

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

(Type all entries - complete applicable sections)

STATE: <b>New York</b>	
COUNTY: <b>Albany</b>	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

<b>1. NAME</b>	
COMMON: <b>Whipple Cast and Wrought-Iron Bowstring Truss Bridge</b>	
AND/OR HISTORIC:	

<b>2. LOCATION</b>			
STREET AND NUMBER: <b>Normanskill Farm, 1000 Delaware Avenue</b>			
CITY OR TOWN: <b>Albany</b>			
STATE <b>New York</b>	CODE <b>36</b>	COUNTY: <b>Albany</b>	CODE <b>001</b>

<b>3. CLASSIFICATION</b>			
CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Building <input type="checkbox"/> Site <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Object	<input type="checkbox"/> Public <input checked="" 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 Yes: <input type="checkbox"/> Restricted <input type="checkbox"/> Unrestricted <input checked="" type="checkbox"/> No
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) _____ _____ _____

<b>4. OWNER OF PROPERTY</b>			
OWNER'S NAME: <b>Mark Stevens - Normanskill Farm</b>			
STREET AND NUMBER: <b>1000 Delaware Avenue</b>			
CITY OR TOWN: <b>Albany</b>	STATE: <b>New York</b>	CODE <b>36</b>	New York

<b>5. LOCATION OF LEGAL DESCRIPTION</b>			
COURTHOUSE, REGISTRY OF DEEDS, ETC: <b>Albany County Courthouse</b>			
STREET AND NUMBER:			
CITY OR TOWN: <b>Albany</b>	STATE: <b>New York</b>	CODE <b>36</b>	Albany

<b>6. REPRESENTATION IN EXISTING SURVEYS</b>			
TITLE OF SURVEY: <b>Historic American Engineering Record</b>			
DATE OF SURVEY: <b>1969</b> <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> Local			
DEPOSITORY FOR SURVEY RECORDS: <b>Library of Congress</b>			
STREET AND NUMBER:			
CITY OR TOWN: <b>Washington</b>	STATE: <b>D.C.</b>	CODE	FOR NPS USE ONLY

SEE INSTRUCTIONS

STATE:

COUNTY:

ENTRY NUMBER

DATE

# 7. DESCRIPTION

CONDITION

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

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The main components of the Whipple Cast and Wrought-Iron Bowstring Truss Bridge are the two top and two bottom chords. Each top chord takes the form of an arch and consists of nine cast-iron segments which act in compression when loaded. The bottom chords each consist of nine wrought-iron links which restrain the outward thrust of the arch. A total of sixteen vertical iron rods, eight on each side, connect the segment junctions of the top with the link junctions of the bottom chords. These rods which are similar to the vertical cables in a suspension bridge, transfer the load from the bottom to the top chords. The top chords are also braced with lateral iron tie rods. The two intersecting iron rods in each panel provide wind bracing for the structure. A deck frame consisting of lateral and longitudinal iron "I" beams and intersecting tie rods, is supported by the bottom chord. Each frame cross-member is braced against lateral sag by a single bar wrought-iron truss rod. The deck is surfaced with wood planks laid diagonally across the deck frame. The lower portion of the abutments are constructed of stone laid up in random ashlar pattern while the upper is concrete. The total free span of the bridge is 109 feet, 10 inches.

SEE INSTRUCTIONS

## 3. SIGNIFICANCE

## PERIOD (Check One or More as Appropriate)

- ☐ Pre-Columbian    ☐ 16th Century    ☐ 18th Century    ☐ 20th Century  
☐ 15th Century    ☐ 17th Century    ☒ 19th Century

SPECIFIC DATE(S) (If Applicable and Known) 1867

## 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"/> Science                   | _____  |
| <input type="checkbox"/> Agriculture               | <input checked="" type="checkbox"/> Invention   | <input type="checkbox"/> Sculpture                 | _____  |
| <input type="checkbox"/> Architecture              | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian       | _____  |
| <input type="checkbox"/> Art                       | <input type="checkbox"/> Literature             | <input type="checkbox"/> Theater                   | _____  |
| <input checked="" type="checkbox"/> Commerce       | <input type="checkbox"/> Military               | <input checked="" type="checkbox"/> Transportation | _____  |
| <input checked="" type="checkbox"/> Communications | <input type="checkbox"/> Music                  |  |  |
| <input type="checkbox"/> Conservation              |   |  |  |

## STATEMENT OF SIGNIFICANCE

Squire Whipple (1804-1888) was one of the earliest civil engineers to evolve a scientific basis for American bridge building. Whipple's first bridge, across a section of enlarged Erie Canal in the early 1840's, was so successful that hundreds like it were soon constructed throughout the northeastern United States.

