

PH0356395

DATA SHEET

Form 10-300
(Rev. 6-72)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE:	Vermont -- New Hampshire
COUNTY:	Windsor -- Sullivan
FOR NPS USE ONLY	
ENTRY DATE	NOV 21 1975

1. NAME

COMMON: **
Cornish-Windsor Covered Bridge
AND/OR HISTORIC:
Cornish-Windsor Bridge

2. LOCATION

STREET AND NUMBER:
Between Bridge Street and N.H. 12-A
CITY OR TOWN:
Cornish
Windsor
STATE
New Hampshire
Vermont
CODE
33,50
CONGRESSIONAL DISTRICT
Second
First
Sullivan
Windsor
CODE
019,027

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Site <input type="checkbox"/> Object <input type="checkbox"/> Building <input checked="" type="checkbox"/> Structure	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Both	Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	<input checked="" type="checkbox"/> Occupied <input type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input checked="" type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify)

4. OWNER OF PROPERTY

OWNER'S NAME:
New Hampshire Department of Public Works and Highways
STREET AND NUMBER:
John O. Morton Building
85 Loudon Road
CITY OR TOWN:
Concord
STATE:
New Hampshire
CODE
33

5. LOCATION OF LEGAL DESCRIPTION

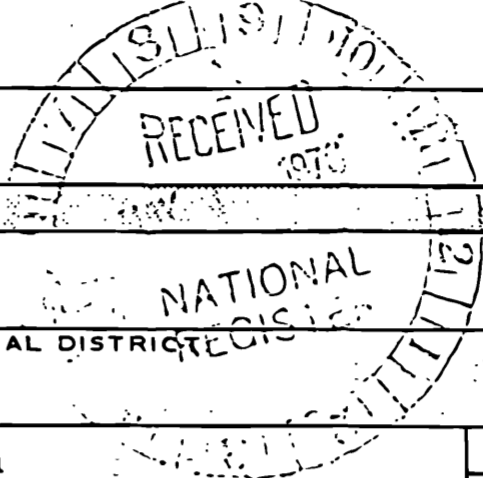
COURTHOUSE, REGISTRY OF DEEDS, ETC:
Sullivan County Registry of Deeds
STREET AND NUMBER:
P.O. Box 448
Sullivan County Records Building
24-A Main Street
CITY OR TOWN:
Newport
STATE:
New Hampshire
CODE
03773
33

6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:
See Continuation Sheet 1
DATE OF SURVEY:
DEPOSITORY FOR SURVEY RECORDS:
STREET AND NUMBER:
CITY OR TOWN:
STATE:
CODE

STATE	New Hampshire
COUNTY	Sullivan
TOWN	Windsor
ENTRY NUMBER	
DATE	

SEE INSTRUCTIONS



7. DESCRIPTION

CONDITION	(Check One)				
	<input checked="" type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins
	(Check One)		(Check One)		
	<input checked="" type="checkbox"/> Altered	<input type="checkbox"/> Unaltered	<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site	

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

Present Physical Appearance:

The Cornish-Windsor Bridge crosses the Connecticut River between the east end of Bridge Street, Windsor, Vermont and N.H. 12-A, Cornish, New Hampshire. As the Connecticut River forms the boundary between New Hampshire and Vermont, the low water mark on the west (Vermont) side, the bridge is being nominated concurrently by both states.

The bridge consists of two spans supported by two flanking timber lattice trusses adapted from the Town patent design. The trusses are built of six-by-eight inch spruce timbers which are bolted together at intervals of four feet into the diagonal Town lattice pattern. Each truss has two upper and two lower multi-segmented chords bolted to the lattice members. Some joints in the chords have been reinforced with steel plates. Iron rods extend from the tops of the trusses to the abutments and pier to anchor the bridge.

Two sets of upper lateral bracing extend between the trusses. One set forms crosses within the top beams; the other set connects the top chords, with iron reinforcing rods extending through the apexes formed by adjoining crosses. Wood struts provide additional reinforcement between the upper intermediate chords and the top beams. The lower lateral bracing forms crosses between the bottom chords, with iron reinforcing rods extending through the apexes of adjoining crosses.

