

10. NAME(S) OF STRUCTURE

State Bridge Number 153

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

73A:22-28



73A:27

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; and misc. records, 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: Annual Reports; contract files.

Plans on file at Delaware DOT: Contract #597

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 153

2. LOCATION

Kirkwood Highway over Little Mill Creek
Elsmere, New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1938

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

CS

6. CONDITION

Good: Some deterioration and calcium stains on parapets and wing walls.

State Bridge Number 153 is a 36'-8" double span, reinforced concrete slab bridge; each span measures 16'-0". The bridge carries four lanes of traffic, a center median strip and a sidewalk on each side for a total width of 106'-0". The substructure consists of concrete abutments with flared wing walls. The slab and the wing walls are topped with a corbeled band. The parapet is concrete and consists of two solid walls between square, battered end blocks and a center pier. It is ornamented in a simple Art Moderne style, with incised vertical striations.

Delaware Department of Transportation records for Bridge 153 include original drawings for the present bridge under Contract No. 597 (Federal Aid Project No. 166A). They are dated April 1938 and include plans, sections, elevations, and details of the parapet; drawing notes stated "remove present bridges." Design load was for a 20 ton truck with impact. The bridge retains its original configuration and detailing. State Bridge No. 153 was part of a 1.26 mile-long project for a Dual Highway from Elsmere to Price's Corner; this highway construction was part of a broader program of improvements intended to reconstruct 12.5 miles of the "Capital Trail" between Newark and Wilmington. The Capital Trail improvement project, with an estimated cost of \$500,000, included reconstruction of the existing highway and "relocation where necessary to straighten alignment and bypass congested sections." Six old roadway bridges were to be removed. The contract for the Elsmere to Price's Corner section was awarded on July 13, 1938 to the Alessandro Petrillo Company of Wilmington, for their bid of \$156,106.50; bridge construction was subcontracted to J. A. Bader & Company. The estimated cost of Bridge 153 was \$12,535; it replaced a previous bridge which incorporated masonry abutments and piers. Construction was started on July 21, 1938, and the structure was completed on August 3 of the following year. The south half of the bridge was built first, to maintain traffic flow on this primary artery during construction.

Bridge 153 is a two span concrete slab bridge, a commonly built type, of standardized design, reflecting the continuing expansion and improvement of the road network under the auspices of the Delaware State Highway Department. The improvement of the Capital Trail, of which Bridge 153 was a part, exemplified the Department's efforts to bring primary roads up to modern standards; another such project during this period was the Dual Highway between Wilmington and Dover, touted at the time of its construction as the longest such road in the world. In addition to upgrading primary routes, the Department had assumed responsibility for construction and maintenance of all local roads in 1935; between 1935 and 1942, efforts focused on the improvement of rural roads and increasing road construction in towns and cities. Over 250 bridges were built during this period statewide. Bridge 153 is considered a good representative multiple span example of the commonly built concrete slab type. The bridge's parapet type was illustrated by the State Highway Department as a typical number "VIII solid type, concrete balustrade" during this period of standardized design.