Whipple Trusses were pre-fabricated in small sections and were assembled on the site. The sections of the chords did not require welding or riveting. They just fitted together with the aid of locating pins and were finally held in place by compression when the vertical rods and the wrought iron bowstring links were tightened. The bridges were inexpensive, relatively light weight, extremely strong and durable, available in standard lengths, and were adaptable to a large variety of situations.

Whipple patented his Iron Bowstring Truss in April of 1841, but within a few years the success of the Whipple System led to wide-spread infringement of the patent.

In 1867, a builder of Whipple-type bridges, Simon DeGraft of Syracuse, New York, fabricated the bridge that is now at Normanskill Farm. The original location of this bridge is unknown. When the Albany and Delaware Turnpike (Delaware Avenue) was rerouted in 1899, the Normanskill Farm bought the bridge and re-erected the structure over the deep ravine which separated the farm from the new highway.

Today, although the Delaware Avenue of 1899 is now just a country lane, having been cut off and replaced by a larger road, the Whipple Truss Bridge is well maintained and still serves as the main entrance to Normanskill Farm. It is one of the earliest surviving iron bridges in the United States and is a key landmark in the history of American Civil Engineering.

# 9. MAJOR BIBLIOGRAPHICAL REFERENCES

Condit, Carl W. American Building Art. The Nineteenth Century. New York: Oxford University Press, 1960.

Mohawk-Hudson Area Survey 1969 "Whipple Iron Truss Bridge." Washington: Historic American Buildings Survey, 1969.

# 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	° ' "	° ' "		42° 32' 15"	73° 48' 00"	
NE	° ' "	° ' "				
SE	° ' "	° ' "				
SW	° ' "	° ' "				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY:

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

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

# 11. FORM PREPARED BY

NAME AND TITLE: <b>Chester H. Liebs</b>	
ORGANIZATION <b>New York State Historic Trust</b>	DATE <b>Sept. 1970</b>
STREET AND NUMBER: <b>Executive Department</b>	
CITY OR TOWN: <b>Albany</b>	STATE <b>New York</b> CODE <b>31</b>

# 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 Chairman, New York State Historic Trust

Date Oct. 20, 1970

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

Chief, Office of Archeology and Historic Preservation

Date \_\_\_\_\_

ATTEST:

Keeper of The National Register

Date \_\_\_\_\_

SEE INSTRUCTIONS

**NATIONAL REGISTER OF HISTORIC PLACES**  
**PROPERTY MAP FORM**

(Type all entries - attach to or enclose with map)

STATE New York	
COUNTY Albany	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

<b>1. NAME</b>			
COMMON: Whipple Cast and Wrought-Iron Bowstring Truss Bridge			
AND/OR HISTORIC:			
<b>2. LOCATION</b>			
STREET AND NUMBER:			
Normanskill Farm, 1000 Delaware Avenue			
CITY OR TOWN:			
Albany			
STATE:	CODE	COUNTY:	CODE
New York	36	Albany	001
<b>3. MAP REFERENCE</b>			
SOURCE:			
U.S.G.S. quadrangle 7.5 minute series			
SCALE: 1:24000			
DATE: 1953			
<b>4. REQUIREMENTS</b>			
TO BE INCLUDED ON ALL MAPS			
1. Property boundaries where required.			
2. North arrow.			
3. Latitude and longitude reference.			

**NATIONAL REGISTER OF HISTORIC PLACES**  
**PROPERTY PHOTOGRAPH FORM**

(Type all entries - attach to or enclose with photograph)

STATE New York	
COUNTY Albany	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

<b>1. NAME</b>			
COMMON: Whipple Cast and Wrought-Iron Bowstring Truss Bridge			
AND/OR HISTORIC:			
<b>2. LOCATION</b>			
STREET AND NUMBER:			
Normanskill Farm, 1000 Delaware Avenue			
CITY OR TOWN:			
Albany			
STATE:	CODE	COUNTY:	CODE
New York	36	Albany	001
<b>3. PHOTO REFERENCE</b>			
PHOTO CREDIT: Jack Boucher for Historic American Buildings Survey			
DATE OF PHOTO: August 1969			
NEGATIVE FILED AT:			
Library of Congress			
<b>4. IDENTIFICATION</b>			
DESCRIBE VIEW, DIRECTION, ETC.			
View from west			

NEW YORK STATE HISTORIC TRUST  
Whipple Cast and Wrought-Iron  
NAME OF SITE: Bowstring Truss Bridge  
COORDINATES: NORTH 42° 32' 15"  
WEST 73° 48' 00"  
TITLE OF MAP: Albany, New York  
DATE: 1953