The massive west abutment and central pier of the bridge are built of stone blocks mortared together. The east abutment is completely faced with concrete. The west abutment has some concrete facing on the north side at water level. The extreme ends of the trusses rest on secondary abutments which are recessed behind the primary abutments and built of irregular stone slabs laid dry. Wing walls also built of stone blocks extend upstream from both abutments. The central pier is rounded on the north (upstream) side and flares outward toward the river bed to deflect floating debris and ice.

The bridge is 450.5 feet long at floor level. The gable ends overhang the roadway six feet at the east portal and eight feet at the west portal. Hence along the ridge the bridge is about 465 feet long. The pier stands nearly under the midpoint of the bridge: the two clear spans measure 204.6 feet and 203.7 feet respectively east and west. The wood floor begins 1.5 feet inside the east portal and 3.5 feet inside the west portal; the approaches are paved. The floor (and road surface) consists of planks laid flat and parallel to the trusses. The overall width of the bridge is 23.5 feet. The roadway is 19.5 feet wide, which allows two-way vehicular traffic through the bridge. The posted legal load limit is six tons.

On the exterior, the trusses (and side walls) of the bridge are sheathed with matched boards which are hung vertically and painted grey. Eighteen small square windows with hoods are cut at regular intervals in each side

Continued on Continuation Sheet 2

SEE INSTRUCTIONS

3. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- | | | | |
|--|---------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> Pre-Columbian | <input type="checkbox"/> 16th Century | <input type="checkbox"/> 18th Century | <input type="checkbox"/> 20th Century |
| <input type="checkbox"/> 15th Century | <input type="checkbox"/> 17th Century | <input checked="" type="checkbox"/> 19th Century | |

SPECIFIC DATE(S) (If Applicable and Known) 1866

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Aboriginal | <input type="checkbox"/> Education | <input type="checkbox"/> Political | <input type="checkbox"/> Urban Planning |
| <input type="checkbox"/> Prehistoric | <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) |
| <input type="checkbox"/> Historic | <input type="checkbox"/> Industry | | _____ |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Invention | <input type="checkbox"/> Science | _____ |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Sculpture | _____ |
| <input type="checkbox"/> Art | <input type="checkbox"/> Literature | <input type="checkbox"/> Social/Humanitarian | _____ |
| <input type="checkbox"/> Commerce | <input type="checkbox"/> Military | <input type="checkbox"/> Theater | _____ |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Music | <input checked="" type="checkbox"/> Transportation | _____ |
| <input type="checkbox"/> Conservation | | | _____ |

STATEMENT OF SIGNIFICANCE

Engineering:

The present Cornish-Windsor Bridge is the fourth on the site, the earlier ones having been built in 1796, 1824, and 1849 (the first covered bridge) and lost to floods. One month after the 1849 bridge was washed away, James F. Tasker of Cornish and Bela J. Fletcher of nearby Claremont signed a contract on 3 April 1866 for the construction of the present bridge.¹

Tasker, who as an intuitive engineer able neither to read nor to write, directed the work.² He used an adaptation of the Town lattice truss, substituting six-by-eight inch timbers for the usual planks in the lattices. The structure was framed initially in a Windsor meadow to the northwest of the site.³ Construction took about seven months; the bridge was opened to traffic probably in late October or early November of 1866.⁴

Transportation:

Built for a private bridge company, the Cornish-Windsor Bridge remained a private toll bridge until 1935 when the New Hampshire Highway Department purchased it.⁵ Subsequently the state charged toll on the bridge for eight years, finally declaring the bridge free in 1943. It was the last covered toll bridge over the Connecticut River between New Hampshire and Vermont.⁶ (Three other covered bridges cross the river between the two states; two of them continued to carry vehicular traffic.)

