

**10. NAME(S) OF STRUCTURE**  
State Bridge Number 177

**11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION**  
37A:18-23, 1E:10A-18



1E:10A

**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).
- Delaware State Archives. New Castle County Levy Court Records. Specifications, Proposals, Contract and Bond files.
- Delaware State Archives. New Castle County Road Commissioners Records, 1750-1940.
- Delaware DOT records: Annual Reports; contract files.
- Plans on file at Delaware DOT: Contract # BNC-51, 64-040-14 1925

**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 177

## 2. LOCATION

Brackenville Road over Mill Creek  
Gateway Farms, New Castle County, Delaware

## 3. DATE(S) OF CONSTRUCTION

c. 1840/1965

## 4. USE (ORIGINAL/CURRENT)

Vehicular

## 5. RATING

SA

## 6. CONDITION

Good: Much of the substructure has been parged.

State Highway Bridge 177 is a 20'-0" single-span stone arch bridge. The voussoirs consist of radiating bricks; the barrel was constructed of rubble, as were the spandrel walls. A galvanized guard rail serves as a parapet. The deck is 24'-0" wide and carries two lanes of vehicular traffic. The abutments and wing walls are partially parged semi-coursed rubble, with U-shaped wing wall configuration. A concrete overhang is the most visible evidence of a 1965 alteration.

The stone bridge over Mill Creek was originally constructed as a single-span stone arch in 1846 as noted in the photo archives at DelDOT. In 1965, the bridge was altered when the narrow structure was widened to 24 feet. The parapet walls were torn down and a reinforced concrete slab was cast. The original structure is recognizable despite this radical alteration. Drawings dated June 1925, prepared by the Office of the New Castle County Engineer, direct the reconstruction of a rubble masonry wing wall for Bridge 177. These drawings document the parapet wall which was removed in the 1965 widening, indicating that the parapet rose approximately 3' above the road with a 2'-0" wide stone cap used from the old parapet.

Delaware Department of Transportation photographic archives contain records for extant New Castle County bridges of the 1920s. At that time there were approximately 20 remaining stone bridges in the county. All were constructed of uncoursed or semi-coursed rubble masonry. Varying from five to twenty feet in span length, the majority were single spans; at the time of the 1920s inspection, there was only one two-span stone bridge. A photograph of Bridge 177 illustrates its excellent condition in 1920. A solid masonry arch bridge, Bridge 177 is an example of a structure associated with nineteenth century turnpike construction in the Mid-Atlantic region. Alterations to this bridge consisted of removing parapet walls and construction of a 1965 slab extension. Although these alterations destroyed significant portions of original fabric, the configuration of the body of the bridge is visible, and it is considered significant as one of four remaining historic stone arch roadway bridges in Delaware.

7. DESCRIPTION

8. HISTORICAL DATA

9. SIGNIFICANCE