FHR-8-300 (11-78)

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

For HCRS use only
received JAN 2 9 1981
date entered FEB 20 1981

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic ASHUELOT COVERED BRIDGE

and/or common ASHUELOT COVERED BRIDGE

2. Location

street & number NH Rt. #119 & Bolton Road ___ not for publication

city, town Ashuelot ___ vicinity of congressional district Second

state New Hampshire code 33 county Cheshire code 005

3. Classification

Category	Ownership	Status	Present Use	
___ district	X public	___ occupied	___ agriculture	___ museum
___ building(s)	___ private	X unoccupied	___ commercial	___ park
X structure	___ both	___ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	___ in process	___ yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	X transportation
		___ no	___ military	___ other:

4. Owner of Property

name Town of Winchester

street & number

city, town Winchester ___ vicinity of state New Hampshire 03470

5. Location of Legal Description

courthouse, registry of deeds, etc. Cheshire County Registry of Deeds, Cheshire County Courthouse

street & number 12 Court Street

city, town Keene state New Hampshire 03431

6. Representation in Existing Surveys

title Historic American Engineering Record has this property been determined elegible? ___ yes ___ no

date 1974 X federal ___ state ___ county ___ local

depository for survey records Office of Archaeology & Historic Preservation

city, town Washington (-continued-) state DC 20240

7. Description

Condition
___ excellent
___ good
___ fair
_X_ deteriorated
___ ruins
___ unexposed

Check one
___ unaltered
_X_ altered

Check one
_X_ original site
___ moved date _____

Describe the present and original (if known) physical appearance

Present physical appearance: The Ashuelot Bridge spans the Ashuelot River in the unincorporated village of Ashuelot, Town of Winchester. The National Society for the Preservation of Covered Bridges' World Guide to Covered Bridges' number is 29-03-02. The New Hampshire Department of Public Works and Highways' number is 082/087. The New Hampshire Department of Resources and Economic Development number is 1.

The bridge is 178' long; the roadway is 17' wide with 11' 10" overhead clearance. The overall width of the bridge is 29', the sidewalks being 3'10" wide. The bridge crosses the river in two spans, supported by coursed, split granite abutments and central pier. Concrete platforms have been added to the bases of the supports and the center pier has been equipped with a metal breakwater. The only cement pointing occurs in the upper courses of the center support, probably applied when the reinforcing platforms were added.

The bridge has been closed to trucks because many of the roadbed beams under the bridge are broken.

The bridge's trusswork follows Ithiel Town's Lattice design. Normally, a covered bridge's sides are sheathed to protect the all-important trusswork. It was also this sheathing that was the most expensive element of the bridge. The Ashuelot Bridge is protected in three ways: 1. There are walkways on both sides so that the roof extends a distance beyond the trusswork. 2. The sidewalks are vertically sheathed to just below the handrail height. 3. The bridge is presently painted white. Whether the bridge was painted during the last century would be difficult to say categorically. There does not seem to be a great deal of paint build-up, but then, perhaps the bridge was not repainted often.

Lacking siding, the lattice design gives a lightness and decorative feeling to the bridge. This seens to have inspired the builders to elaborate on the structure's details. The roof is of medium pitch, presently covered in tin, painted red. There is a cornice fascia alone over the rafter ends. The verges project with a frieze just beneath. The gables are finished in functional board and batten, although this is often interpreted as Gothic gingerbread. The real gingerbread occurs with the "flat and round corner" trim over the road portal and the center ogee trim over the walkways, all of which are painted red. The gable overhang arches out gently to meet the traveler. It is supported on the cased-in portals by curved, projecting brackets which are horizontally panelled. The overhang is upheld on the exterior by the slender, chamfered posts which hold up the roof the length of the sidewalks.

The eastern wolkway has a boxed-in pipe running its length and is supposed to be closed to foot traffic.

Original physical appearance: The structure is basically that of the original, although maintenance work has replaced worn members. The white paint may be original although the red paint is definitely a post-1940 addition. The roof was probably originally shingled. The flooring now runs parallel to traffic but the original design in many bridges was perpendicular to traffic. There is no readily visible evidence to determine the direction of the original flooring.

