

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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HISTORIC PRESERVATION OFFICE NAT. REGISTER OF HISTORIC PLACES NATIONAL PARK SERVICE	

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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 Peck's Ferry Bridge

other names/site number Locktown-Flemington Road Bridge, #100D388

2. Location

street & number Locktown-Flemington Road NA not for publication

city or town Delaware Township vicinity

state New Jersey code NJ county Hunterdon code 019 zip code 08822

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.)

Signature of certifying official/Title [Signature] Date 7/16/99
Assistant Commissioner for Natural & Historic Resources/DSHPO

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 certifying official/Title _____ Date _____

State of 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): _____

Signature of the Keeper [Signature] Date of Action 11/12/99

Peck's Ferry Bridge
Name of Property

Hunterdon Co., NJ
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
1	_____	structures
_____	_____	objects
1	0	Total

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

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

Transportation/road related

Current Functions
(Enter categories from instructions)

Transportation/road related

7. Description

Architectural Classification
(Enter categories from instructions)

Materials
(Enter categories from instructions)

foundation Stone/ashlar & concrete
walls _____
roof _____
other Metal/Steel or Iron

Narrative Description

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

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Section number 7 Page 1

Peck's Ferry Bridge
Hunterdon County, New Jersey

Location and Setting

Peck's Ferry Bridge is a one-lane single-span metal truss bridge built in 1900 that crosses a tributary of the Wickecheoke Creek, 5 ½ miles upstream from the confluence of the Wickecheoke with the Delaware River. It is located in the Piedmont physiographic province of northern New Jersey, in southwestern Hunterdon County. The tributary of the Wickecheoke Creek, known as Plum Brook, travels through the Hunterdon Plateau from Raritan Township southwesterly into Delaware Township to its juncture with the Wickecheoke Creek, one and a half miles southwest of Peck's Ferry Bridge.

The bridge is on the Locktown-Flemington Road, a narrow country east-west road surrounded by wooded lots and farm fields, which descends to a glen at the Brook. The bridge crosses Plum Brook skewed at an angle to the Locktown-Flemington Road to accommodate the angle of the creek as it passes under the road. It is immediately east of the intersection with Ferry Road. Some of the nearby farmsteads date back to the Revolution and both roads were surveyed in the 18th century.

Description

Peck's Ferry Bridge is a two-panel, pony truss bridge built by a local fabricator and identified as number 100D388. The bridge is "a hybrid modified Warren design with predominantly riveted connections. The reinforced floorbeam is suspended from a pin at the lower panel points. A non-functioning vertical rod extends from the pin and is secured to the top chord by a ball finial. The original lattice railings remain" [1].

The bridge has a 29-foot span, a width of 14 feet and a height of 7 feet above the creek. The panels are 4 ½ feet high. This bridge is similar to a bridge built in 1903 that crosses Plum Brook a half mile to the north on Stone Signpost Road, identified as No. 100D390. Both bridges were constructed by a local foundryman, J. W. Scott of Flemington. A third bridge over Plum Brook a half-mile to the south was built in 1901 by M. B. Culver and has a different design[11].

The following description is taken from the New Jersey Department of Transportation's *Historic Bridge Survey*:

"The two-panel, pin-connected slightly skewed Warren pony truss bridge has several unusual features. The top chord is a riveted box member consisting of angles and plate and a continuous cover plate, bent at the inclined end posts. Gusset plates secure the diagonals at the lower panel points. The bottom chord and diagonals are toe-in angles. The vertical member, a modification to the original design made after 1974, consists of two angles with a center separating batten and a central rod which threads through the top chord into a fastening finial. The bottom of the rod is a forged loop that passes around the

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Peck's Ferry Bridge

Hunterdon County, New Jersey

pin that [provides a] U hanger for the single flame-cut floorbeam. The bridge is supported on random fieldstone abutments with wingwalls. The original medallion and lattice railing remains, but collision damage has buckled the east end post and railing. Concrete scour protection has been added, and a concrete toe wall has been added to the east abutment. Other minor repairs include welded reinforcing plates at the bottom of one inclined end post" [1].

The masonry abutments are made of local fieldstone known as argillite or 'blue jingler'. The stone construction is similar to nearby houses made of the same material. The northwest corner of the abutments suffers from erosion of the streambed just north of the bridge. Although the bridge has had minor alterations in the 1970's and stands in need of repair, it has retained its original design and rural setting.

Modifications

The deck was built with oak planks, which were regularly replaced up until 1961 when a new metal deck was installed. The Historic Bridge Survey refers to modifications made in 1974, but those do not appear in the County Bridge Card [11]. Exactly when the battens were installed over the center rods is not known. The battens are not found on bridge #100D390 (Stone Signpost Road).

Earlier photographs show a pipe railing along the east and west approaches [See Bridge Card in Attachments]. This has been replaced with timber railing and a section of steel guide rail [11]. The original contract called for six ten-inch beams. These were replaced, probably before 1957, with seven-inch beams which reduce the original weight carrying capacity of the bridge.

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Peck's Ferry Bridge
Hunterdon Co., NJ

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Appendix: Repair Record, from the County Bridge Card.

August 1944, repaired deck with oak plank.
April 1946, Repaired plank deck (Mullen).
June 1947, Painted (Wilson)
December 1947, Plank and Wheel Beam (Peckwinkle)
August 1948, New Plank (Keown)
March 1949, Pipe (Kerr)
September 1949, Wingwalls (Kerr)
February 1950, Tonnage Signs (Brown)
September 1954, painted (Garis)
August 1957, 3 plank and repaired wall (Suydam)
February 1958, Plank (Suydam)
November 1958, Plank (Suydam)
April 1959, Concrete post & rail, bridge painted (Suydam)
December 1959, Plank and reflectors (Suydam)
June 1960, 3 new planks (Tomson)
March 1961, New metal deck (Horvath)
1962, welded rail (Suydam)
1964, Repaired rail, paint (Suydam)
1965, Paint (Suydam)
1966, Pl_d (?) Collor (Tomson)
August 1967, Placed 2 cone, post & paint (Tomson)
April 1968, Shim floor beam, repaired reailing (Bird)
May 1971, Replaced railings (Naylor)
October 1972, Replaced pins in truss and repaired Abutments (Lambert)
January 1973, Painted truss
September 1974, Repaired railing (Naylor)
December 1975, Painted Truss (Naylor)
May 1977, Painted (Naylor)

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 N/A
(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

Period of Significance

1900

Significant Dates

1900

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

J. W. Scott, builder

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): N/A

- 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:

Hunterdon Co. Historical Society

Peck's Ferry Bridge
Name of Property

Hunterdon Co., NJ
County and State

10. Geographical Data

Acreage of Property less than one acre, Stockton Quad

UTM References

(Place additional UTM references on a continuation sheet.)

	Zone	Easting	Northing
1	18	504760	4481280
2			

	Zone	Easting	Northing
3			
4			

See continuation sheet

Verbal Boundary Description

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

The nominated structure occupies the road right-of-way and extends to the back wall of the abutments.

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.) The boundary encompasses the site of the nominated structure.

11. Form Prepared By

name/title Marfy Goodspeed, Delaware Township Historian

organization _____ date March 15, 1999

street & number 136 Locktown-Flemington Rd. telephone (908) 782-0354

city or town Flemington state NJ zip code 08822

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 Hunterdon County Board of Freeholders

street & number One East Main Street telephone (908) 788-1102

city or town Flemington state NJ zip code 08822

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.

