



STRUCTURE # 2001001 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE SNYDER AVENUE OVER PASSAIC RIVER FACILITY SNYDER AVENUE

INTERSECTED

TOWNSHIP BERKELEY HEIGHTS TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 90 ft WIDTH 30 ft

CONSTRUCTION DT 1927 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT BAUER(UNION) & HOPKINS(MORRIS) BUILDER HENRY E. TERRILL

SETTING / The bridge is located in a wooded area along the Passaic River, which at this location is the boundary between Union and Morris
CONTEXT Counties. A late-20th century water treatment plant is located along the river nearby. The bridge carries 2 lanes and two sidewalks over

the river.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 2-span stringer bridge rests on concrete abutments and pier. The round-nose pier and the wingwalls are rusticated. The stringers are completely encased in concrete, and the fascia is paneled. The concrete parapet is also paneled, and the posts at the center of the bridge

have plaques from the two counties. The bridge is not technologically or historically distinguished. It is one of over 25 remaining stringer

bridges in Union County built before World War II.

INFOR MATION

PHOTO: 156:13-15 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # 2001010 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE DIAMOND HILL ROAD OVER GREEN BROOK FACILITY DIAMOND HILL ROAD

INTERSECTED

TOWNSHIP BERKELEY HEIGHTS TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 43 ft WIDTH 25 ft

CONSTRUCTION DT 1925 ALTERATION DT 1949 SOURCE PLAQUE

DESIGNER/PATENT BAUER(UNION) & VAN EMBURGH(SOM) BUILDER SNOOK & SONS

SETTING / The bridge is located in a wooded area at the confluence of two streams. The skewed structure crosses one of the streams, carrying 2

CONTEXT lanes and 2 shoulders. The stream crossed is Green Brook, the dividing line between Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge has a concrete substructure. The encased stringer bridge was built in 1925, and it was widened in 1949 with a reinforced concrete slab superstructure placed on widened abutments and pier. The parapets match one another, but the bridge has not

retained the integrity of its original steel beam design. The structure is not technologically or historically distinguished, nor was it prior to

the widening.

INFOR MATION

PHOTO: 158:16-18 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # 2001013 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE PLAINFIELD AVENUE OVER GREEN BROOK FACILITY PLAINFIELD AVENUE

INTERSECTED

TOWNSHIP BERKELEY HEIGHTS TOWNSHIP

TYPE DECK ARCH, CULVERT DESIGN BARREL MATERIAL Reinforced

SPANS 1 **LENGTH** 31 ft **WIDTH** 46 ft

Concrete

CONSTRUCTION DT 1916 ALTERATION DT 1968 SOURCE COUNTY ENGINEER

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER UNKNOWN

SETTING / The bridge is located in a wooded area with a late-20th century residential complex nearby. The structure carries a three-lane road over

CONTEXT the stream that divides Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 1916 reinforced concrete arch bridge was widened on both faces in 1968. The reinforced concrete box culverts constructed at each face doubled the width of the skewed bridge from about 25 feet to about 50 feet. The stream flows over a concrete invert slab placed in

1968. The 1968 parapet is concrete with an aluminum railing. The bridge is not distinguished technologically or historically.

INFOR MATION

PHOTO: 163:4-5 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # COUNTY 2001017 UNION OWNER **MILEPOINT**

NAME & FEATURE SPRINGFIELD AVENUE OVER PASSAIC RIVER & FACILITY SPRINGFIELD AVENUE

INTERSECTED **GLADSTONE RR**

BERKELEY HEIGHTS TOWNSHIP **TOWNSHIP**

TYPE THRU GIRDER **DESIGN PARTIALLY ENCASED MATERIAL** Steel

SPANS 11 LENGTH 447 ft WIDTH 38 ft

CONSTRUCTION DT 1936 **ALTERATION DT** SOURCE PLAQUES

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER HICKEY&HOUGHTON, BETH.STL**

The bridge is located in a post-World War II light industrial and commercial area. It carries 2 lanes of traffic and 2 cantilevered sidewalks

over the Passaic River and the Gladstone Branch of the New Jersey Transit system.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The main span of the bridge is a steel thru-girder, with 10 concrete slab approach spans. The entire substructure is concrete. Some of the SUMMARY

piers have arched struts between the columns, but most at the approach spans have simple columns at the corners of each span. The thru-girder is encased below the deck, as are the floorbeams and longitudinal diaphragm at the centerline of the roadway. Paneled

concrete parapets line the sidewalks. The bridge is technologically and historically undistinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Chatham PHOTO: 158:7-9 (05/92)





