

10. NAME(S) OF STRUCTURE  
State Bridge Number 543

11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION  
55B:9-12



55B:10

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 # 495, 87-570-1

12. SOURCES

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 543

## 2. LOCATION

Carr Road over Shellpot Creek  
Shellburne, New Castle County, Delaware

## 3. DATE(S) OF CONSTRUCTION

1936/46

## 4. USE (ORIGINAL/CURRENT)

Vehicular

## 5. RATING

SG

## 6. CONDITION

Good

State Bridge Number 543 is a single span steel girder bridge, with a span length of 36'-0". In elevation, the bridge has the appearance of a shallow stone arch bridge. The structure consists of nine rolled steel beams supported on stone abutments and is built at a 40° skew. The stone wing walls are U-shaped. The deck is 37'-0" wide and carries two lanes of vehicular traffic. It is capped with a handsome solid parapet wall made of stone, with four posts on each side built up higher than the parapet and extending to the base of the wingwalls. The posts at either end of the span are decorated with diamond shapes ("the Diamond State"). The parapet is capped with a band of coursed ashlar. A corbeled stone belt course extends across the fascia.

Delaware Department of Transportation records state that Bridge 543 was built in 1936 under contract 495, and repaired in 1946. The bridge was one of two structures built as part of a project to construct a new spur road off Washington Street Extension to Carrcroft, a distance of 1.42 miles. Union Paving Company of Philadelphia received the contract on June 25, 1936, for \$50,568.90; the bridge accounted for an estimated \$8,000 of that total cost. Contract correspondence indicates that a Mr. Jacoby supervised the construction of the bridge. Drawings dated December 1933 on file at the Delaware Department of Transportation document the design, materials, and construction of the bridge. The bridge was designed to carry a 20 ton truck without impact. Notes refer to the unusual stone veneer, cautioning that "the placing of Rubble Masonry should follow the best practice so the stone veneer will be held securely in position especially in arch," and provide insight into the inspiration for the design: "the site shows exposed rock thickly located around the entire vicinity; construction should conform as closely as possible to the surrounding country." Contract correspondence indicates that the design of the present bridge was also influenced by nearby stone-faced structures: ". . . will be similar to the structure already built across the same creek down the stream about a half a mile. This will make on the Shellpot Creek three rubble masonry structures and an I-beam span on the Industrial Highway." The masonry embellishment of Bridge 543 was presented as an example to contractors executing similar work in 1937 on Bridge 257. Specifications for that similar bridge indicate a desire to have designs consistent with the bridges built on the Park Spur off Washington Street Extension in Wilmington in 1934. The work undertaken in 1946 repaired flood damage resulting from a severe storm in September 1945.

This unusual bridge is designed as an embellished execution of a common structural type, the steel girder bridge. It features rock-face ashlar details and good craftsmanship, and it is an excellent example of this type. In the 1930s a number of small concrete slab and steel girder spans, faced with masonry, were built in upper New Castle County. This construction was an apparent effort to relate to their rustic surroundings, as well as a possible reflection of the area's historic association with nineteenth century turnpike construction, as these small stone-faced bridges evoke structures of an earlier time. Survey results indicate that this masonry articulation of the 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 all road and bridge construction throughout the state in 1935, the State Highway Department continued the practice. Under the direction of Bridge Engineer A. G. Livingston the State Highway Department designed a number of these stone-faced bridges, which were built in wooded, often park-like settings. Livingston's notes and other documents, including the above-referenced notation on the plans for Bridge 543, may indicate his feeling that a structure's surroundings should influence its form, and that stone masonry was an appropriate response to the landscape of upper New Castle County.