

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name: Dauphin County Bridge #27
other names/site number: Seaman Bridge

2. Location

street & number: Deibler's Dam Road, Mahantango Creek Road N/A not for publication
city, town: Mifflin Township and Lower Mahanoy Township N/A vicinity
state: Pennsylvania code: PA county: Dauphin code: 043 zip code: 17017
Northumberland 097

3. Classification

Ownership of Property

- private
- public-local
- public-State
- public-Federal

Category of Property

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

| Contributing | Noncontributing |
|--------------|------------------|
| _____ | _____ buildings |
| _____ | _____ sites |
| <u>1</u> | _____ structures |
| _____ | _____ objects |
| <u>1</u> | <u>0</u> Total |

Name of related multiple property listing _____

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, 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. See continuation sheet

DR. BRENT D. GLASS Brent D. Glass
Signature of certifying official
PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

6/21/93
Date

State or Federal agency and bureau _____

In my opinion, the property meets does not meet the National Register criteria. See continuation sheet

Signature of commenting or other official _____

Date _____

State or Federal agency and bureau _____

5. National Park Service Certification

I hereby certify that this 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 _____

Date of Action _____

6. Function or Use

Historic Functions (enter categories from instructions)

Transportation/ road-related:
(vehicular)

Transportation/pedestrian-related

Current Functions (enter categories from instructions) ---

"vacant/not in use"

7. Description

Architectural Classification
(enter categories from instructions)

"other" : Metal Truss Bridge

Materials (enter categories from instructions)

foundation : STONE

walls : N/A

roof : N/A

other : METAL/ iron

Describe present and historic physical appearance.

Dauphin County Bridge #27, also known as Seaman Bridge, is a metal truss bridge spanning the Mahantango Creek between Mifflin Township, Dauphin County and Lower Mahanoy Township, Northumberland County. It was built in 1896 by the Chambersburg Bridge Company and measures 162.5 feet in length, by 15 feet 10 inches in width and 27 feet in height. The bridge consists of ten 16 foot 3 inch panels. The most outstanding feature structurally is the vertical members above the middle diagonal connections. As seen on the plan sheet, these vertical members (U3 to M3, U5 to M5, and U7 to M7) were built up with four angle sections.

The bridge is a variant of the Baltimore truss type. Baltimore truss bridges incorporate the use of sub-struts in the panels, for use as either tension members or compression members, compared to the common Pratt truss where these sub-struts are omitted from the design. These additional members give intermediate support to the chord supporting the floor system, while still retaining the structure's simplicity in construction. However, Dauphin County Bridge #27, has lower verticals made of two slender rods below the connection points (M3, M5, and M7). This signifies that the upper built-up, laced verticals, above these connection points, are intended for compression members and the lower verticals for tension members. This is highly unusual as compared to the Baltimore truss, which uses these lower members for compression and top members for tension.

All top chord members, (diagonals U1, L2, U9, L8, and verticals U4, L4, U6, L6) were built-up members of two angle sections. The floor consists of metal "I" beams which have wooden inserts on both sides running the full length. It has wooden stringers and a timber plank deck. Also, the bottom lateral bracing is made of eye bars which are connected to these metal "I" beams with pins. The abutments with wing walls are stone and measure 20 feet 6 inches in length, by 9 feet 9 inches in height, and 20 feet 10 inches in width. Another unusual feature of the Seaman Bridge is the existence of roller plates in the abutments, which were used for expansion and contraction. In recent years these rollers were cemented in place and the two lower chords are seen to be bowing, due to the change in weather. These lower

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Dauphin County Bridge #27

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chord members are divided in five sections and are connected with pins. When the weather is extremely hot, you can see these chord members bowing outward or sometimes inward. No damage has been done to these chord members because of this bowing action but they were not originally intended for expansion and contraction like the roller plates were.

Not only does the Seaman Bridge have these unusual features, but it also was one bridge to survive the 1972 flood without damage. Later this bridge was closed down in 1978 but after receiving petitions, it was later reopened for a five year period. In 1983 the bridge was closed to vehicular traffic permanently. Pedestrians crossed this span until March 1992. Due to the condition this bridge is in now, liability was a main factor in closing it for any transportation. Currently, there are large holes in the timber planks and one of the wooden stringers have weakened because of the weather. There are very few problems with the metal framework of this bridge. However, there are some places where rust is showing and the paint is chipping off.