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Peck's Ferry Bridge
Hunterdon County, New Jersey

Significance

Peck's Ferry Bridge possesses significance under National Register Criterion C in the area of engineering. It is distinguished by its "hybrid design variation on a Warren truss that reflects the experimental nature of metal truss bridge design in the 19th century"[1]. Although built in July 1900, it is representative of the evolution of design for pony truss bridges during the last quarter of the 19th century, and is historically significant as the work of a local fabricator. There have been some modifications to improve the weight carrying capacity, but Peck's Ferry Bridge, along with its sister bridge on Stone Signpost Road, retains its original design and its rural setting.

"While not representing the state of engineering or understanding of sound engineering principles of their day, [they] do represent the variety and idiosyncrasy of bridge designs that characterize the heyday of the metal truss bridge era. Because both bridges are relatively well preserved, both have been evaluated as significant" [1].

Evolution of the Area

Late in the 18th century, John Besson erected a sawmill on Plum Brook, just north of the intersection of Locktown-Flemington Road and Ferry Road [13]. Besson (1750-1842) was a Revolutionary War veteran who owned considerable acreage and was probably the one who was responsible for the survey of an east-west road through his property in 1779. Besson must have expected the new road (the Locktown-Flemington Road, known in early days as "the road to the Swamp Meeting House") would be an important one, for it was surveyed as a Great Road, that is, a four-rod road, having a right-of-way of 66 feet. No other municipal road in Delaware Township has as wide a right-of-way [14]. Mr. Besson's ambitions were not realized. The road today is quite the opposite of a great road.

Ferry Road, which intersects the Locktown-Flemington Road at the bridge, was surveyed in 1799 [13]. Originally it included a stretch of what is today called Stone Signpost Road. The road was surveyed to run "North across the edge of Albertus Mires . . . to the great road about two chains below Bessons Saw mill" [13]. Albertus Myers (1751-1839) was also a Revolutionary War veteran, whose home was located a short distance southwest of the bridge.

John Besson gradually disposed of his land holdings to his children [17] and died at the age of 92. The sawmill was owned by Daniel Carrell in 1851 when Stone Signpost Road was realigned [3]. The survey for this change was recorded with a map that shows both the sawmill, which has since disappeared, and a bridge. The road return confirms that there was an existing bridge at the site of the Peck's Ferry Bridge well before the Civil War [See Map in Attachments].

Peck's Ferry

Plum Brook today does not appear to be a stream that could support a ferry, and local residents have long been mystified by the name. Vince Abraitys, naturalist and former Hunterdon County

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Peck's Ferry Bridge

Hunterdon County, New Jersey

freeholder (now deceased), related in an interview that the ferry over Plum Brook was used during spring freshets to transport livestock across the creek [9]. This view is echoed by Hubert G. Schmidt, who wrote that "in general, fords were more common than bridges during the whole of the Colonial period. This meant that all travel except that by horseback was stopped by freshets." Thomas Capner wrote in 1787 that there were practically no bridges in Hunterdon County [3, pg 168].

Exactly when the original bridge at Peck's Ferry was built is not known. But the fact that it existed in 1851 seems to have obviated the need for a livestock ferry over Plum Brook, and adds to the mystery. The Peck of Peck's Ferry is also a mystery. The only Peck in the vicinity was a Jesse Peck who married into a Locktown family shortly before the Civil War and removed to Schenectady, New York [18, 21]. The freeholders' meeting place to discuss the bridge was identified as "Peck's Ferry." However, a road petition of 1903 which listed all property owners along the road did not include anyone named Peck nor a label for Peck's Ferry.

There is another possible explanation: a sardonic humor was sometimes used when naming roads. The best example is 'Featherbed Lane' for a very rough road. Perhaps some incident brought about the name Peck's Ferry, and the story has been forgotten. It was widely recognized as a place name, however. The term "Ferry" was used in the local newspapers in 1900 to designate a large area north of Sergeantsville when reporting on neighborhood events [8]. The the farm of Albertus Myers was called "The Ferry Farm" in 1861 [20]. In 1862, the farm was purchased by Isaac Horne, a chairmaker, who rented, and later sold, it to his son Jeremiah T. Horne, also a chairmaker. A sawmill and chairmaker at work in this locale represented industrial activity typical of rural Hunterdon in the 19th century [4a].

In 1774, legislation was passed giving counties the power to manage roads and bridges. Hunterdon was slow to begin, as Thomas Capner attested. Bridge building began in Hunterdon County in 1795 when the Freeholders first levied taxes to raise funds to bridge some of its inland creeks. Like the other counties in New Jersey, Hunterdon County took responsibility for most of the bridges, excepting the bridges over the Delaware River, which were joint stock ventures by private companies [17].

Construction of the Peck's Ferry Bridge in 1900 was preceded by construction of several other bridges in Delaware Township, both stone arch and metal truss. Masonry arch bridges in the township were constructed from 1829 to 1873, most of them before the Civil War. Metal truss bridges were constructed from 1876 to 1903, plus one built in 1925. Green Sergeant's Covered Bridge was built in 1872. In Hunterdon County as a whole, stone arch bridges were being built primarily during the latter half of the 19th century, at the same time that metal truss bridges were being built. The stone arches appear to have been reserved for small streams while metal truss bridges were used to replace wooden bridges on larger streams.

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Peck's Ferry Bridge

Hunterdon County, New Jersey

Truss Bridges

Some of the earliest bridges were wood beam structures known as king-post or queen-post bridges that were sometimes strengthened with a triangular brace. The truss is a simple triangle that is very strong because it transfers vertical forces in a horizontal direction. This fact has been known since the 16th century, but it was not until the 19th century that builders began to use multiple trusses to create a bridge span much longer than the wood-beam designs could support.

Truss bridges take advantage of compression and tension. "If a member is in compression, then the forces acting on it tend to push it together. If it is in tension, then these forces tend to pull it apart. The main members of a truss are either stiff, heavy struts or posts, or thin flexible rods or bars. Stiff struts or posts are capable of withstanding both tension and compression; however, thin rods or bars are only capable of withstanding tension, and this difference provides a major clue in truss identification" [6]. The configuration of tension and compression members determines the design of the bridge, rather than the number of panels.

The first truss bridges were made of wood and were quite common during the middle of the 19th century, many of them covered. "Wood works well in compression, but it cannot accommodate tensile forces efficiently. This limitation was resolved by William Howe (1803-1852) who, in 1840, patented a truss bridge design that used wrought iron rods for the tension members (posts) and wood for the bulkier compression members and top and bottom chords" [1]. This design can be easily seen in the Green Sergeant's Covered Bridge in Delaware Township (#1000110). Today, it is the only covered wood truss bridge that remains in use in the State of New Jersey.

Many factors caused the disappearance of these bridges, including susceptibility to fire, rot and insect damage as well as washouts from floods or freshets. But most important was the development around 1860 of metal truss bridges which were stronger, more durable and much easier to maintain [1]. The introduction of metal into truss bridge design started a design revolution. Experimentation began almost immediately on designs that substituted wrought iron and cast iron for wood. Wrought iron has good tensile qualities which were exploited in the important truss designs patented by William Howe, Thomas Pratt, Squire Whipple, and others. "Their truss designs ushered in an era of unprecedented advancement in metal bridge technology that was both a product of and a response to industrial advancement in this country" [1].