The Cornish-Windsor Bridge has survived several major floods to become the longest covered wood bridge remaining in the United States.⁷ The bridge has an overall length at floor level of 450.5 feet. The longer of its two spans has a clear span of 204.6 feet, only 5.4 feet shorter than the longest wood clear span in the world - the 210-foot span of the Old Blenheim Covered Bridge at North Blenheim, New York.⁸

The Cornish-Windsor Bridge remains essentially original in structure, lacking any of the various devices added to many other covered bridges for reinforcement. The bridge continues to carry two-way traffic restricted only by the current legal load limit of six tons. In 1970 the American Society of Civil Engineers designated the bridge as a National Historic Civil Engineering Landmark.

Continued on Continuation Sheet 3

SEE INSTRUCTIONS

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Allen, Richard Sanders. Covered Bridges of the Northeast. Brattleboro, VT: The Stephen Greene Press, 1957.

Allen, Richard Sanders. Rare Old Covered Bridges of Windsor County. Brattleboro, VT: The Stephen Greene Press, 1962.

Congdon, Herbert Wheaton. The Covered Bridge. Middlebury, VT: Vermont Books, 1970.

Continued on Continuation Sheet 4

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			O R	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
NW	° ' "	° ' "		43° 28' 26"	72° 23' 02"	
NE	° ' "	° ' "		<i>Zone 18</i>		
SE	° ' "	° ' "		<i>711-625-E</i>	<i>4816-550 N</i>	
SW	° ' "	° ' "				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 1 acre

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
New Hampshire	33	Sullivan	019
Vermont	50	Windsor	027
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE:
Hugh H. Henry, Historic Sites Researcher

ORGANIZATION: **Vermont Division of Historic Sites** DATE: **April 26, 1974**

STREET AND NUMBER:
Pavilion Building

CITY OR TOWN: **Montpelier** STATE: **Vermont 05602** CODE: **50**

12. STATE LIAISON OFFICER CERTIFICATION **NATIONAL REGISTER VERIFICATION**

As the designated State Liaison 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 National Park Service. The recommended level of significance of this nomination is:

National State Local

Name: *[Signature]*
Title: **NH State Historic Preservation Officer**
Date: **May 12, 1975**

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

[Signature]
Director, Office of Archeology and Historic Preservation

Date: **11/21/76**

ATTEST:
[Signature]
Keeper of The National Register

Date: **11.15.76**

SEE INSTRUCTIONS

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet) 1

STATE	
Vermont --New Hampshire	
COUNTY	
Windsor --Sullivan	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

6. REPRESENTATION IN EXISTING SURVEYS, continued

Historic American Engineering Record
1972, x Federal
Historic American Engineering Record
1100 L Street, NE
Washington, D.C. 20240, 11

National Historic Civil Engineering Landmarks
1970, x Federal
American Society of Civil Engineers
345 East 47th Street
New York, New York 10017, 31

New Hampshire's Historic Preservation Plan
1970, x State
State of New Hampshire Department of Resources and Economic Development
P.O. Box 856, State House Annex, 25 Capitol Street
Concord, New Hampshire 03301, 33

Vermont Historic Sites and Structures Survey
1973, x State
Vermont Division of Historic Sites
Pavilion Building
Montpelier, Vermont 05602, 50



NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet) 2

STATE	
Vermont -- New Hampshire	
COUNTY	
Windsor -- Sullivan	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE
	NOV 21 1976

(Number all entries)

7. DESCRIPTION, continued

Present Physical Appearance, continued:

wall of the bridge. The windows in one wall are spaced diagonally opposite those in the other wall. Vertical matched boards, which are painted white for increased visibility, protect the ends of the trusses immediately inside the portals. The gable ends, which are also painted white, are sheathed with horizontal clapboards. The portal openings are framed with semi-elliptical arches.

A medium-pitch gable roof covers the entire bridge; it does not overhang the gable ends. The roof is framed with light rafters, which extend from the top chords to abut at the ridge. There is no internal bracing connected to the roof structure. The roof is covered with corrugated metal sheeting.

The Cornish-Windsor Bridge has the numbers (New Hampshire) 29-10-09 and (Vermont) 45-14-14 in the World Guide to Covered Bridges published by the National Society for the Preservation of Covered Bridges. The number assigned to the bridge by the New Hampshire Department of Public Works and Highways is 064-108; the number assigned by the New Hampshire Department of Resources and Economic Development is 20.