Presently, the bridge is closed and restricted to both vehicular and pedestrian traffic. This one lane span is in very good condition for it's age but does need rehabilitation.

Over the years, no major alterations have been made to this bridge except to the roller plates in the abutments and the replacement of wood.

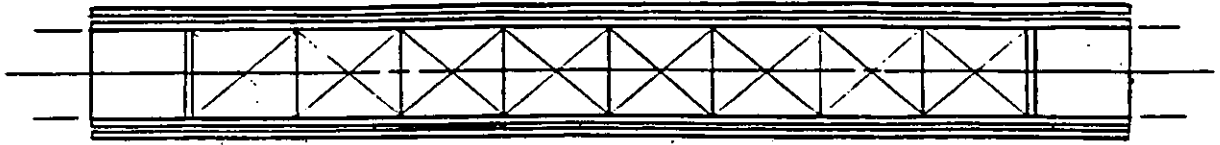
Dauphin County Bridge #27

Plan Sheet

Dauphin and Northumberland
Counties, Mifflin and
Lower Mahanoy Twps.



FLOW



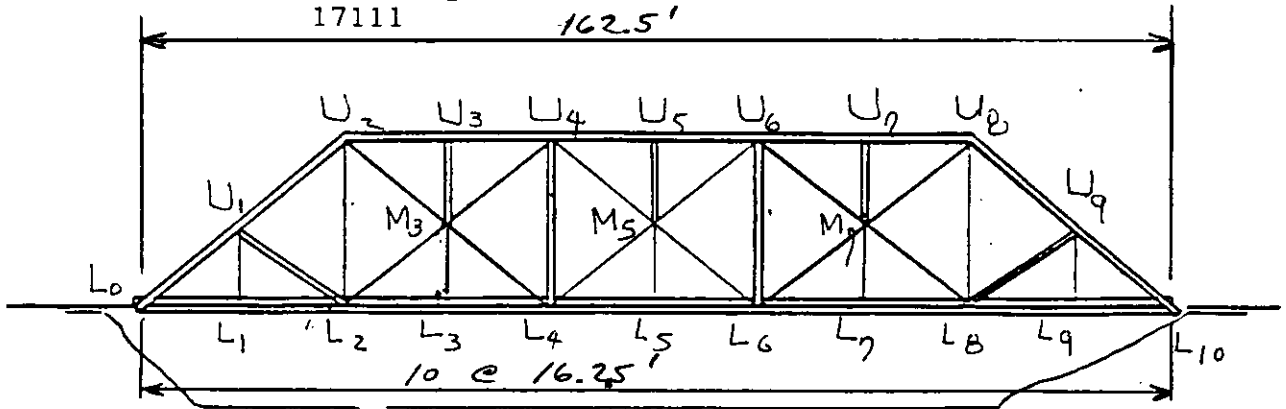
Drawn by:
Herbert, Rowland & Grubic Inc.
369 East Park Drive, Harrisburg, Pa.

PLAN

SCALE: 1" = 30'-0"

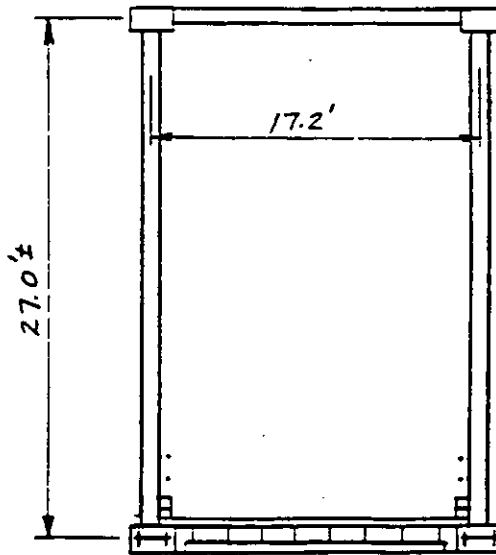
17111

162.5'



ELEVATION

SCALE: 1" = 30'-0"



CROSS SECTION

SCALE: 1" = 10'-0"

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

nationally statewide locally

Applicable National Register Criteria A B C D

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance (enter categories from instructions)
Engineering

Period of Significance
1896

Significant Dates
1896

Cultural Affiliation
N/A

Significant Person
N/A

Architect/Builder
Chambersburg Bridge Company

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

Built in 1896 by the Chambersburg Bridge Company, Dauphin County Bridge #27 is an excellent example of a late nineteenth century metal truss bridge. The length of span (162.5 feet) and the unusual truss design (a variation of the Baltimore truss) make it a particularly noteworthy example of a late nineteenth century truss bridge.

