, known for its rigidity and impact resistance, remains in its original location on abutments which appear to be constructed of granite quarry scraps, and retains its integrity of location, design, materials, workmanship, feeling and association.

Within sight of the quarry it was built to serve, this riveted, Hilton through-truss with a northeast-southwest orientation, carries a single lane across the West River. The top chord is a 9 inch by 14 inch box-girder formed of angles and channels, with stay plates on the underside, every four feet. The top chords are joined by crossed pairs of angle section providing lateral bracing. The end posts are inclined and are identical in construction to the top chord box-girder. The portals themselves are braced with lattice between T-struts, and T-section knee braces. The bottoms of the end posts are reinforced with channel sections. The main diagonals and hip verticals are paired angles joined by stay plates spaced 60 inches on center. The hip vertical and the first two diagonals originate from the top chord hitch plates. The reverse diagonals are paired angles joined by lattice bars. The bottom chords are paired, 12 inch deep, built-up channels with stay plates 72 inches on center. The bottom chords carry a floor system of rolled I-section floor beams spaced approximately 18 inches on center, and they in turn carry a steel grill deck. On the bottom of the lower chords, angle-section lateral bracing similar to the top chord bracing adds rigidity. Guardrails on each side of the bridge are bolted to the trusses. These are composed of a square tubing top rail supported by square tube stanchions, a fender rail about 10 inches wide, and a wheel guard welded to the stanchions at deck level.

Rice Farm Road Bridge
Name of Property

Windham County, Vermont
County and State

8. Statement of Significance

Applicable National Register Criteria

(Mark "X" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "X" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

Engineering

Transportation

Period of Significance

1892

Significant Dates

1892

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Berlin Iron Bridge Co.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

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

Name of repository:

Rice Farm Road Bridge
Name of Property

Windham County, Vermont
County and State

10. Geographical Data

Acreage of Property less than one acre

UTM References

(Place additional UTM references on a continuation sheet.)

1	1 8	6 9 4 8 0 0	4 7 5 4 0 6 1 0
	Zone	Easting	Northing
2			

3			
	Zone	Easting	Northing
4			

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Eric Hanson, Historic Preservation Program

organization University of Vermont, History Department date 7/31/94

street & number Wheeler House telephone (802) 656-3180

city or town Burlington state Vermont zip code 05405

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A **USGS map** (7.5 or 15 minute series) indicating the property's location.

A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Town of Dummerston

street & number Town Offices, RD #2, Box 995 telephone _____

city or town Putney state Vermont zip code 05346

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 1

Rice Farm Road Bridge

Dummerston, Windam Co., Vermont

Built in 1892, the Hilton Through Truss bridge, which bears Rice Farm Road across the West River, south of Dummerston, Vt., is one of the oldest metal truss bridges in Vermont. It is submitted as part of Multiple Property Documentation Form: Metal Truss, Masonry and Concrete Bridges in Vermont as a metal truss bridge property type, and carries state-wide significance under National Register criterion A and C. The bridge is highly significant because it displays a rare use of railroad engineering to meet a unique road-building situation; carrying carts laden with quarried granite across the White River. Further, it is a rare survivor of the flood of 1927, which destroyed some 1200 bridges state-wide, and therefore was not a part of the post-diluvian standardization movement in bridge construction, which characterized the rebuilding campaign. Finally, It was constructed by one of the largest bridge builders in New England and at the time was notable for its innovative design, length and construction methods.

The bridge is significant under Criteria A as a part of Vermont's growing road network in the late 19th century. The creation of modern roads was instrumental in the growth of both local and nation-wide trade and commerce in what had long been a commercially isolated state. Specifically, this bridge was built to serve the George E. Lyon Granite Company. The company produced one of Vermont's most famous and celebrated products, and the bridge was built during a particularly innovative and prosperous time, when new equipment was making possible the quarrying of single stones of previously unmanageable sizes.

The bridge is significant under Criteria C because of both its unique structural design, and the status of its manufacturer. The Hilton Truss, a quadruple intersection Warren Truss, uses a multiple intersection design developed for railway use. Although the Hilton Truss was criticized for being excessive in its use of materials and for the inability to accurately measure the load limits of its design, the extra diagonals added rigidity and impact resistance. The

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National Park Service

National Register of Historic Places Continuation Sheet

Rice Farm Road Bridge

Section number 8 Page 2

Dummerston, Windam Co., Vermont

configuration of closely spaced crossbeams resting directly on the lower chord was devised to support heavy moving loads such as trains. All of these factors made the design stable and long-wearing. The traits which made the Hilton truss suitable for railroads, also made it suitable for supporting the large granite blocks that Lyon's was shipping. Finally, the bridge is an early example of the use of riveting in bridge building.

The bridge is also significant because of its association with an important manufacturer, The Berlin Iron Bridge Co. which, until 1900 was the largest bridge builder in New England. The span is an unusual example of a riveted bridge by the Berlin Iron Bridge Company which was best known for its lenticular pinned trusses. Such an example by the Berlin company is also significant, because in 1900 the company was acquired by the American Bridge Co. whose nation-wide operations would make riveted bridges the standard of the day. Finally, the bridge was long for its time, and was considered important enough to be included in the Berlin Iron Bridge Co. catalog of 1892.

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National Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 1

Rice Farm Road Bridge

Dummerston, Windam Co. Vermont

Verbal Boundary Description

The boundary for this property is the bridge and its abutments. The Bridge carries Rice Farm Road (Town Highway 62) across the West River south of the town of Dummerston, Vt. at UTM reference point: 18 / 594800 / 4754060. The bridge is 198 feet long and 14.2 feet wide.

Boundary Justification

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