Original Physical Appearance:

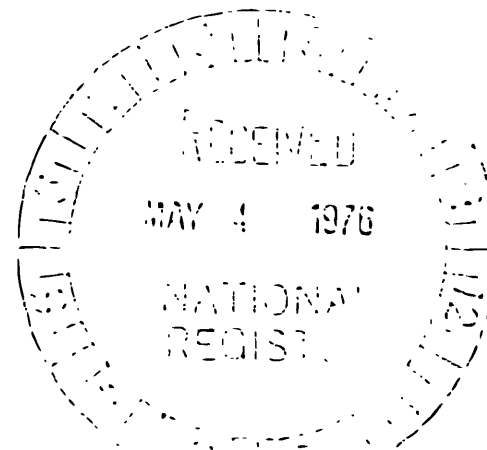
The original physical appearance of the bridge is known to have differed somewhat from its present appearance. The roof was covered originally with wood shingles, which were replaced with the metal sheeting in 1924.² The matched boards applied to the bridge and painted in 1954-55 probably replaced flush plain boards which were likely to have been left unpainted.³ The east abutment was built originally of irregular stone blocks; it was faced with concrete in 1921 after it had begun to settle.⁴

¹ Richard T. Dana, The Bridge at Windsor, Vermont and Its Economic Implications (New York: Codex Book Co., 1926), 38.

² Ibid, 60.

³ Richard S. Allen, Rare Old Covered Bridges of Windsor County, Brattleboro, VT: The Stephen Greene Press, 1962) 38.

⁴ Dana, op. cit., 60.



NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet) 3

STATE Vermont -- New Hampshire	
COUNTY Windsor -- Sullivan	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

8. SIGNIFICANCE, continued

¹Richard S. Allen, Rare Old Covered Bridges of Windsor County (Brattleboro, VT: The Stephen Greene Press, 1962), 37.

²Ibid., 33.

³Ibid., 37.

⁴Margaret Foster, "The Windsor-Cornish Bridge," (Lebanon, NH: Dartmouth Lake Sunapee Region Associations, n.d.).

⁵Ibid.

⁶Allen, op. cit., 38.

⁷Citation by American Society of Civil Engineers of Cornish-Windsor Bridge as National Historic Civil Engineering Landmark.

⁸Richard Sanders Allen, Covered Bridges of the Northeast (Brattleboro, VT: The Stephen Greene Press, 1957), 45.



NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet) 4

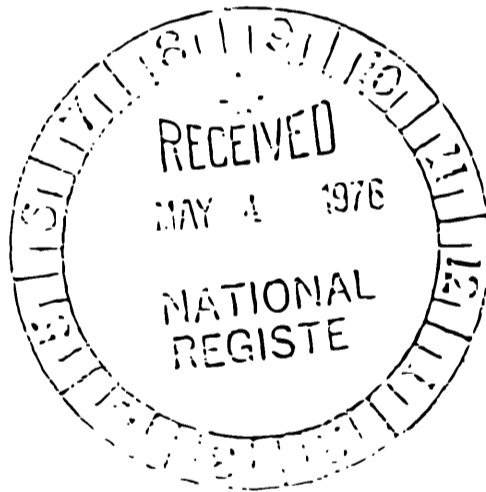
STATE	
Vermont -- New Hampshire	
COUNTY	
Windsor -- Sullivan	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

9. MAJOR BIBLIOGRAPHICAL REFERENCES, continued

Dana, Richard T. The Bridge at Windsor, Vermont and Its Economic Implications.
New York: Codex Book Co., 1926.

Foster, Margaret. "The Windsor-Cornish Bridge." Lebanon, NH: Dartmouth Lake
Sunapee Region Association, n.d.



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

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RECEIVED	MAY 4 1976
DATE ENTERED	NOV 21 1976

CONTINUATION SHEET

ITEM NUMBER 10. PAGE 5.

10. GEOGRAPHICAL DATA, continued

10.2 UTM References

<u>Zone</u>	<u>Easting</u>	<u>Northing</u>
18	7.11.625	48.16.550