

F-2-2

Bennies Hill Road Bridge
Middletown
Public

C. 1889

The Bennies Hill Road Bridge spans Catoctin Creek southwest of Middletown on Bennies Hill Road, at the base of Bennies Hill. It is an iron bowstring pony truss bridge in a single span ninety-four feet in length and fourteen feet, eight inches in width, built circa 1880 by the King Iron Bridge Manufacturing Company of Cleveland, Ohio. The structure is set on two abutments; the one on the west bank is a replaced reinforced concrete pier installed in summer 1977, the other is an original random stone abutment with wing walls. The entire structure, including new steel stringers, new wood planking, and a coat of paint was rehabilitated during the summer of 1977.

The Bennies Hill Road Bridge is the larger of two bowstring arch truss bridges in the county. Since the destruction of the Keysville Road Bridge, a twin arch column bridge, and relocation of the Detour Bridge, the Bennies Hill Road Bridge and Crum Road Bridge are the only two known bow arch bridges in Maryland situated in their original location. As such, the preservation of these bridges is important in documenting the history of bridge engineering design in Frederick County and the State of Maryland.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FOR NPS USE ONLY 1010617
RECEIVED
DATE ENTERED

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

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC Bannies Hill Road Bridge
AND/OR COMMON

2 LOCATION

STREET & NUMBER Bannies Hill Road over Catoctin Creek
CITY, TOWN Middletown VICINITY OF Sixth
STATE Maryland CODE 24 COUNTY Frederick CODE 021

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input checked="" type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL
<input checked="" type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT
	<input type="checkbox"/> BEING CONSIDERED	<input checked="" type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL
		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> TRANSPORTATION
			<input type="checkbox"/> OTHER:

4 OWNER OF PROPERTY

NAME The Board of County Commissioners of Frederick County, Maryland
c/o William Fout, Roads Department Engineer
STREET & NUMBER Winchester Hall; 12 East Church Street
CITY, TOWN Frederick VICINITY OF Maryland STATE 21701

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC. Frederick County Roads Department (Bridge #0308)
STREET & NUMBER Montevue Lane
CITY, TOWN Frederick STATE Maryland 21701

6 REPRESENTATION IN EXISTING SURVEYS

TITLE Historic American Engineering Record
DATE Summer, 1977 FEDERAL STATE COUNTY LOCAL
DEPOSITORY FOR SURVEY RECORDS National Park Service, 1100 L Street, NW
CITY, TOWN Washington STATE D. C. 20240

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input checked="" type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Bennies Hill Road Bridge spans Catoctin Creek southwest of Middletown, Frederick County, Maryland, on Bennies Hill Road, at the base of Bennies Hill.

It is an iron bowstring pony truss bridge in a single span 94 feet in length and 14 feet 8 inches in width, built circa 1880 by the King Iron Bridge Manufacturing Company of Cleveland, Ohio. The structure is set on two abutments; the one on the west bank is a replaced reinforced concrete pier installed in summer 1977, the other is an original random stone abutment with wing walls. The entire structure, including new steel stringers, new wood planking, and a coat of paint was rehabilitated during the summer of 1977.

It is believed that a wood truss bridge originally stood in the present location of Bennies Hill Bridge. Certainly by the flood of June, 1889, there were several iron truss bridges located south of Middletown as documented by this entry in the Frederick County Commissioners Minutes of Friday, August 16, 1889: "Messrs. Miller, Hightman, Madell, and Eyler took carriage and proceeded to Middletown."¹ Immediately after the flood the Commissioners had sent for an "expert or good mechanic" from the King Iron Bridge Manufacturing Company and the Canton Wrought Iron Bridge Company,² and later authorized \$75,000.00 to be borrowed to build bridges.³

¹ Frederick County Commissioners Minutes, Friday, August 16, 1889, p. 43.

² Ibid., Tuesday, June 4, 1889, p. 30.