8. Significance

Period	Areas of Significance—Check and justify below			
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture
___ 1600–1699	___ architecture	___ education	___ military	___ social/ humanitarian
___ 1700–1799	___ art	_X_ engineering	___ music	
_X_ 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ theater
_X_ 1900–	___ communications	___ industry	___ politics/government	_X_ transportation
		___ invention		___ other (specify)

Specific dates **Builder/Architect**

Statement of Significance (in one paragraph)

Engineering: "The Town lattice truss was an uninterrupted series of crisscrossed diagonals in construction forming... what were actually overlapping triangles. In such trusses any load on any one triangle affected distribution of stress in all other triangles. The web members were fastened at their points of intersection, so that independent action of any one triangle was impossible. Therein lay the great strength of the Town truss. It was a real invention, not resembling any design advanced for wooden spans in the thousands of years before its time that bridges had been built."[1]

Ithiel Town's lattice design was not only original but it met a need that other bridge designs could not. It "could be erected by a common carpenter's gang."[2] This was no small consideration when New England towns had to undertake a task of expensive proportions. But since the construction could be locally executed, each bridge beyond the basic trusswork, was an expression of the natives' taste; and so might be considered a form of folk art. Certainly the Ashuelot Bridge is unique.

The Town lattice truss was favored for bridge construction because of its simple design, its proven strength, and the fact that its use required no skill in formal engineering. The truss was an indeterminate structure and was not susceptible to the methods of structural analysis that were coming into use in the United States by the time of the Civil War. The properties of the Town truss were understood empirically, however, and the invention was therefore used not only for highway bridges but also for railroad spans that were required to withstand far greater static and dynamic stresses.

The trusses of the Ashuelot bridge are typical of the lighter form of web used for highway spans. Such trusses have only one set of diagonals in each direction rather than the doubled sets used in most railroad bridges. Each truss is continuous and uniform for the full 178-foot length of the structure; this uniformity, which pays no regard to the presence or absence of a central pier, is characteristic of Ithiel Town's patent.[3] Because Town's truss is indeterminate and was not designed according to structural analysis, its design did not require a two-point support system as did trusses in which stresses were calculated. The central pier of the Ashuelot bridge therefore added support to the truss without changing its structural character. The pier was probably added more as a safety factor than as a necessity, since experience had shown that Town trusses could be constructed with a much greater unsupported span than that used in the Ashuelot bridge; the Blenheim bridge (1853) over Schoharie Creek in North Blenheim, New York, used Town trusses with a clear span of 228 feet.[4]

Winchester had been discussing building new bridges over the Ashuelot since 1853. The town warrant for the bridge that was finally constructed reads: "Article 15--To see if the town will vote to build an X or Lattice Bridge with split stone abutments, a sidewalk on open sides over the Ashuelot River at Ashuelot at or near the place where the old bridge now stands, choose a building committee and raise money therefore and act thereon." It was voted March 8, 1864, to proceed and by March 10, 1865, the bill of $4,650 was registered as paid.[5]

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9. Major Bibliographical References

-see continuation sheet-

10. Geographical Data

Acreage of nominated property 0.3 acre +

Quadrangle name Keene, NH-VT **Quadrangle scale** 15'

UTM References

		Zone	Easting	Northing
A		18	710750	4739000
B				
C				
D				
E				
F				
G				
H				

Verbal boundary description and justification: There is no local map & parcel # for the bridge. The nominated area consists of a rectangualar parcel approx. 225' in length running north & south, and 50' in width running east & west, contered on the bridge and with sides parallel to the bridge, enclosing approx. 0.3 acre.

