

10. NAME(S) OF STRUCTURE

State Bridge Number 76

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

41B:4-10



41B:5

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: Photo archives.

Plans on file at Delaware DOT: Contract (Levy Court)

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 76

2. LOCATION

Montchanin Road over Waterway
Granogue, New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1932

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

CS

6. CONDITION

Good: Spalling in concrete slab

State Highway Bridge 76 is a single span concrete slab bridge spanning 9'-0" feet. The bridge is built on a 13 degree skew. It carries two lanes of traffic on a 24'-0" wide deck. The substructure consists of uncoursed ashlar abutments with U-shaped wing walls. The parapet is also uncoursed ashlar and has a corbeled cap. A stone corbel course divides the parapet from the fascia of the slab.

Delaware Department of Transportation drawing files contain one drawing from the "widening and rebuilding" of Bridge 76. Designed by the Levy Court Engineer's Office, the bridge achieved its present appearance in 1932, when a previous structure which incorporated masonry elements was rebuilt and widened from 16 feet to 24 feet. The previous bridge, a concrete slab bridge, 16 feet wide was widened 4 feet on both sides. The rebuilding included the complete demolition of the headwalls and portions of the roadway slab and abutment walls. Specifications provided that all new masonry was to match the existing approach wall. Reuse of existing stones was permitted, provided that the stone was free of any old mortar. This widening and rebuilding contract was awarded to a Philadelphia firm, Hefflin and Kelly, for \$885.77.

State Bridge Number 76 is an example of a concrete slab bridge, constructed to look like a stone bridge. A number of small concrete slab and steel girder spans in upper New Castle County were faced with rubble masonry, in an apparent effort to relate to their rustic surroundings as well as to reflect the area's historic association with early turnpike construction. These small stone-faced bridges present an appearance similar to that of nineteenth century turnpike structures. Survey results indicate that this masonry articulation of the slab and girder bridge type was built only in New Castle County. Several similarly embellished bridges were built by the Levy Court of New Castle County in the early 1930s; upon taking over responsibility for road and bridge construction throughout the state in 1935, the State Highway Department continued the practice in portions of New Castle County. Bridge Engineer A. G. Livingston of the State Highway Department was a champion of these stone-faced bridges, which were built in wooded, often parklike settings; Livingston's notes and other documents indicate his strong feeling that a structure's surroundings should influence its form, and that the stone masonry was an appropriate response to the landscape of upper New Castle County. Notes on the drawings for Bridge 543, a masonry-embellished steel girder bridge constructed in the area in 1934, provide insight into the inspiration for this treatment: "the site shows exposed rock thickly located around the entire vicinity; construction should conform as closely as possible to the surrounding country."