There was strong incentive for development of bridge technology in New Jersey during this period. The State, always a crossroads, was providing transportation for huge amounts of coal brought from the anthracite coal fields of Pennsylvania, first on canal boats, but later by railroads, to the New York market. As demand for coal increased, so did demand for greater load capacity of railroad bridges. The solution was the metal truss, and New Jersey was a leader in

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Peck's Ferry Bridge
Hunterdon County, New Jersey

construction of these bridges. By the 1880's, metal truss bridges were the norm, making possible a significantly more efficient transportation network than had existed prior to the Civil War [1].

The enthusiasm for metal truss bridges in the 19th century is evidenced in the number of patent applications sent to Washington. There were 372 patents for truss bridges and bridge construction submitted between 1797 and 1872. Most of these were fanciful and some were dangerous. Only a few were actually built. Most surviving metal trusses in America are either Pratt or Warren designs. Both forms date back to the 1840s, but many of the bridges employing these trusses that still survive were built since the turn of the century [5]. The Pratt and Warren forms were versatile, durable and economical, and these qualities made them the preferred forms by the early twentieth century [6].

For smaller streams and road crossings, a lighter design was preferred to the heavy styles used to support railroads. These bridges were known as 'pony truss' bridges, with shallower truss depths and no upper bracing between the top chords. Hunterdon County Freeholders usually called them "low truss" bridges. By the mid 1880's, this bridge type became the one preferred by county officials on short-span crossings for its economy and low maintenance, and they regularly voted to replace timber spans with "low truss" bridges [19].

The Warren Truss

Technological developments of the mid- to late-1890's brought about a transition from the Pratt design to almost exclusive use of the Warren truss design by the 1910's. These developments included better knowledge of materials strength and development of field pneumatic riveting which provided rigid panel point connections and led to abandonment of pinned connections.

The Warren truss was patented in 1848 by British engineers James Warren and Willoughby Monzani. The basic Warren truss has diagonals which are alternately placed in either tension or compression. As a result, the Warren is most easily recognized by its triangular outline. Most Warren trusses were built with vertical members which stiffen the entire structure.

The Warren's simple, straightforward design with equal-sized members made it easy to construct. It was also adaptable, allowing for increased capacity by the addition of a second set of diagonals and extra verticals. It is still being used by present-day bridge engineers [1], although not in New Jersey, where the Department of Transportation prohibits new construction of any type of metal truss bridge.

There are in the State of New Jersey more Warren truss bridges than any other design. Lichtenstein & Co. surveyed more than 77 Warren truss bridges comprising 40% of all the metal truss spans in the state. Of these, 62 bridges are pony trusses with 58 of them dating from the 20th century [1], including the Peck's Ferry Bridge.

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Peck's Ferry Bridge
Hunterdon County, New Jersey

J.W. Scott

Production techniques such as standardization of truss members made it possible for bridge fabricating companies to become prolific both in New Jersey and throughout the northeast and especially in Ohio during the last half of the 19th century [1]. One of these was "Scott's Foundry" in Flemington, NJ. John W. Scott's small foundry was in operation during the late 19th [3, pg 220] and early 20th centuries. In 1901, "Scott's Foundry" manufactured small iron castings and employed 5 men. In 1907 and 1918, the Foundry employed 12 men [2a-c]. This suggests that Scott did not expand to take on extra work for the war effort.

Scott's Foundry was a small company in 1901. The fact that he pursued bridge building in the early 1900's is especially interesting since by that time, national companies from Berlin, Connecticut and Canton, Ohio had taken over much of the work by underbidding the local fabricators, and companies like Andrew Carnegie's American Bridge in Pennsylvania were buying out these smaller business. They also were subsidiaries of steel companies and thereby controlled access to the raw materials. Scott's survival to 1918 may indicate a lack of interest by larger companies in the small bridges needed for Hunterdon County roads or a commitment on the part of Hunterdon Freeholders to employ local craftsmen.

J. W. Scott's Foundry probably bought stock pieces from a company like Carnegie's and fit them to specific bridges. The foundry business itself would have focused on cast iron used for domestic and industrial purposes, rather than on bridge building.

In addition to the similar Warren truss bridge on Stone Signpost Road (#100D390, Scott built a bridge "near Clark's Stone quarry" in Holland Township which is no longer standing. Scott's interest in bridges was not limited to Hunterdon County; he also built two thru-truss bridges at Woodfern in Somerset County (#18B0511 & #18B0512). Judging from his frequent appearance in the Hunterdon County Freeholders' Minutes of 1900 as a vendor [19], there are probably additional bridges attributable to Mr. Scott that have not yet been identified.

The Freeholders paid bills to J. W. Scott or John W. Scott for work done in several different townships. He probably did both forging and foundry work, producing items of both wrought and cast iron, and probably made repairs to existing bridges. However, despite his operation growing to employ 12 men, he was not listed in *The 1914 Farmers' /Businessman's Directory of Hunterdon and Somerset*. Obituaries suggest he might have been John W. Scott of Quakertown who died unmarried on May 20, 1940 at age 76 years 4 months [21].

Peck's Ferry Bridge

The Freeholders' Minutes for June 13, 1900 state that the Board would meet at "Peck" Ferry in Delaware Township on Monday June 20th 1900 at 10:30 a.m. and then meet at Changelwater on June 22nd [19]. They actually met at Peck's Ferry on June 18th and then adjourned to

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Peck's Ferry Bridge
Hunterdon County, New Jersey

Sergeantsville (probably at Jacob Wilson's Hotel, now the Township Municipal Building) for further consideration of two bridges over Plum Brook. "No. 1" was near land of Merret Suydam. Jeremiah E. Bowne, the freeholder representing Delaware Township, moved that the bridge be left to the committee having charge of the construction; the motion passed.

"Bridge No. 2 or the Ferry Bridge" was more controversial. Mr. Bowne moved to condemn it, but the motion failed, 8 to 11. Then, "on the motion of Mr. Cramer, Freeholder Bowne of Delaware Township was ordered to repair the Ferry Bridge" [19, pg 74-75].

Mr. Bowne was not the only one who thought the bridge was in bad shape. The Democrat Advertiser of July 26, 1900 reported: "Complaint reaches this office that a couple of public road bridges in Delaware Township between Croton and Locktown are in an unsafe condition. One of them has a great hole broken into it which is and has been for some time covered over with a big flat stone to prevent horses from falling through it. Whether these are County or Township bridges we do not know, nor does it make any difference. They should be repaired in any event. If accident results from their neglected condition somebody will have damages to pay" [8].

The Hunterdon County Democrat noted on July 10, 1900 that "John W. Scott was awarded the contract to build the low truss bridge over the creek near Clark's Stone quarry in Holland Township; price \$675; bridge 39 feet 6 inches long" [8]. But it said nothing during the months of July and August of his work on the bridge at Peck's Ferry, nor did The Democrat Advertiser.

Mr. Bowne got his way, even though the Freeholders voted not to condemn the existing bridge. The contract specified construction of a new metal truss bridge. It did not clearly state that it was to replace an existing bridge, but did require that "the Bridge [was] to be properly anchored to the abutments" [12], which could be interpreted as referring to existing abutments.