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
state	code	county	code

11. Form Prepared By

name/title	Darleen Melis		
organization		**date**	April 27, 1974
street & number	306 Riverway, Apt. #15	**telephone**	(617) 277-7944
city or town	Boston	**state**	Massachusetts 02115

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national X state ___ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature

title Commissioner, Department of Resources & Economic Development
NH State Historic Preservation Officer **date** December 18, 1980

For HCRS use only

I hereby certify that this property is included in the National Register

Keeper of the National Register **date** 2/20/81

Attest: **date**

Chief of Registration

GPO 938 835

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

New Hampshire's Historic Preservation Plan
1970 -- State
State of New Hampshire
Department of Resources & Economic Development
Box 856
Concord, New Hampshire 03301

World Guide to Covered Bridges, No. 29-03-02
National Society for the Preservation of Covered Bridges
Boston, Massachusetts

State of New Hampshire
New Hampshire Department of Public Works & Highways
No. 082/087
Concord, New Hampshire 03301

State of New Hampshire
Department of Resources & Economic Development
No. 1

The bridge was built where the old one stood, incorporating some members of the old bridge, for a wooden beam with an earlier date than 1864 was removed when repairs were made after the 1936 hurricane.

Although covered bridges were quite commonplace, that is hardly the case now. In the summer of 1954, Richard Sanders Allen made a survey of covered bridges with the following results: NH-54; Maine-11; VT-121; Conn-3; Mass-12; RI-0. Pennsylvania had 390 and Ohio 349 covered bridges twenty years ago.[6] Doubtless, the list has changed but certainly not on the augmentative side. Covered bridges do not appear as frequently in New England as people would like to believe.

Transportation: Winchester, New Hampshire, is a large and sparsely-populated township measuring approximately six by eight miles. The township includes two principal villages, Winchester and Ashuelot. Both villages grew in response to water power afforded by the Ashuelot River, considered one of the most important manufacturing streams in the state after the Civil War.[7] By 1864, when the bridge was constructed, the villages of Ashuelot and Winchester supported woolen mills, manufactories of wooden products, machine shops and stores, all connected to other Connecticut Valley towns in New Hamsphire and Vermont, and ultimately to Boston, by the Ashuelot and Cheshire Railroads. The Ashuelot Railroad, incorporated in 1844, completed in 1851 and eventually absorbed into the Boston & Maine system, passed within yards of the southern abutment of the Ashuelot bridge.[8]

This bridge provided the only means by which highway traffic could cross the river in the village of Ashuelot and connected tha main settlement, on the north side of the stream, with a smaller settlement and the railroad depot on the south. No less than five roads converged near the north end of the bridge, and a hotel and public library were eventually built at this focal point. Near each end of the bridge, roads ran east to connect Ashuelot with the village of Winchester. Thus the Ashuelot covered bridge was, and remains, a vital transportation link in the small village, permitting highway transportation between the two sides of the river, between Ashuelot and Winchester, and between the main street of Ashuelot and its vital railroad connection on the opposite side of the stream. The bridge continues to carry automobile and foot traffic but is closed to heavy trucking.

The Ashuelot Covered Bridge can be seen as one of the units in the transportation chain that linked the industries and people of New England to the markets of Boston and the eastern seaboard. At the same time, the bridge elevates itself above its mundane function by indulging in a few decorative whimsies that proves the Yankee character had an eye for more than the utilitarian.

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[1]Richard Sanders Allen, Covered Bridges of the Northeast, p. 15.

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[2]Ibid.

[3]Henry Grattan Tyrrell, Bridge Engineering, A Brief History of this Construction Art from the Earliest Times to the Present Day (N.p., the author, 1911), pp. 137-138.

[4]Carl W. Condit, American Building Art: The Nineteenth Century (New York: Oxford University Press, 1960), p. 297, note 1.

[5]Town Records of Winchester, New Hampshire.

[6]Eric Sloane, American Barns and Covered Bridges, p. 112.

[7]D. Hamilton Hurd, ed., History of Cheshire and Sullivan Counties, New Hampshire (Philadelphia: J.W. Lewis & Co., 1886), p. 2.

[8]H.F. Walling, Atlas of the State of New Hampshire (New York: Comstock & Cline, 1877), p. 31.

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