STRUCTURE # OWNER NJDOT 2001150 CO UNION **MILEPOINT** 38.62

FACILITY US 1&9 NAME & FEATURE US 1&9 OVER RAHWAY RIVER & HAZELWOOD

INTERSECTED AVENUE

TOWNSHIP RAHWAY CITY

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

LENGTH 306 ft # **SPANS** 6 WIDTH 50 ft

CONSTRUCTION DT 1928 **ALTERATION DT** SOURCE INSCRIPTION **DESIGNER/PATENT** NJ STATE HWY DEPT BRIDGE DIV **BUILDER UNKNOWN**

The bridge is located in an area of mixed use and age, with high-rise housing, light industrial and small commercial structures. The bridge

carries a 4-lane divided highway with 2 sidewalks over the Rahway River and a 2-lane collector street.

1995 SURVEY RECOMMENDATION Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/22/91, Letter 6/30/95.

The 6-span stringer bridge sits on 5-column concrete bents and scored abutments. Three river piers have cutwater foundations for the SUMMARY bents. The encased stringers are deeper over the street and river spans than over the 2 spans at the south abutment. A concrete

balustrade encloses the bridge, as well as a staircase to the lower road. It was determined eligible because it "is representative of multi-

span concrete encased girder technology and a major link in a highway system at a major crossing".

INFOR MATION

> REVISED BY (DATE): PHOTO: 150:14-16, (04/92) QUAD: Perth Amboy





STRUCTURE # 2001153 CO UNION OWNER RAILROAD MILEPOINT 0.5

NAME & FEATURE LINDEN INDUSTRIAL TRACK OVER US 1&9 FACILITY LINDEN INDUSTRIAL TRACK

INTERSECTED

TOWNSHIP LINDEN CITY

TYPE THRU GIRDER DESIGN PARTIALLY ENCASED MATERIAL Steel

SPANS 1 **LENGTH** 114 ft **WIDTH** 12.4 ft

CONSTRUCTION DT 1940ca ALTERATION DT SOURCE STYLE

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in an area of late-20th century commercial and industrial construction. The bridge carries one track over seven lanes

CONTEXT of heavy traffic on a divided highway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge sits on paneled concrete abutments with scored posts with stepped tops that stylistically date ca. 1940.

The girders are encased except for the inside faces of the webs, exposing riveted knee braces connecting to floorbeams. Pin-connected lateral bracing is present below the rolled section stringers. A steel deck and curbing protects the girder from the ballasted track. The

bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 158:33-37 (05/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2001156 CO UNION OWNER RAILROAD MILEPOINT 0.0

NAME & FEATURE STATEN ISLAND RAPID TRANSIT OVER US 189 FACILITY SIRT LINE

INTERSECTED

TOWNSHIP LINDEN CITY

TYPE THRU GIRDER DESIGN MATERIAL Steel

SPANS 1 **LENGTH** 90 ft **WIDTH** 13.6 ft

CONSTRUCTION DT 1930 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT BUILDER McCLINTIC MARSHALL COMPNY

SETTING / The bridge is located next to a large tank storage complex and near a highway interchange. It carries one track of the Staten Island Rapid

CONTEXT Transit line over the four northbound lanes of US 1 & 9.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Staten Island RR Historic District, Eligible. Contributing.

CONSULT DOCUMENTS SHPO Comments 2/27/95, Letter 6/30/95

SUMMARY The steel thru-girder bridge sits on scored concrete abutments. Rolled floorbeams are supported by the built-up girders. Knee braces are present on the interior web stiffeners of the girders. The concrete deck does not extend to the web of the girders, but it has a curb that

holds the ballast in place. The bridge is a representative example of a common bridge type. It is not technologically or historically

distinguished.

INFOR MATION

PHOTO: 151:30-32 (04/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2002005 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE VALLEY ROAD OVER RAHWAY RIVER FACILITY VALLEY ROAD

INTERSECTED

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 4 **LENGTH** 149 ft **WIDTH** 29.3 ft

CONSTRUCTION DT 1926 ALTERATION DT 1977 SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** ARTHUR E. SMITH

SETTING / The bridge is located in Rahway River Park, a linear greenway following the winding river through the post-World War II residential area. A CONTEXT dam 100' upstream from the bridge has created a recreational lake. The bridge carries 2 lanes of traffic and two sidewalks over the river.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY

The four-span stringer bridge sits on concrete roundnose piers and abutments. The stringers are encased except for the additional sidewalk stringer on the downstream face. The sidewalk was added in 1977, outside of the paneled parapet and has chain-link fence for a railing. The other sidewalk is inside the parapet, which has a pipe railing set in the cap. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:15-18 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2002019 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE RARITAN ROAD OVER RESERVOIR FACILITY RARITAN ROAD