³ Ibid., Friday, June 28, 1889, p. 37.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input checked="" type="checkbox"/> OTHER (SPECIFY) industrial archeology
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES circa 1889 BUILDER/ARCHITECT King Iron Bridge Company, Cleveland, Ohio

STATEMENT OF SIGNIFICANCE

The Bennies Hill Road Bridge is the larger of two bowstring arch truss bridges in the county. Since the destruction of the Keysville Road Bridge, a twin arch column bridge, and relocation of the Detour Bridge, the Bennies Hill Road Bridge and Crum Road Bridge are the only two known bow arch bridges in Maryland situated in their original location. As such, the preservation of these bridges is important in documenting the history of bridge engineering design in Frederick County and the State of Maryland.

The bowstring arch truss bridge was a popular design for the King Iron Bridge and Manufacturing Company. Its founder, Zenas King, patented the Tubular Arch Bridge in 1859, and the company began manufacturing bridges at the rate of approximately twenty-five per year. But by 1874 when the company's catalog was published, 250 to 300 bridges in Tubular Arch style were being built a year. By 1884 King Iron Bridge and Manufacturing Company was one of the largest highway bridge works in the United States.¹ There are two other bridges in Frederick Connty known to have been built by the company and one more is attributed. However, the Bennies Hill Road Bridge is by far one of the finest examples of early iron truss bridge construction remaining in Frederick County, Maryland.

¹ Dan Deibler, Metal Truss Bridges in Virginia, 1865-1932, (Virginia Highway and Transportation Research Council, 1975), p. 35.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

SEE CONTINUATION SHEET #1.

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 194' x 50'

UTM REFERENCES

A	<input type="text"/>	<input type="text"/>	<input type="text"/>
	ZONE	EASTING	NORTHING

B	<input type="text"/>	<input type="text"/>	<input type="text"/>
	ZONE	EASTING	NORTHING

VERBAL BOUNDARY DESCRIPTION

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

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

1 km

NAME / TITLE

Cherilyn Widell

ORGANIZATION

Frederick County Historic Preservation

DATE

January 17, 1978

STREET & NUMBER

Winchester Hall; 12 East Church Street

TELEPHONE

(301) 663-8300

CITY OR TOWN

Frederick

STATE

Maryland 21701

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL

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 National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

