

10. NAME(S) OF STRUCTURE

State Bridge Number 488N

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

28B:34-36A

29B:2



28B:34

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. State of Delaware, New Castle County Levy Court, Specifications, Proposals, Contract and Bond. 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: contract files.

Plans on file at Delaware DOT: Contract #220

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 488N

2. LOCATION

U.S. 13 Northbound over Blackbird Creek
H & H Corner, New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1931

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

CF

6. CONDITION

Good

State Highway Bridge 488N is a single span rigid frame concrete bridge, carrying northbound traffic on U.S. 13 over Blackbird Creek at H & H Corner. It has a span length of 40'-0" and a total horizontal clearance of 39'-0". The substructure consists of a concrete abutment and U-shaped concrete wing walls. The bridge is topped by a concrete parapet wall. Directly above the span the parapet is ornamented with incised rectangles, above the wing walls it is plain. Ornamental piers separate the span and wing wall portions of the parapet. The piers are topped with a triangular capstone and each decorated with a diamond pattern. The fascia is shaped as a segmental arch.

Delaware Department of Transportation records state that Bridge 488N was built in 1931 under State Highway Department contract 220 (Federal Aid project no. 43). Original drawings, dated November 1931, illustrate the configuration and construction details of the structure. Bridge 488N, along with 488S (built over a decade earlier) were part of the final phase of a major highway building project first begun by Coleman T. DuPont in 1911. The completion of that project involved the dualization of Route 13 at this location through the construction of a 4.76 mile road between Reynold's Corner and Fieldsboro. On December 15, 1931, the State Highway Department awarded the contract for this project to Vincent Schiavi, a Buffalo, New York contractor temporarily located in Alexandria, Virginia, for the bid price of \$189,155.00. Schiavi subcontracted the bridge construction to William F. Anderson. Originally Contract correspondence indicates that the selection of rigid frame construction for Bridge 488N represented "a departure in the design of a semi-arch structure;" by incorporating fixed ends, the design would allow for a saving of approximately 40 yards of concrete over a conventional structure. The cost of materials for this bridge was estimated at \$12,060.

State Bridge Number 488N is an example of a concrete frame bridge, like the commonly built concrete slab and girder bridges, a common type constructed during the early growth period and the period of rapid expansion of the state road network. While earlier examples of this type exist, built under the auspices of county road departments, Bridge 488N is the first concrete frame structure to be built by the State Highway Department. In a letter of November 28, 1931 to A. F. Gordon, Bridge Engineer for the Bureau of Public Roads, State Highway Department Bridge Engineer A. G. Livingston noted that "this is a new type of construction to be built in Delaware," and requested Gordon's comments on the plans for Bridge 488N, as the Bureau could be expected to have broader experience with the type. The bridge features an embellished parapet, and the fascia is constructed in the shape of a segmental arch. The bridge appears to be in good structural condition and is unaltered, and is considered a representative example of this common type which derives additional significance from its status as the first structure of its type to be built by the State Highway Department.