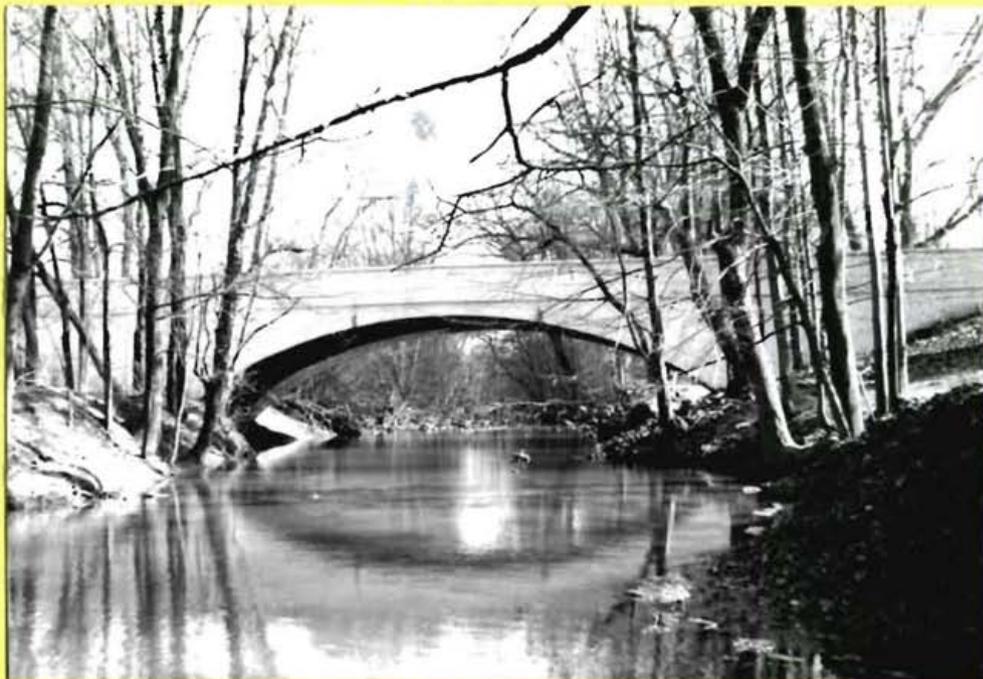


10. NAME(S) OF STRUCTURE

State Bridge Number 336

11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION

25B:6-13



25B:10

12. SOURCES

Mack, Warren W. "A History of Motor Highways in Delaware", in Reed, Henry Clay, Delaware: A History of the First State, vol.2, pp.535-550 (NY: Lewis Historical Publishing Co., 1947).

Delaware State Program. Delaware State Highways; The Story of Roads in Delaware.... [Newark, Delaware: Press of Kells, 1919].

Federal Writers' Project. Delaware: A Guide to the First State. (New York: Viking Press, 1938).

Art Work of Delaware. (n.p.: The Charles Madison Co., 1898).

Spero, Paula A. C. A Survey and Photographic Inventory of Concrete and Masonry Arch Bridges in Virginia. (Charlottesville, Virginia: Virginia Highway & Transportation Research Council, 1984).

Delaware State Archives. State of Delaware, New Castle County Levy Court, Specifications, Proposals, Contract and Bond; and misc. records, ms., State Archives, Dover, DE.

Delaware State Archives. New Castle County Road Commissioners Papers, various years 1750-1940, ms. State Archives, Dover, Delaware.

Delaware DOT records: Photo archives.

Plans on file at Delaware DOT: Levy Court, BNC-10

13. INVENTORIED BY:

AFFILIATION

DATE

P.A.C. Spero & Company with Kidde Consultants for Delaware DOT

April-November 1988

HABS/HAER INVENTORY

See "HABS/HAER Inventory Guidelines" before filling out this card.

1. NAME(S) OF STRUCTURE

State Bridge Number 336
Cooch's Bridge

2. LOCATION

Old Baltimore Road over Christina Creek
New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1922

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

CA

6. CONDITION

Good

State Highway Bridge 336, Cooch's Bridge, is a single span filled, solid spandrel concrete arch bridge with a clear span of 64'-0" and an arch rise of 12'-0". It carries two lanes of traffic with a total horizontal clearance of 24'-0". The substructure consists of concrete abutments with U-shaped concrete wing walls. The arch is capped with a concrete parapet ornamented with incised horizontal rectangles and a top rail. The parapet is divided into three sections, mirroring the span and wing walls, by raised square blocks ornamented with stepped, raised caps and two incised rectangles.

Delaware Department of Transportation records state that Bridge 336 was built in 1922. This is confirmed by the bridge plate which also indicates that the structure was built under the jurisdiction of the Levy Court of New Castle, Delaware. Charles E. Grubb served as County Engineer on the design and construction of the crossing. The 1922 bridge replaced a pony truss which served the site since 1881; a historic photograph of the previous structure appears in the 1898 Art Work of Delaware. Specifications for the replacement bridge, dated June 6, 1922, call for a reinforced concrete arch, with at 12'-0" rise and a 64'-0" clear span, with a 24'-0" clear roadway and 32'-0" wingwalls at each end. One wing wall "toward Glasgow" was required to be "curved to suit the present roadway." Specifications further direct that the existing truss bridge was to be dismantled at its joints in such a manner as not to injure any member of the structure, so that the bridge could be reassembled and used elsewhere. All truss members were to be match-marked before disassembly and the record of the marking turned over to the County Engineer. The contract was awarded on June 28, 1922, to Charles P. Witsil of Wilmington, Delaware, for a bid price of \$11,515.50. Drawings dated May 1922, prepared by the New Castle County Engineer, document the configuration and construction details of the present Cooch's Bridge. A note indicates that the masonry substructure of the previous bridge was to be used to "riprap the wing walls and roadway to the full extent of masonry available from present wing walls and abutments."

State Bridge Number 336 is an example of a solid spandrel, filled concrete arch bridge, designed by in-house highway department staff in a style similar to the "plain design" Luten arch bridges, patented by Daniel B. Luten. The tradition of concrete arch bridge construction started in the United States with Ernest L. Ransome's 1889 Golden Gate Park bridge, and continued well into the twentieth century. As with all bridge types of the late nineteenth and early twentieth century, proprietary types were patented and marketed. These types, such as Luten's arch bridges, were built throughout the United States, and eventually were the inspiration for similar designs prepared by local highway departments. Bridge 336, similar in style to Delaware's Luten bridges, was designed by the Department during the period of rapid expansion of Delaware's transportation network, following the Federal Aid Highway Act of 1916 and the establishment of the Delaware State Highway Department in 1917. It is distinguished by its relatively long span, its high degree of integrity, and by its aesthetic value. Bridge 336 appears to be in good structural condition and is unaltered; it is considered a good example of the concrete arch bridge type, and it is located within the Cooch's Bridge Historic District.