TITLE

STATE HISTORIC PRESERVATION OFFICER

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

Bennies Hill Road Bridge
Frederick County

CONTINUATION SHEET Maryland

ITEM NUMBER 9

PAGE 1

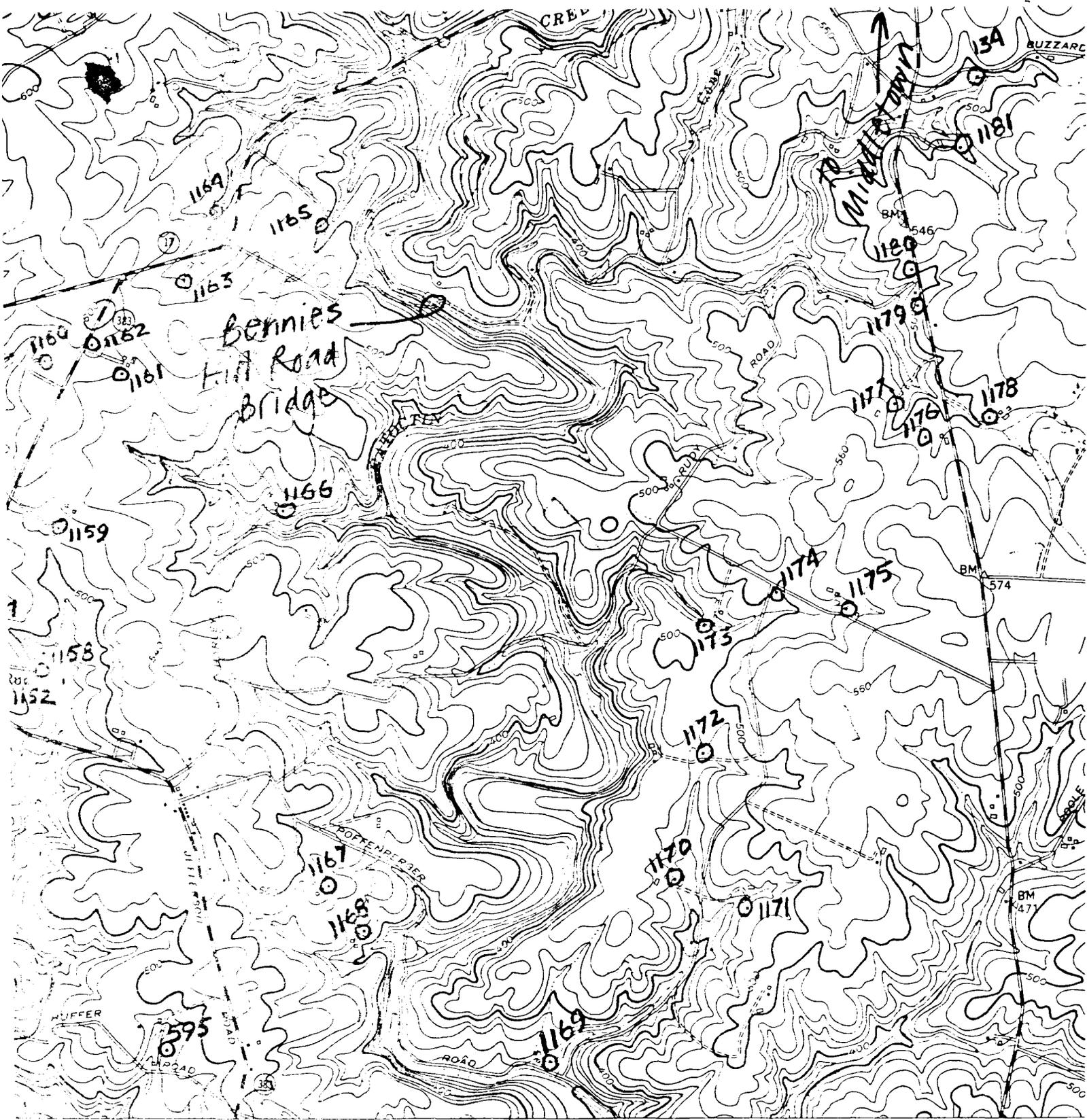
MAJOR BIBLIOGRAPHICAL REFERENCES

Deibler, Dan. Metal Truss Bridges in Virginia, 1865-1932. Vol. I.
Virginia Highway and Transportation Research Council, 1975.

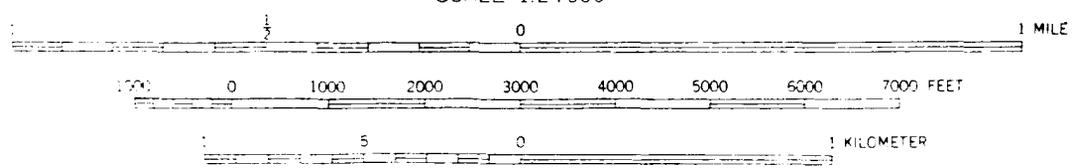
Jackson, Donald. "Railroads, truss bridges and the rise of the civil engineer."
Civil Engineering (October, 1977), 97-101.

Meeting minutes of the Frederick County Commissioners, 1882-1889.

The Frederick Examiner, Wednesday, September 13, 1854.



JEFFERSON 3 MI. POINT OF ROCKS 10 MI. SCALE 1:24000 JEFFERSON 1 MI.



F-2-2

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

Middletown Quad

MAGNETIC NORTH
AT CENTER OF SHEET

MARY
QUAD.

