

10. NAME(S) OF STRUCTURE

State Bridge Number 155

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

57A:8-24A

58A:3-6



57A:8

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).

Wilmington Evening Journal Every Evening, 18 August 1931.

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 #144, 144A, 87-570-15, 81-099-23

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 155
Marshallton Bridge

2. LOCATION

Old Capitol Trail over Red Clay Creek
Elsmere, New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1931

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

SG

6. CONDITION

Good: Some cracks in substructure concrete with calcium stains. Some previous section loss in steel. Heavy corrosion of railing.

State Highway Bridge 155, Marshallton Bridge, is a 113'-0" built-up steel plate girder span, carrying two lanes of traffic on a 24'-0" wide deck. Constructed at a 40° skew, the bridge rests on concrete abutments, with U-shaped wing walls; there is a fixed bearing on the south abutment, and an expansion bearing on the north. Concrete end blocks with concrete lampposts mark the portals. A 6'-10" wide sidewalk of wooden planks is cantilevered on built-up plate supports on each elevation, and features an elaborate metal railing with diamond shaped openings inside rectangular panels and posts corresponding to every other girder rib. The ornamentation is carried through in a concrete railing which caps the wing walls.

Delaware Department of Transportation records state that Bridge 155 was built in 1931 under Contract No. 144 (Federal Aid Project No.65A-B-C). Original drawings for the "Marshallton Bridge" dated September 1930 are on file at the Delaware Department of Transportation. The bridge was constructed as part of a road relocation project called the Marshallton Cutoff. It replaced a previous Warren pony truss constructed in 1919. Separate contracts were let for the substructure and superstructure. The former was constructed by D. E. O'Connell and Sons of Ridley Park, Pennsylvania; the contract was awarded on December 18, 1930, and construction took place between January 19 and March 31, 1931. The superstructure was built by George E. Shockley of Rehoboth, Delaware; work began on May 11, 1931 and was completed on July 24 of the same year. Opening of the structure awaited completion of the road, and a formal celebration was held on November 21, 1931. The total cost of the bridge was \$32,300. The State Highway Department highlighted this project in its annual report for 1931, stating that "through careful attention to details in its design this bridge presents an unusually pleasing appearance and with its approaches eliminates the traffic congestion and hazards which formerly existed on account of the narrow and winding route through the town." A newspaper item called the bridge "one of the finest structures of its kind in the county, the light standards adding much to its beauty". The bridge was designed for a 15 ton truck with 30% impact. Shop drawings and bills of material in DelDOT files indicate that the structural steel was furnished by the Shoemaker Bridge Company of Pottstown, Pennsylvania; the decorative steel railing was fabricated by the Bauman Iron Works of Reading, Pennsylvania. The reinforced concrete obelisks marking the portals (the light standards noted in the cited newspaper item) carried "Venetian" pendant lanterns on cast bronze "Commonwealth" brackets, both supplied by the Westinghouse Electric and Manufacturing Company, Philadelphia, and installed by the Delaware Power and Light Company.

State Bridge No. 155, constructed in 1931, is an example of a through plate girder bridge, a commonly built type during the time of expansion and improvement of the road network in the 1920s and 1930s. Bridge 155 appears to be in good structural condition and is unaltered, and is considered a good representative example of this type, with unusual embellishment. The bridge was constructed as part of a project, assisted by federal funds, to correct dangerous conditions of alignment and relieve traffic congestion in a growing suburb of Wilmington. During the period 1926-1935, the Department focused on the consolidation and improvement of the state's highway system, taking advantage of federal assistance to widen and realign thoroughfares to meet the demands of increasing traffic and higher speeds.

7. DESCRIPTION

8. HISTORICAL DATA

9. SIGNIFICANCE