Shortly after the bridge was constructed, a petition was made to the freeholders on April 1, 1903 [16], to macadamize the Locktown-Flemington Road. (A map was included with the petition; see Attachments.) Apparently, the new bridge gave the old road more significance as a thoroughfare, and residents felt it deserved a more durable paving than dirt. The freeholders did not agree. In 1961, when the County Bridge Card was written, the road was still a dirt 12-foot roadway. Today road has an oil & gravel paved surface and a width of 16-18 feet. This paved surface was installed in the 1930's when the stone walls along the road were used as a base [10].

Original Contract for Peck's Ferry Bridge

The original bridge that appeared in the 1851 road return was probably a wooden bridge. During the year 1900, the Freeholders considered replacement of several bridges in the county. Nearly all were wooden bridges that had rotted.

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Peck's Ferry Bridge
Hunterdon County, New Jersey

The original contract for the bridge, dated July 13, 1900, is on file with the Hunterdon County Engineer's Office [12]. The "Iron Deck bridge" was to be constructed for \$280 and was to be completed by August 1st. If the builder failed to complete the bridge, a penalty of \$10/day would be deducted from the price.

The lattice work with medallions, which was quite common but now is rarely found, was to be 3 feet 4 inches high on each side, the frame to support the ends of the plank. The lattice work was to be made of 2 ½ inch by 3 ½ inch angle iron. Lattice work with medallions was quite popular at this time; there were companies that mass-produced this feature, which could be selected from a catalogue. The medallions were especially popular.

The contract called for lateral brace irons to be 1 ½ inch by ¼ inch. All iron work was to receive one good coat of mineral paint "well rubbed in at shop," and then a coat of "light-colored" paint on site. The exact color of the original paint is not known. Attempts to take a paint sample have not been successful.

The contract called for a name plate to be placed on the bridge by the builder with the names of the bridge committee (Freeholders J. E. Bowne, M B. Culver and G. W. Fulper) and date of erection. The name plate is no longer attached to the bridge, and may never have been.

The existing bridge departs from the original contract in several ways. It is four feet longer than the 25-foot single span called for, but is two feet narrower than the 16-foot width specified. There were to be 6 lines of heavy 10-inch beams. Instead, there are 7-inch beams. It was to be a "one-panel" bridge, but has two. It is hard to imagine a pony truss bridge with only one panel; perhaps the Freeholders had a different notion of the meaning of 'panel.'

The contract for Peck's Ferry Bridge required that it be set at 90 degrees to the creek. As a result it is set at an angle to the road as the creek flows under the road from the northwest. This angle creates a traffic calming effect and adds to the rural experience of this location. The practice is avoided today—roads are engineered to eliminate angles and provide a straight traveling path.

The bridge departs from the classic Warren truss design in a few ways. In the most common form of Warren truss, tension and compression are shared by diagonal and vertical members, both being rigid metal posts [6]. The Peck's Ferry Bridge has only diagonal members, excluding the vertical rod with ball finial, which is not structural. The center rod with ball finial is an idiosyncratic design, very unusual for a period when local builders were becoming scarce. Also exceptional is the continuous cover plate on the top chord and diagonals, which was probably only possible due to the short span of the bridge.

Most Warren truss bridges of this period had a minimum 50-foot span. This bridge at 29 feet, is much shorter, with only two panels. A bridge of this design was unusual for such a short span, which could just as easily have been handled with a timber or masonry bridge.

National Register of Historic Places Continuation Sheet

Section number 8 Page 8

Peck's Ferry Bridge
Hunterdon County, New Jersey

Scott was a local craftsman whose work would never have been approved by the new, college-educated engineers of the time. His quirky adaptations of a popular design would have been unacceptable to them, just as they are to today's engineers. His work represents one side of a debate that took place during this period over the nature of vocations—whether to learn a craft through hands-on experience and apprenticeship or through academic training using the scientific method and textbook procedures.

Conclusion

The Peck's Ferry Bridge is an embodiment of the development of industrial techniques to solve transportation challenges in rural areas, where roads were used by farmers and local craftsmen to transport their goods to market. It is a representative sample of a disappearing type; pony truss bridges like Peck's Ferry were once ubiquitous, but are now becoming scarce as development pressures with increased traffic and heavier vehicles eliminate one-lane, skewed bridges. The truss bridges of Hunterdon County have until recently been spared these pressures, but that reprieve is ending.

Peck's Ferry Bridge, along with its sister bridge on Stone Signpost Road, are the only documented bridges with their particular design in the State of New Jersey. The Peck's Ferry Bridge meets National Register Criterion C in the area of engineering as a special example of early 20th century craftsmanship and creativity in the construction of metal truss bridges by a local fabricator, during a period when small bridge building companies were disappearing.

National Register of Historic Places Continuation Sheet

Section number 9

Page 1

PECK'S FERRY BRIDGE
Hunterdon County, New Jersey

Bibliography

Books, Reports and Pamphlets:

- 1] New Jersey Department of Transportation, *The New Jersey Historic Bridge Survey*, prepared by A.G. Lichtenstein & Associates, Inc., 1994, No. 100D388.
- 2] *The Industrial Directory of New Jersey*
 - a] 1901, compiled & prepared by William Stainsby, Bureau of Statistics of New Jersey, Trenton.
 - b] 1907, compiled & published by the Bureau of Statistics of New Jersey, under direction of Winton C. Garrison, Trenton.
 - c] 1918, published by the Bureau of Industrial Statistics, NJ Department of Labor, under direction of Lewis T. Bryant, Trenton.
- 3] Hubert G. Schmidt, *Rural Hunterdon: An Agricultural History*, New Brunswick, NJ: Rutgers University Press, 1945.
- 4] Hunterdon County Cultural & Heritage Commission, *The First 275 Years of Hunterdon County*, Flemington, NJ, 1989.
- 4a] William H. MacDonald, *Central New Jersey Chairmaking of the Nineteenth Century*, 1959.

Periodicals and Unpublished Materials

- 5] Richard Sanders Allen, "Simeon S. Post's Patent Truss Bridges," *North Jersey Highlander*, Ringwood, NJ: North Jersey Highlands Historical Society, 1995.
- 6] T. Allan Comp, and Donald Jackson, "Bridge Truss Types: a guide to dating and identifying," Nashville, TN: American Association of State & Local History, Technical Leaflet, 1977.
- 7] *Preservation New Jersey* (Vol. XIV Number 1: Spring 1995).
- 8] *Hunterdon County Democrat*, 1900, and *Democrat-Advertiser*, 1900.

Interviews

- 9] Vince Abraitys, 1979.
- 10] Helen Sauer Youngblood, 1979.

Public Records

Hunterdon County Engineer's Office

- 11] County Bridge Card, D388.
- 12] Contract for construction of Peck's Ferry Bridge.