Maryland Historical Trust

Maryland Inventory of Historic Properties number: F-2-2c

Name: Bermies Hill Rd Bridge

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <input checked="" type="checkbox"/>	Eligibility Not Recommended <input type="checkbox"/>
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> None	
Comments: _____ _____ _____	
Reviewer, OPS: <u>Anne E. Bruder</u>	Date: <u>3 April 2001</u>
Reviewer, NR Program: <u>Peter E. Kurtze</u>	Date: <u>3 April 2001</u>

Dug

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. F-2-2

SHA Bridge No. F03-08 Bridge name Bennies Hill Road Bridge

LOCATION:

Street/Road name and number [facility carried] Bennies Hill Road over Catoctin Creek

City/town Middletown Vicinity X

County Frederick

This bridge projects over: Road Railway Water Land

Ownership: State County Municipal Other

HISTORIC STATUS:

Is the bridge located within a designated historic district? Yes No

National Register-listed district National Register-determined-eligible district

Locally-designated district Other

Name of district _____

BRIDGE TYPE:

Timber Bridge :

Beam Bridge Truss -Covered Trestle Timber-And-Concrete

Stone Arch Bridge

Metal Truss Bridge

Movable Bridge :

Swing

Bascule Single Leaf

Bascule Multiple Leaf

Vertical Lift

Retractable

Pontoon

Metal Girder :

Rolled Girder

Rolled Girder Concrete Encased

Plate Girder

Plate Girder Concrete Encased

Metal Suspension

Metal Arch

Metal Cantilever

Concrete :

Concrete Arch Concrete Slab Concrete Beam Rigid Frame

Other Type Name _____

DESCRIPTION:

Setting: Urban _____ Small town _____ Rural X

Describe Setting:

Bridge No. F03-08 carries Bennies Hill Road over Catoctin Creek in Frederick County. Bennies Hill Road runs east/west and Catoctin Creek flows north/south. The bridge is located in the Middletown vicinity and is surrounded by wooded areas and pasture.

Describe Superstructure and Substructure:

Bridge No. F03-08, constructed circa 1880, is a single-span, 1-lane bowstring pony truss bridge. The structure is 28.6 meters (94 feet) in length and has a clear roadway width of 3.96 meters (13 feet). The out-to-out width is 4.46 meters (14.66 feet). It has ten (10) panels with diagonal endposts and eyebars connected with pins. The floor system has steel rolled beam stringers and floorbeams. All verticals are built-up sections and all connections are pinned. The structure has no railings.

The east end has a parged stone abutment and wingwall, while the west end has a concrete abutment and wingwall (installed in 1977). A plaque on the structure attributes construction to the King Iron Bridge Manufacturing Company of Cleveland, Ohio. The structure is posted for 3.15 tonnes (7,000 pounds) and has a sufficiency rating of 29.65.

Discuss Major Alterations:

The structure was rehabilitated in 1977, included new steel stringers, new wood deck, and replacement of the west abutment and wingwall. In addition, the structure was painted. In 1993, some stringers and diagonal rods were replaced.

HISTORY:

WHEN was the bridge built: circa 1880
This date is: Actual _____ Estimated X
Source of date: Plaque _____ Design plans _____ SHA/County bridge files/inspection form X
Other (specify): _____

SURVEYOR/HISTORIAN ANALYSIS:

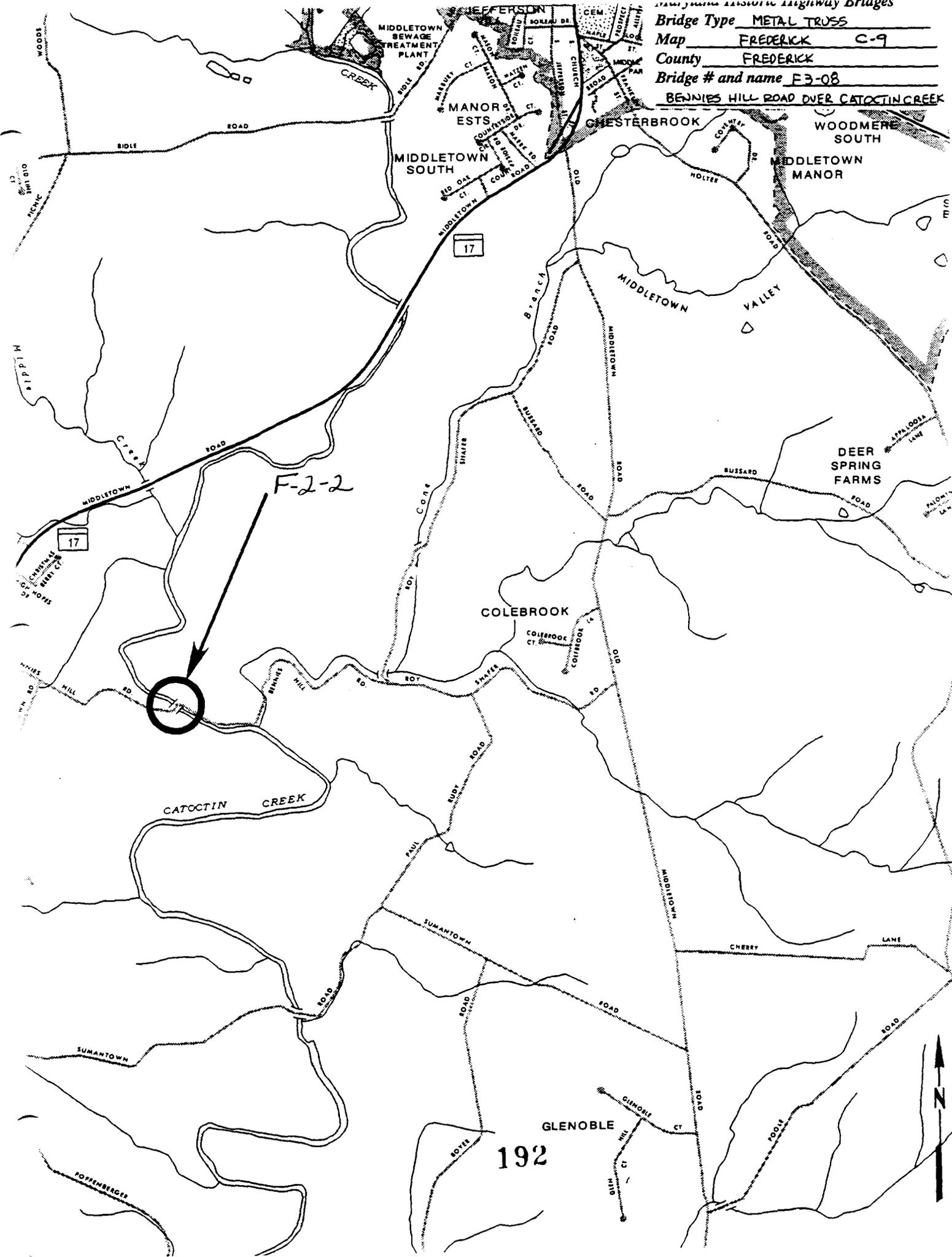
This bridge may have National Register significance for its association with:
A - Events X B- Person _____
C- Engineering/architectural character X

The bridge was listed on the National Register of Historic Places in June 1979.

SURVEYOR:

Date bridge recorded March 1998
Name of surveyor Dave Dick/Caroline Hall
Organization/Address Wallace Montgomery and Associates, 110 West Road, Towson, MD 21204/
 P.A.C. Spero & Co., 40 W. Chesapeake Ave, Suite 412, Baltimore, MD 21204
Phone number (410) 296-1635 FAX number (410) 296-1670

STATE ROUTE 17
 Bridge Type METAL TRUSS
 Map FREDERICK C-9
 County FREDERICK
 Bridge # and name F3-08
BENNIES HILL ROAD OVER CATOCTIN CREEK



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1. F 2-2

2. F 308, Bureau of the ...

3. F 308, Bureau of the ...

4. F 308, Bureau of the ...

5. F 308, Bureau of the ...

6. F 308, Bureau of the ...

7. F 308, Bureau of the ...

8. F 308, Bureau of the ...