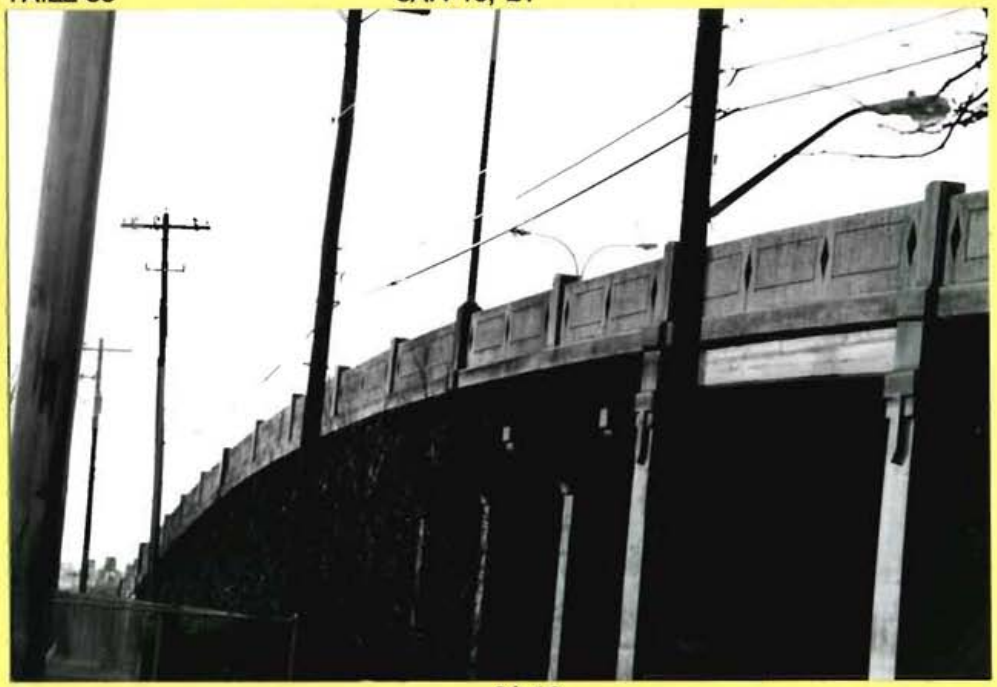
10. NAME(S) OF STRUCTURE
State Bridge Number 257E

11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION
7A:22-35 8A:4-19, 21



8A:16

12. SOURCES

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Carter, Dick. The History of Sussex County. Georgetown, Delaware: Community Newspaper Corp., 1976.
Hancock, Harold Bell. The History of Sussex County, Delaware. [s.l. : s.n.] 1976.
Delaware State Archives. Sussex County Road Papers 1875-1940.
Delaware DOT records: Annual Reports; contract files.
Plans on file at Delaware DOT: Contract # 690

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 257E

2. LOCATION

Route 20 over Conrail
Seaford, Sussex County, Delaware

3. DATE(S) OF CONSTRUCTION

1940

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

SG

6. CONDITION

Good: Spalling along longitudinal deck construction joint. Heavy graffiti throughout.

7. DESCRIPTION

State Highway Bridge Number 257E, "Tull Crossing", is a multiple span bridge measuring 566 feet long. It comprises a 40'-6" main span over the Conrail tracks, with nine concrete-encased steel I-beam girders supporting the deck. The approach spans consist of 20 continuous concrete slab spans (12 to the west, 8 to the east) of varying lengths. The roadway measures 30'-3" wide, has a 5'-0" sidewalk on each side and has an asphalt wearing surface. The structure exhibits a variety of surface treatments: the parapets feature Art Moderne influenced geometrical motifs and "bush hammered" panels above bands of horizontal scoring. A diamond pattern, evoking Delaware's motto, the "Diamond State", is emphasized by inset, red glazed tiles. On the substructure, the pier capitals of the main span are corbeled, and those of the approach spans are molded to suggest heavy brackets. The abutments are decorated with bands of horizontal scoring.

8. HISTORICAL DATA

Delaware Department of Transportation records indicate that Bridge Number 257E was constructed in 1940-41, under Highway Department Contract Number 690 (Federal Aid Project FAGS 2). Bids were received on June 12, 1940, and the contract was awarded to M. J. McDermott of Georgetown, Delaware, for the bid price of $74,214.50. The National Building Supply Company of Baltimore provided the reinforcing steel; structural steel came from the Belmont Iron Works, Philadelphia. Concrete incorporated sand from the Delaware Sand Company, Lewes; gravel from the Warner Company, Wilmington and John R. Hitchens, Seaford; and cement supplied by the Lehigh Cement Company of Allentown, Pennsylvania. Ralph Morgan was the electrical contractor responsible for the installation of ten lamp posts and luminaries. The contract stipulated a completion date in April, 1941, but the structure was not opened to traffic until September of that year; delays were attributed to weather, wartime difficulties in securing materials, and unevenness of the road surface of the completed bridge which delayed its final acceptance by the State. Bridge 257E was designed to eliminate a grade crossing at the Pennsylvania Railroad tracks. Grade crossings posed a dangerous junction between railroad and highway traffic, accounting for thousands of fatalities in the U.S.; in 1926, the Delaware State Highway Department began a systematic program of eliminating these hazardous crossings. The railroad companies acted in cooperation with the Highway Department to replace grade intersections with separated crossings. In some cases, grade crossings could be eliminated by relocating the road or the railroad tracks, or both, but this program generally involved the construction of over- or underpasses. Around 1940, the federal government began to offer assistance for this type of construction through the Federal Aid highway program of the Public Roads Administration, whereby construction costs were borne by the federal government, and right-of way costs by the State and the railroad company acquisition expenses.

9. SIGNIFICANCE

Bridge 257E is a multiple span, embellished example of a concrete encased steel girder bridge. As first contemplated, the design for Bridge 257E comprised approach embankments on fill, but this was abandoned as aesthetically unsuitable for an in-town location, where an open-type structure of concrete slab spans on concrete bents was preferred. A macadam bypass road was built to carry traffic during construction, and was retained to provide permanent access to properties adjacent to the new structure. Original plans, dated August 1939, show meticulous detail design for the bridge's ornamentation. Drawings document design approval by the Pennsylvania Railroad and the Delaware State Highway Department. State Bridge No. 257E is significant as a multiple span girder bridge and for its Art Moderne-influenced architectural detailing which is uncommon among the Sussex County bridges of the period. It is stylistically very similar to two New Castle County bridges, 684 and 686, also grade crossing structures. It derives additional significance from its association with the grade separation program, in which the federal government, states, and private railroad companies worked in cooperation to eliminate a recognized menace to public safety.