

10. NAME(S) OF STRUCTURE

State Bridge Number 42A

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

21B:18-23



21B;22

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).

Hancock, Harold Bell. A History of Kent County, Delaware. (Dover, Del.: Dover Litho Printing Co., 1976).

Kent County Levy Court Records

Delaware State Archives. Kent County Road Records 1875-1940. ms. State Archives, Dover, Delaware.

Delaware DOT records: contract files.

Plans on file at Delaware DOT: Contract #278

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 42A

2. LOCATION

Road 42 over Little Duck Creek
Cheswold, Kent County, Delaware

3. DATE(S) OF CONSTRUCTION

1933

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

CS

6. CONDITION

Good

State Highway Bridge 42A is a combined-use structure, incorporating highway bridge and water control functions. The structure is 34'-8" long and consists of double span concrete slab construction supported on concrete abutments with straight wing walls. The spillway for Voshell Lake is located on the west elevation; hand adjustable wooden "flood and flash" gates are situated in concrete tracks. The bridge is 28'-0" wide and carries two lanes of traffic. The parapet is solid concrete and decorated with three scored rectangles.

Delaware Department of Transportation records state that Bridge 42A was built in 1933 under State Highway Department contract 278 (Federal Aid Project 112), as part of a project to construct a 9' concrete road between Brenford and Seven Hickories, a distance of 3.06 miles. Financed with funds appropriated by Congress under the Emergency Relief and Construction Act, the specifications alerted bidders that these funds could only be expended on work actually completed by July 1, 1933, and timely completion of the project was therefore essential. Bids were received on January 24, 1933, and the contract was executed on February 2 with George and Lynch of Dover, Delaware, for a bid price of \$69,036.00; work on the road project began four days later. The bridge was estimated to account for \$9,205.00 of this total. Reinforcing steel was supplied by Taylor-Davis Company, Philadelphia. Concrete incorporated cement from the Lehigh Cement Company, Allentown, Pennsylvania; gravel from the Warner Company, Wilmington; and sand supplied by George and Lynch. As the structure forms the outlet to a mill pond, three concrete columns were built on the upstream side with vertical grooves in which flash boards could be inserted to control the level of water in the pond. An inspection conducted on May 26, 1933 found the structure 95% completed, with work proceeding satisfactorily, and estimated that all work should be completed in about ten days, well within the stipulated period. The inspection also noted that "the structure has good lines and an excellent finish . . ." Original drawings, dated January 1933, show that this bridge replaced a timber bridge at the same location. The replacement structure included both the bridge and the spillway under this contract; it was designed for a 20 ton truck live load, with no impact loading.

Bridge 42 was part of a road construction project representing the efforts of the State Highway Department to expand the secondary road system in rural areas of Delaware during this period. This program was enhanced by the commitment of federal financial assistance for road construction through the Public Roads Administration, an agency of the United States Department of Agriculture. The Federal Aid statement for this project indicated the necessity for the undertaking: "this project is a secondary road opening up a fertile agricultural section of Kent County, the roads of which are impassable in the winter months." This concrete slab bridge also is an intact example of a combination bridge and water flow control structure. This dual purpose structure type is found in Kent and Sussex Counties, and reflects a specialized engineering response to the water management necessities of lower Delaware.