INTERSECTED

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 3 **LENGTH** 104 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER JOSEPH F. BURKE, CONTRCTR

SETTING / The bridge is located in a late-20th century residential area that surrounds a reservoir used for local water supply. It carries a busy 2-lane

CONTEXT road and 2 sidewalks over the reservoir.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 3-span encased stringer bridge bears on concrete abutments and piers. The fascia stringers are paneled, as are the concrete parapets. A pipe railing has been added to the top of the parapets. The bridge is a representative example of a common bridge type,

being one of over 25 extant pre-World War II stringer spans in Union County. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:27-28 (05/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2002027 CO UNION OWNER COUNTY MILEPOINT

NAME & FEATURE GOODMANS CROSSING OVER ROBINSONS FACILITY GOODMANS CROSSING

INTERSECTED BRANCH RAHWAY RIVER

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 LENGTH 48 ft WIDTH 28 ft

CONSTRUCTION DT 1910 ALTERATION DT SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in an area dominated by late-20th century multi-unit housing complexes. It carries a 2-lane road over a stream with

CONTEXT wooded banks.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The simple span stringer bridge rests on concrete abutments. The stringers are encased except for their bottom flanges. The concrete parapets are paneled on both faces. The fascia stringer is also paneled. The abutments have been repaired with gunite in a few places.

The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:25-26 (05/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2002150 CO UNION OWNER NJDOT MILEPOINT 44.03

NAME & FEATURE US 1&9 OVER ELIZABETH RIVER 7 LOCAL FACILITY US 1&9 (ELIZABETH RIVER VIADUCT)

INTERSECTED STREETS

TOWNSHIP ELIZABETH CITY

TYPE MULTI GIRDER DESIGN ENCASED MATERIAL Steel Rein.

SPANS 42 LENGTH 185200 ft WIDTH 46.6 ft

Concrete

oncrete

CONSTRUCTION DT 1929 ALTERATION DT SOURCE PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER

SETTING /
CONTEXT

The long viaduct carries 4 lanes of divided traffic over a meandering river and local streets in an late-19th century brick and frame row houses, cleared land, and commercial blocks in a mixed-use section of Elizabeth. The buildings have been altered, and the area does not appear to have historic district potential. The viaduct is later than the surrounding buildings, and, because of its size and age, is an

intrusive element in the neighborhood.

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

CONSULT STATUS

Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY

Built as part of the NJ 25 metropolitan traffic plan designed by the Department in response to the opening of the Holland Tunnel, the 42-span viaduct composed of reinforced concrete and steel multi-girder spans is historically and technologically significant. The reinforced concrete girders are not a commonly used bridge type in the state, and historically the span represents a major structure built by the Department to resolve the efficient flow of thru traffic through an urban area.

INFOR MATION

Bibliography:

1995 SURVEY RECOMMENDATION Eligible

NJDOT: Plan File; 2002150.

State Highway Commission. "Report of the State Highway Engineer to the New Jersey State Highway Commission in the matter of a comprehensive State Highway System for the State of New Jersey, in accordance with Senate Concurrent Resolution Number 3," 1926. TAMS. "Routes U.S. 1 & 9 Corridor Historic Engineering Survey Historical Narrative and Assessment of Significance," June, 1991. Johannesson, Sigvald. "Lincoln Highway from Jersey City to Elizabeth, New Jersey," American Society of Civil Engineers Proceedings, (November, 1933), pp. 1389-1412.

S. Johannesson. "Viaduct Design and Structure," Engineering News-Record, Vol. 100, No. 1, (Jan. 5, 1928), pp. 5-8.

Physical Description: The 1,852-foot long, 42-span viaduct is composed of reinforced concrete multi-girder, encased steel thru girder, and encased deck multi-girder spans. It was built with a vertical clearance of 22' over mean high water. The whole is finished with standard-design concrete balustrades enclosing the cantilevered safety walks on each side of the 48.5-foot roadway. The elevated viaduct that crosses three city street and the meandering Elizabeth River three times is accessed by a 325' approach ramp on the south end and a 470' ramp on the north end. Because the structure crosses six features, it is made up of skewed and 90 degree crossings with steel girders at the feature crossings linked by two- or three-span continuous reinforced concrete deck multi-girder and floor beam spans. The earth-filled ramps have concrete retaining walls and are finished with the same balustrade as the viaduct itself. The ramps are flanked by surface local roads.