National Register of Historic Places Continuation Sheet

Section number 9 Page 2

PECK'S FERRY BRIDGE
Hunterdon County, New Jersey

Hunterdon County Clerk's Office

- 13] Road Book I page 235, file 18-7-18, today's Ferry Road, surveyed Sept 1799.
- 14] Road Book I page 101, today's Locktown-Flemington Road, surveyed 1779.
- 15] Road File 20-9-9 (1851, Stone Signpost Road).
- 16] Folder 75, Record Group 800, County Road Records
- 17] Deed 27-115.
- 18] The only real estate listing for Jesse Peck is in 1864 when, as one of the heirs of Sylvester Horner, he and his wife Mary Jane Vansyckle sold lots out of Horner's estate [Deeds 129-657, 130-276 and 133-683]. The deeds show that the Pecks had removed to New York by that time. Mary Jane Vansyckle was the granddaughter of Sylvester D. Horner of Locktown. Her marriage to Jesse Peck is not listed in Deats' Hunterdon Co. Marriages.
- 19] Freeholders' Minutes, 1900-1903.

Hunterdon Co. Surrogate's Court

- 20] Estate of Samuel Carrell (Carrell had purchased the Myers farm in 1844).

Hunterdon Co. Historical Society

- 21] Census Records, Delaware Township, 1860-70.
- 22] Obituaries.

Special Thanks to Andrea Tingey, Bierce Riley and Patrick Harshbarger.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Photographic Identification

PECK'S FERRY BRIDGE
Hunterdon County, New Jersey

The following information is the same for all photographs submitted with the nomination.

Name: Peck's Ferry Bridge
Location: Delaware Township, Hunterdon Co., NJ
Photographer: Marfy Goodspeed
Date of Photographs: March 10, 1999
Negative repository: Marfy Goodspeed
136 Locktown-Flemington Rd., Flemington NJ 08822

Peck's Ferry Bridge

- #1 NE view
- #2 NE view
- #3 SW view
- #4 South view
- #5 South view
- #6 South view, close-up
- #7 South view, close-up
- #8 Detail, northwest corner with bridge number
- #9 Detail, Lattice railing with medallions
- #10 Detail, Lattice railing with medallions
- #11 Detail, Base of central rod and end of floorbeam
- #12 Detail, Underside of bridge

Peck's Ferry Bridge

Delaware Township, Hunterdon Co., NJ

prepared by Marfy Goodspeed

March 15, 1999

Block 7

N

Stone Signpost Rd.

14
6 Ac.

Block 6 Lot 11

Locktown-Flemington Rd.

Peck's Ferry Bridge

400'

Plum Brook

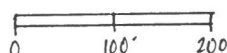
Block 12 Lot 1

FERRY RD

24
2 Ac.

Block 14

23
7 Ac.

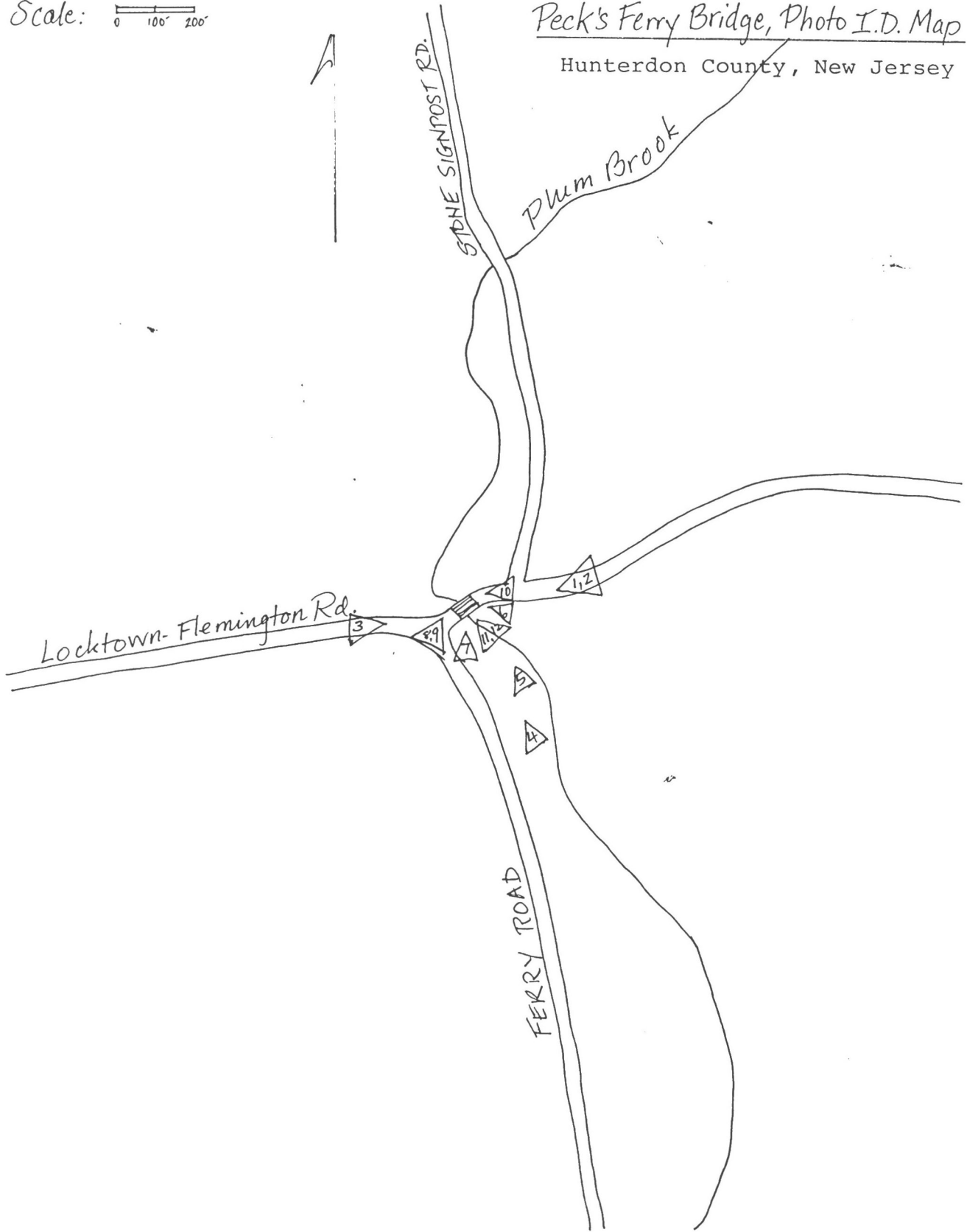
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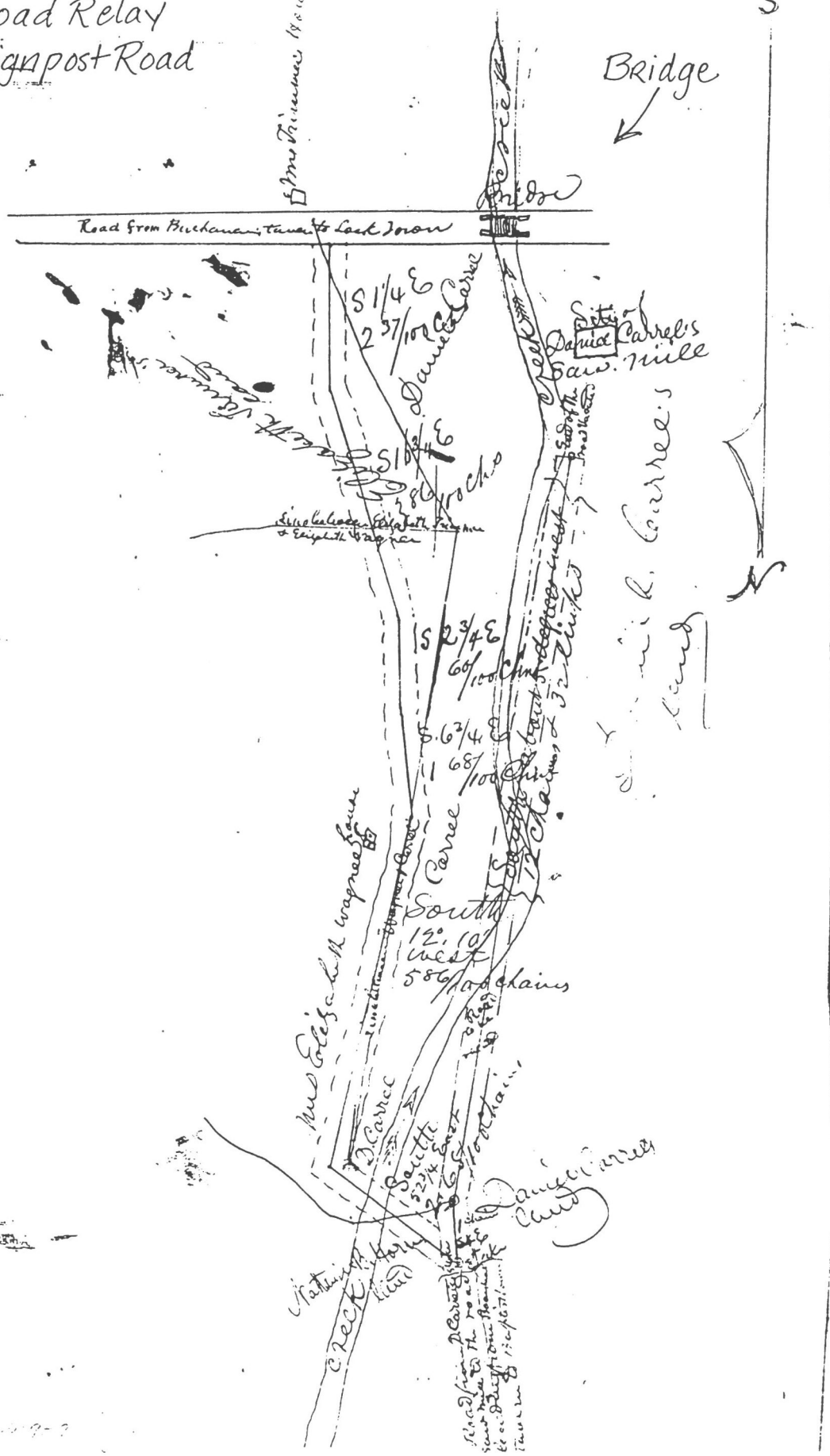
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Peck's Ferry Bridge, Photo I.D. Map