The nominated bridge varies from typical Baltimore truss design. In the case of Dauphin County Bridge #27, the upper vertical laced members are used for compression and the bottom vertical members for tension. With a Baltimore truss these features are reversed. A Baltimore truss uses upper vertical members for tension and lower vertical members for compression. So Dauphin County Bridge #27 is significant for this feature.

The 1988 thematic National Register nomination of Highway Bridges Owned by the Commonwealth of Pennsylvania includes only three examples of the Baltimore Truss type: Walnut Street Bridge, Harrisburg, Dauphin Co. (1890); Bridge in Cumberland Township, Adams Co. (1894); and the Bridge in Damascus Township, Wayne Co. (date unknown). Each of these is a standard Baltimore truss design.

Bridge #27 has been used for transportation since 1896. After surviving the 1972 flood without damage, the bridge was closed in 1978. After receiving petitions, it was reopened that year for a five year period. In 1983 the bridge was closed down to vehicular traffic permanently. Pedestrians still crossed this span until March 1992. Children crossed the bridge to catch their school bus but due to liability reasons this bridge has been barricaded and pedestrians can no longer cross this span.

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The people who live on the south side of this bridge in Dauphin County, are in a cul-de-sac area, which means that this bridge is the only means of getting out of the area in emergency situations. Now that this bridge has been closed, the people who live in this cul-de-sac area are forced to drive 2.5 miles one way to get to the other side of this bridge. If this bridge was open, they would have to drive only 200 yards to get to that same point. So this bridge is very important, not only to get out of this area faster when danger strikes, but also to provide quicker access for emergency vehicles to get into the area.

This bridge is built over the Mahantango Creek and borders Mifflin township, Dauphin County and Lower Mahanoy Township, Northumberland County. Downstream from where this bridge is located is a cement bridge, which is 1 1/2 miles away from this cul-de-sac area. Even though this cement bridge is located downstream, the people who live in this area would still be stranded without Bridge #27.

Years ago many people relied on horses and carriages for transportation over this bridge, so the bridge itself was not intended for the vehicles of today. Even though the bridge was not intended for the traffic of today it can still be rehabilitated for modern capacity.

Dauphin County Bridge #27 retains excellent historic integrity and has significant value. This bridge should be rehabilitated and preserved as a monument to the heritage of almost ninety years of service to the people in its community.

9. Major Bibliographical References

Interview of Charles Rice, July, 1992

Interview of Mr. and Mrs. James Wiest, 1992

Pennsylvania Historical and Museum Commission, Historic Highway Bridges In Pennsylvania, (Harrisburg: Pennsylvania Department of Transportation, 1987).

Interview with Dr. Jai Kim, Bucknell University.

Previous documentation on file (NPS):

- 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 # _____

See continuation sheet

Primary location of additional data:

- State historic preservation office
- Other State agency
- Federal agency
- Local government
- University
- Other

Specify repository: _____

10. Geographical Data

Acreage of property Less than one acre

UTM References

A 18 | 13 | 4 | 3 | 0 | 1 | 0 | 4 | 4 | 9 | 9 | 6 | 6 | 0

Zone Easting Northing

C _____

B _____

Zone Easting Northing

D _____

See continuation sheet

Verbal Boundary Description

Beginning at the southeast corner of the south abutment, proceeding north 183 feet to the northeast corner of the north abutment, then west 21 feet to the northwest corner of the north abutment, then 183 feet south to the southwest corner of the south abutment, and then east 21 feet to the place of beginning.

See continuation sheet

Boundary Justification

The boundary includes the bridge and its abutments. There are no adjoining contributing resources.