The northerly end of the viaduct over Elizabeth Avenue is a 90-degree crossing composed of three span continuous haunched concrete encased deck multi girders. The five girders with a floor beam and stringer flooring system bear on shoes on concrete abutments or bents. The three crossing spans to the south are encased steel deck multi-girders at various skews. They are supported on reinforced concrete columns with bracketed struts. The southerly terminus of the viaduct that crosses the Elizabeth River and paralleling Pearl Street is composed of four encased skewed thru girders supported on concrete columns and a concrete abutment at the south approach ramp. The approach spans are primarily 90-degree two-span continuous reinforced concrete deck multi-girders with cantilevered end sections. They have a haunched profile and are supported on concrete columns with decorative corner brackets. The design with flexible twin columns, set 2' or 3' apart and joined at their bases, and the cantilevered sections at all expansion points to ensure that the joints do not bind and that the joints develop elastic movements only. When adjacent to a skewed crossing span, a third span is used on one face to compensate for the skew. This results in the skew being compensated for in the end spans only. A concrete deck which is integral with the floor beams and stringers is used throughout. The viaduct appears to survive unaltered.

Historical and Technological Significance: The Elizabeth River Viaduct was designed and built the New Jersey State Highway Department as part of the historically and technologically significant Route 1 Extension, the approximately 13-mile long arterial highway from the end of the 1927 Holland Tunnel to Bayway Circle on the south side of Elizabeth. Considered to be America's first "super highway," the carefully considered and designed roadway is distinguished by a variety of innovative engineering solutions to carrying a wide, limited access, high-speed highway through congested areas and some difficult terrain. The portion of the highway between the tunnel toll plaza and what was Airport Circle on the north side of Newark is carried under and over Jersey City (Hudson County) streets and water features on a variety of distinguished bridges and viaducts, including in the spectacular Pulaski Skyway cantilevered thru truss spans over the Passaic and Hackensack rivers. That approximately 7.25 mile-long section of the route, which is predominantly open cut through the Bergen Hill or elevated viaduct, is not of traditional design, and it is technologically and historically significant.

Southerly of Airport Circle the highway was planned as a surface road with some grade crossings. The 1,852'-long, 1929 Elizabeth River Viaduct, which crosses three city streets and an S-curve in the river, is the most significant original structure associated with the Route 1 Extension south of Airport Circle because of its size, design, and state of preservation. The structure employs the same distinctive engineering solutions, like the flexible twin column bents for the reinforced concrete approaches and the concrete railings and curbs, as the elevated portion of the important roadway. Beyond its common history with the other structures on the Route 1 Extension, the viaduct is technologically significant as an engineering solution to a specific transportation problem. It reflects thinking on economics of travel and construction and long-term maintenance and structure performance. While not innovative technology, the complex structure does reflect

NEW JERSEY HISTORIC BRIDGE DATA



then-current engineering concepts, and the approaches are a design not common in the state (criteria A, C).

The final design of the viaduct and the other structures on the route was based on the decision to use encased steel whenever possible. "Complete designs were made of a number of types of viaduct structures, both of concrete and of steel with a concrete or cement-mortar protection, with various span lengths. Comparative estimates of cost indicated that if the subsurface conditions were good and the span lengths uniform, a reinforced-concrete structure with a moderate span length (say up to 40ft.) would be economical. If, however, the subsurface conditions were such that greater span lengths were advisable, or if the surface conditions required a longer or skew spans of varying lengths, a steel structure of simple supported girders or trusses was indicated as the more economical" (Johannesson, "Viaduct Design ...," p. 6). Because much of Route 1 Extension passed through developed areas with existing street and railroad patterns, it was only at certain places, like the Elizabeth River Viaduct, that it possible to use reinforced concrete structures. Additionally, "no attempt was made to distort the alignment for the purpose of improving the angle of a crossing over highways, railroads, and rivers, because any saving in construction would have been overbalanced greatly by the consequent additional cost of vehicle operation" (Johannesson, "Lincoln Highway ...," p. 1392). Thus the design of the viaduct reflects the thinking and decision making that went into the design of one of the most important, early vehicular transportation routes in the country.

The Route 1 Extension, or Route 25 as it was later designated, was designed by the New Jersey State Highway Department, William G. Sloan, State Highway Engineer. Morris Goodkind was the State Bridge Engineer, and the design engineer for the project was Sivgald Johannesson, who later became the head of the planning section of the Department.

Boundary Description and Justification: Although the viaduct was built as one component of a historically significant road development campaign, only the north approximately 7.25 miles of the highway are evaluated as a potential historic district. Most of the southern portion of the highway as a whole has lost its integrity of original design and never was technologically significant. The viaduct, however, is technologically significant based on its design and integrity of original design. The significant boundary is limited to the substructure and superstructure of the elevated portion of the 1,852-foot long, 42-span structure and the earth-filled approach ramps at either end. The mixed-use late-19th and early-20th century neighborhood surrounding the structure in Elizabeth does not possess historic district potential.