Hunterdon County, New Jersey

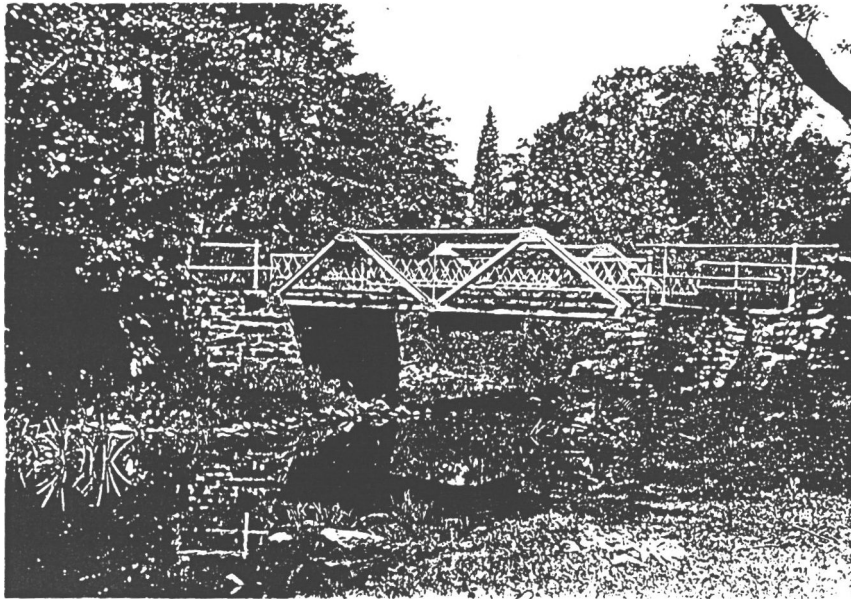


1851, Road Relay
Stone Signpost Road



Peck's Ferry Bridge
Hunterdon County, New Jersey

Hunterdon Co., Road File 20-9-9



- | | |
|---|---|
| 4/59 - Conc. post & rail - Suydam | 8/67 - Placed 2 conc. post
& paint - Suydam |
| 4/59 - Painted - Suydam | 4/68 - Shim floor beam
rep. railing - Bird |
| 12/59 - Plank & reflectors - Suydam | 5/71 - Replace Railing Naylor |
| 6/60 - 3 new posts - Tomson | 10/72 - Replaced Pins
in Truss &
Repaired Abt.
Lambert |
| 3/61 - Repaired guardrail posts - Horvath | 1/73 - Painted truss
Naylor |
| 3/61 - New Metal deck - Horvath | 9/74 - Repaired
railing Naylor |
| 1/62 - Welded rail - Suydam | 12/75 - Painted truss
Naylor |
| 1/64 - Repaired rail & paint - Suydam | 5/77 - Painted Naylor |
| 6/65 - Paint - Suydam | |
| 9/66 - Placed collar - Tomson | |



2 conc. post
+ suspension

1 floor beam
slung - Bird

Railings Naylor
laced Pine
Truss +
sawed Abt.

Lambert
cutted truss
sired Naylor
siling Naylor.

cutted truss
Naylor
cutted Naylor



Peck's Ferry Bridge
Hunterdon County, New Jersey

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Peck's Ferry Bridge
NAME:

MULTIPLE
NAME:

STATE & COUNTY: NEW JERSEY, Hunterdon

DATE RECEIVED: 10/07/99 DATE OF PENDING LIST: 10/21/99
DATE OF 16TH DAY: 11/06/99 DATE OF 45TH DAY: 11/21/99
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 99001313

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

ACCEPT RETURN REJECT 11/12/99 DATE

ABSTRACT/SUMMARY COMMENTS:

*Entered in the
National Register*

RECOM./CRITERIA _____

REVIEWER _____ DISCIPLINE _____

TELEPHONE _____ DATE _____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N







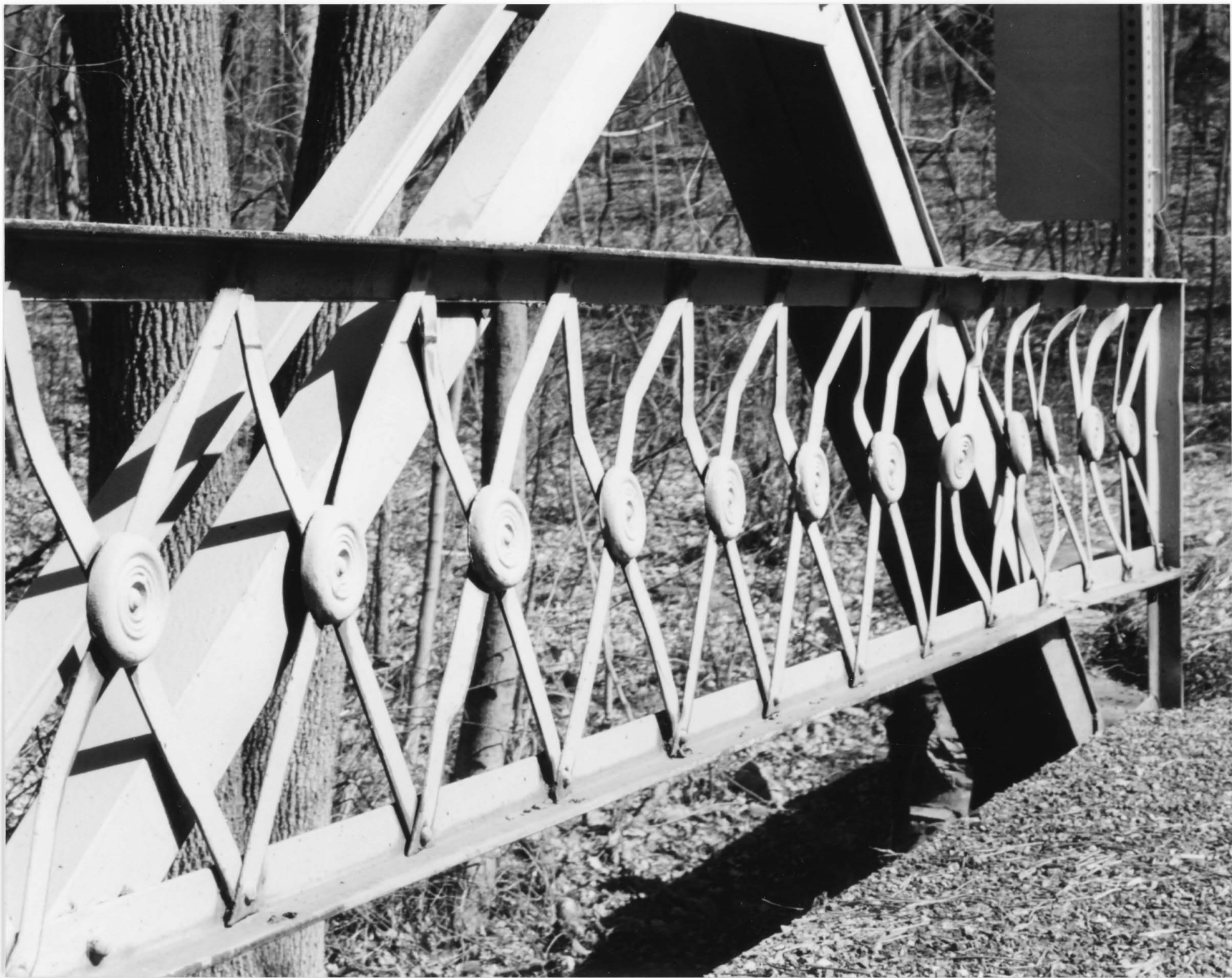




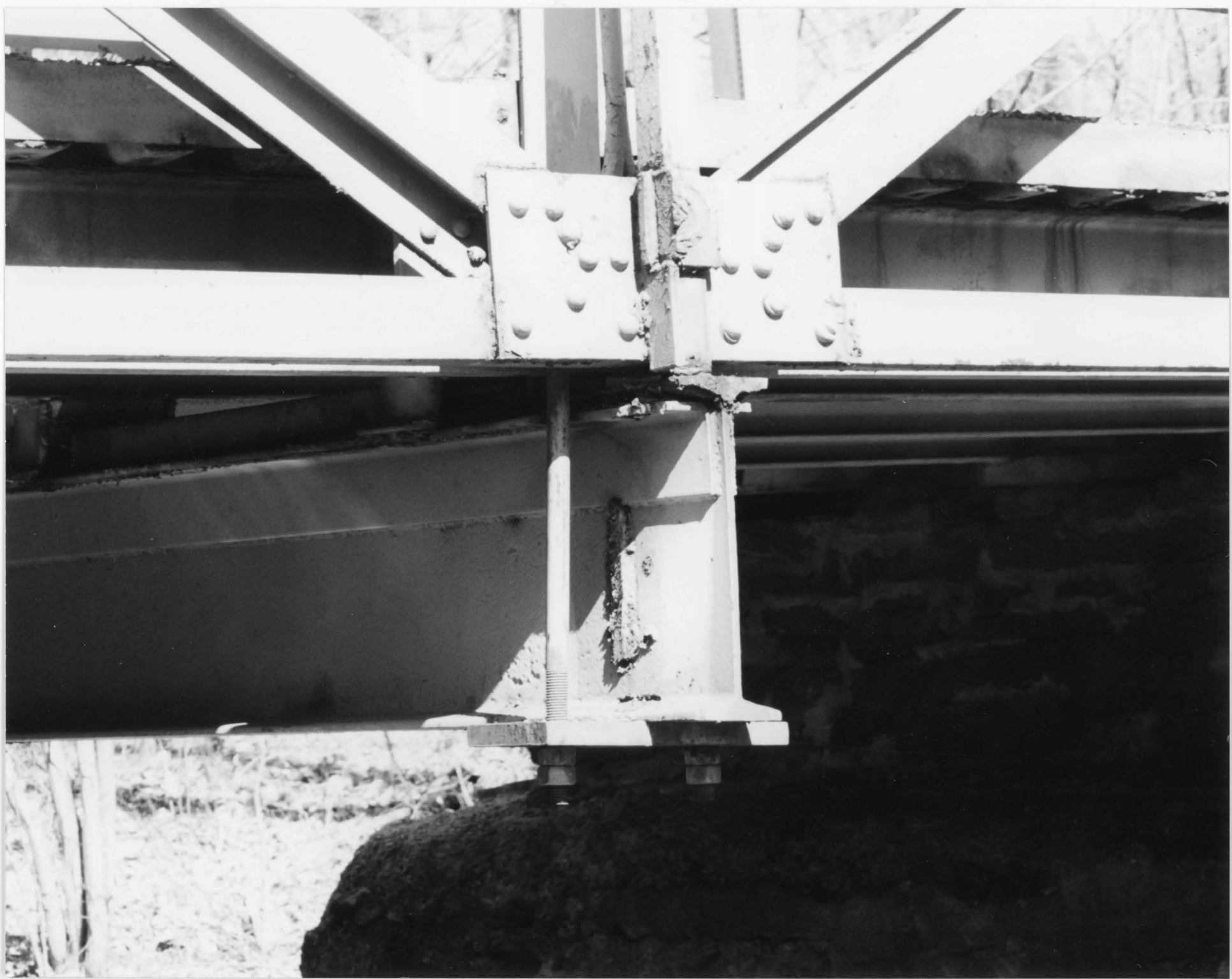






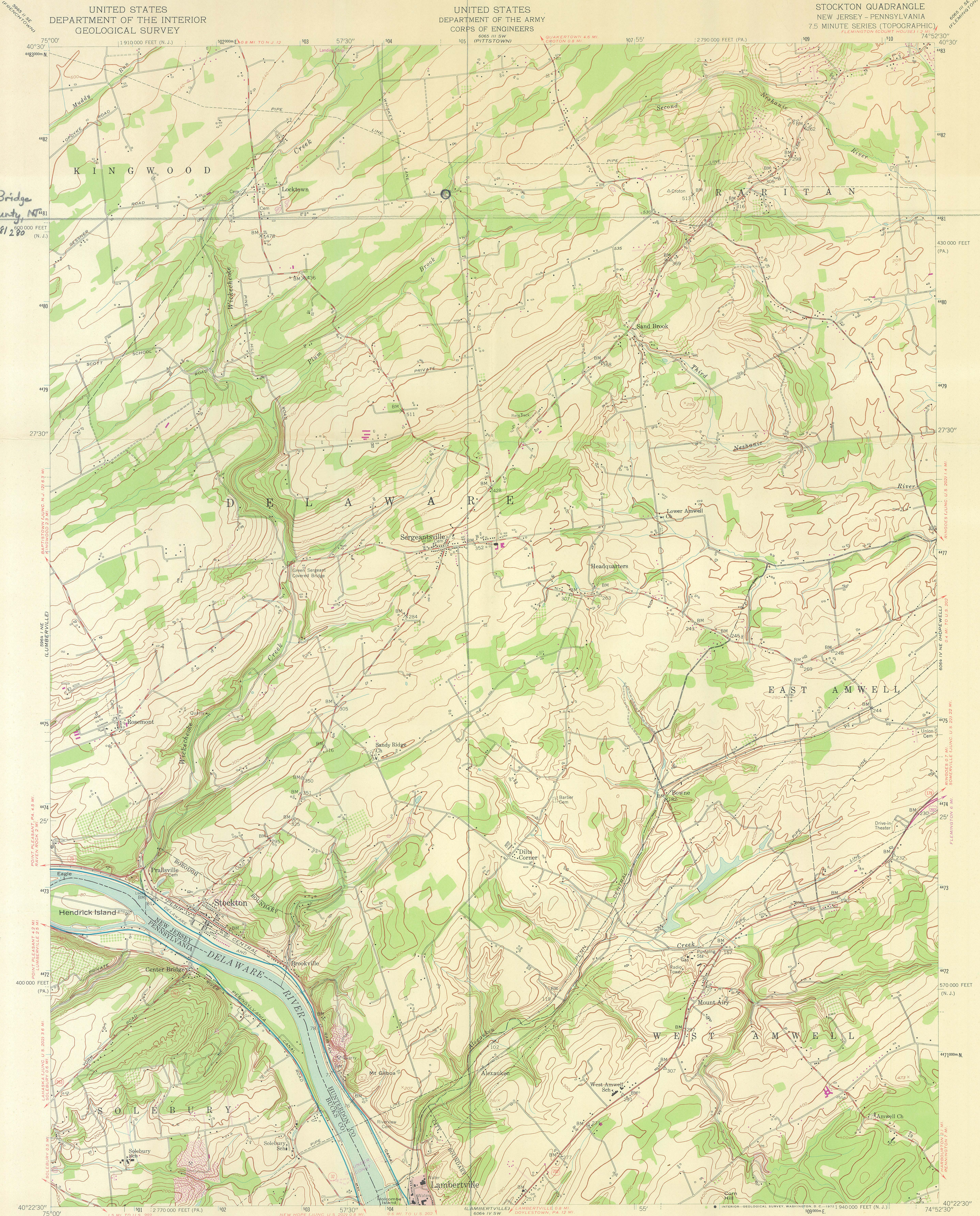








Peck's Ferry Bridge
Hunterdon County, NJ
18/504760/4481280



Mapped by the Army Map Service
Edited and published by the Geological Survey

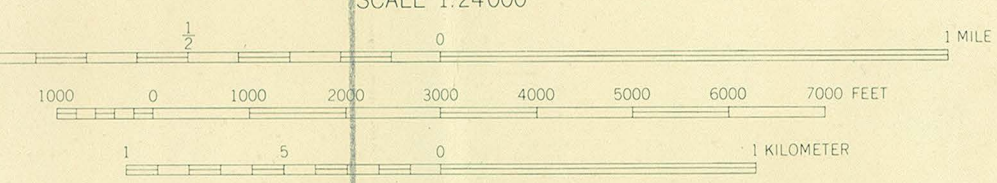
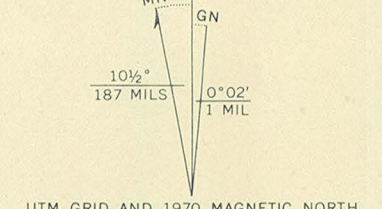
Control by USC&GS, New Jersey Geodetic Survey,
Pennsylvania Railroad, and USSCS

Topography from aerial photographs by stereophotogrammetric
methods. Aerial photographs taken 1942. Field check 1943
Culture revised by the Geological Survey 1954

Polyconic projection, 1927 North American datum
10,000-foot grids based on New Jersey coordinate system
and Pennsylvania coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue

Revisions shown in purple compiled by the Geological Survey
from aerial photographs taken 1970. This information
not field checked

Purple tint indicates extension of urban areas



CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

Heavy-duty	Light-duty
Medium-duty	Unimproved dirt
U.S. Route	State Route



STOCKTON, N. J. - PA.
N4022.5-W7452.5/7.5

1954
PHOTOREVISED 1970
AMS 6064 IV NW-SERIES V822



State of New Jersey

Department of Environmental Protection
Natural & Historic Resources

PO Box 404

Trenton, N.J. 08625-0404

TEL: (609)292-3541

FAX: (609)984-0836

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