See continuation sheet

11. Form Prepared By

name/title Cathy Ann Weaver

organization _____

street & number RD 1, Box 56

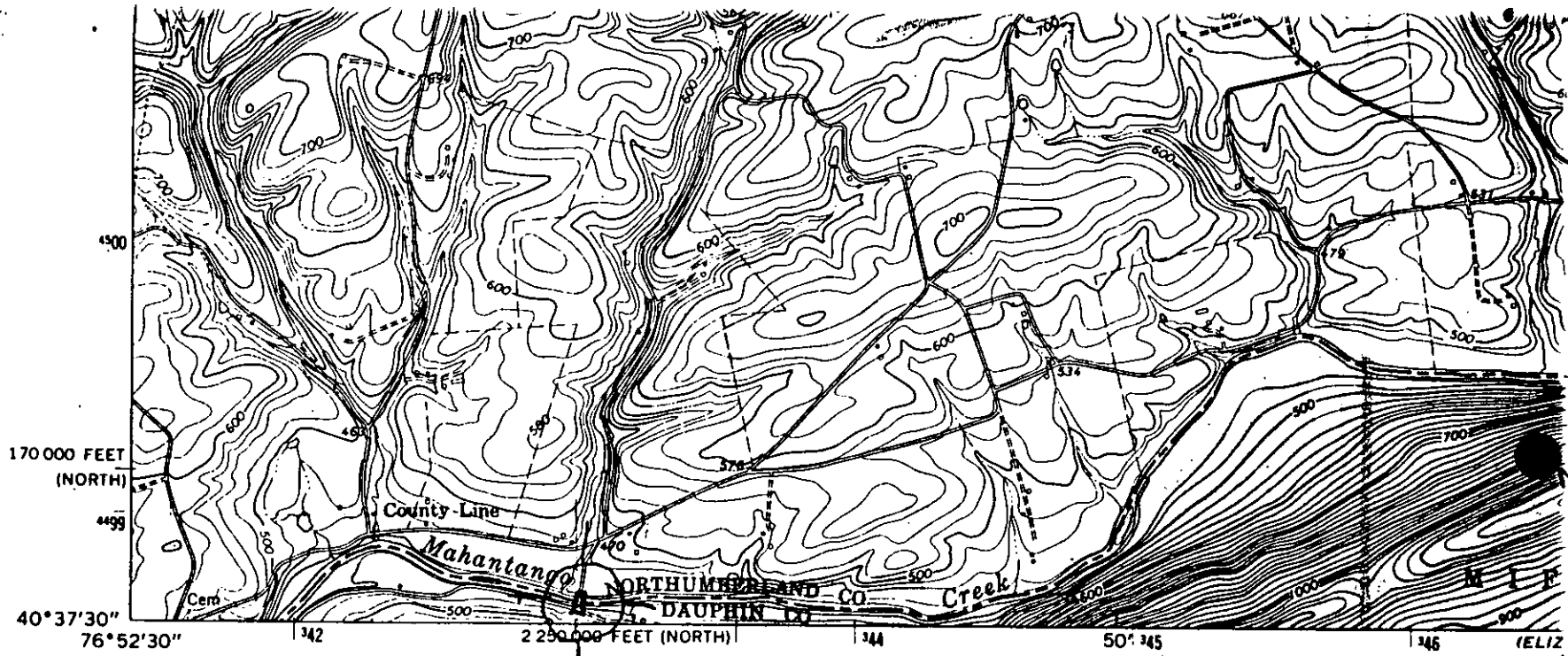
city or town Dalmatia

date July 13, 1992

telephone (717) 758-3026

state PA zip code 17017

Dauphin County Bridge #22
 Dauphin/Northumberland Co
 Zone 18 - Pillow Summit
 E 343010 N 445900

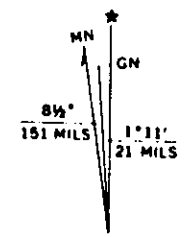


(MILLERSBURG)
 2685 III SW

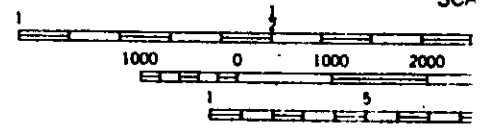
Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS
 Topography by photogrammetric methods from aerial
 photographs taken 1968. Field checked 1969
 Supersedes Army Map Service map dated 1947

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

Fine red dashed lines indicate selected fence and field lines where
 generally visible on aerial photographs. This information is unchecked



UTM GRID AND 1969 MAGNETIC NORTH
 DECLINATION AT CENTER OF SHEET



CONTOUR
 DATUM IS

THIS MAP COMPLIES WITH N
 FOR SALE BY U.S. GEOLOGIC
 A FOLDER DESCRIBING TOPOGRAPHIC