Ms. Carol Shull
Chief of Registration
National Register of Historic Places
National Park Service
Department of the Interior
Washington, D.C. 20240

Dear Ms. Shull:

I am pleased to submit the Peck's Ferry Bridge, Delaware Township, Hunterdon County, New Jersey for National Register consideration.

This application has received majority approval from the New Jersey State Review Board for Historic Sites. All procedures were followed in accordance with regulations published in the Federal Register.

Should you want any further information concerning this application, please feel free to contact Dorothy P. Guzzo, Administrator, New Jersey Historic Preservation Office, P.O. Box 404, Trenton, New Jersey 08625 or call her at (609) 984-0176.

Sincerely,

A handwritten signature in black ink, appearing to read "James F. Hall".

James F. Hall
Deputy State Historic
Preservation Officer

SYNOPSIS FOR NATIONAL REGISTER NOMINATION FORM

NAME OF PROPERTY TO BE DESIGNATED Peck's Ferry Bridge
STREET AND NUMBER Locktown- Flemington Road over Plum Brook
MUNICIPALITY Delaware Township
COUNTY Hunterdon County

SHPO OPINION no **DOE** no

DATE PRESENTED TO STATE REVIEW BOARD 04/14/99

COMMENTS: Passed without opposition.

DATE OF NOTIFICATION LETTER TO OWNER(S) _____

COMMENTS:

DATE OF NOTIFICATION LETTER TO MUNICIPAL/COUNTY OFFICIALS 03/15/99

COMMENTS: Hunterdon County, the property owner, has objected (see attached).

Nomination was prepared by Delaware Township historian. Delaware Township did not respond.

PROPONENT'S COMMENTS: NUMBER RECEIVED FOR 0

OPPONENT'S COMMENTS: NUMBER RECEIVED AGAINST 1