PHOTO: 152:32-39A (05/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2002151 CO UNION OWNER NJDOT MILEPOINT 44.6

NAME & FEATURE CONRAIL ELIZABETH BRANCH (CNJ) OVER US 1&9 FACILITY CONRAIL ELIZABETH BRANCH (CNJ)

INTERSECTED

TOWNSHIP ELIZABETH CITY

TYPE THRU GIRDER DESIGN MATERIAL Steel

SPANS 5 **LENGTH** 126 ft **WIDTH** 19.7 ft

CONSTRUCTION DT 1915 ALTERATION DT 1934, 1987 SOURCE PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER J. F. CHAPMAN & SONS, INC.

SETTING /
CONTEXT

The bridge carries one active railroad track over a divided highway in an urban area in Elizabeth. The freight line was built by the CNJ RR in 1915. It was widened to accommodate development and improvement of the Route 1 Extension, the 1925-32 approach road for the Holland Tunnel that was developed by the state 1925-1932. The road is the prototype of the "superhighway" in this country. The highway is at grade in this section. It is elevated in Hudson Country.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Historic District Status Unresolved.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

CHMMAD

The bridge has been so compromised by subsequent changes that it no longer characterizes the ca. 1930 building campaign for the "superhighway." The removal of the majority of the superstructure and the modifications to the substructure in 1987 have altered the visual integrity of the original bridge. In addition, the recent changes to the US 1&9 roadway and the isolation of this element from the other structures of the historic route was an important aspect of it being undistinguished.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2002152 CO UNION OWNER NJDOT MILEPOINT 44.64

NAME & FEATURE MAGNOLIA AVENUE OVER US 1&9 FACILITY MAGNOLIA AVENUE

INTERSECTED

TOWNSHIP ELIZABETH CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 6 **LENGTH** 222 ft **WIDTH** 30.7 ft

CONSTRUCTION DT 1934 ALTERATION DT SOURCE PLANS

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER J. F. CHAPMAN & SONS, INC.

SETTING / The viaduct carries a local street over a divided highway in a mixed use area of Elizabeth. The viaduct was built after the 1925-1932

CONTEXT completion of the Route 1 Extension approach road to the Holland Tunnel, but it was apparently part of the conceptual plan for the route.

1995 SURVEY RECOMMENDATION Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 9/11/91, Letter 6/30/95.

SUMMARY

The overpass that consists of encased stringers and reinforced concrete T beam spans has no elements that would be considered unusual or innovative. It was, however, determined by the SHPO to "be a self-contained, ornamented, relatively intact viaduct which may be associated with public sponsorship and typical of highway viaducts of the period." The structure has a high level of integrity with the only alterations being removal of the asphalt paving block wearing surface and the added fence.

INFOR MATION

PHOTO: (1991) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2003006 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE KENILWORTH BOULEVARD OVER RAHWAY RIVER FACILITY KENILWORTH BOULEVARD

INTERSECTED

TOWNSHIP CRANFORD TOWNSHIP

TYPE BOX BEAM DESIGN MATERIAL Prestressed

SPANS 2 **LENGTH** 72 ft **WIDTH** 46 ft

Concrete

CONSTRUCTION DT 1925 ALTERATION DT 1992 SOURCE NJDOT

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a Union County Park, and carries a two-lane road across the Rahway River. The bridge was under construction at

CONTEXT the time it was inspected.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Finding 02/08/90

SUMMARY The superstructure of the two-span stringer bridge is being completely replaced with prestressed concrete box beams. The original

concrete substructure remains, with new concrete caps on top of the pier and abutments. The new structure will have stone parapets. The bridge has not retained the integrity of its original design. The original structure was a common bridge type that was evaluated as not

eligible, and the new bridge is not old enough to be evaluated as historically significant.

INFOR MATION

PHOTO: None (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003008 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE EASTMAN STREET OVER RAHWAY RIVER FACILITY EASTMAN STREET

INTERSECTED

TOWNSHIP CRANFORD TOWNSHIP

TYPE THRU GIRDER DESIGN PARTIALLY ENCASED MATERIAL Steel

SPANS 1 LENGTH 85 ft WIDTH 30 ft

CONSTRUCTION DT 1918 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER AMERICAN.BRIDGE, DVR.BLR.WRKS

SETTING /
CONTEXT

The bridge is located in a potential large historic district of early-20th century residences. The bridge carries a two-lane street and two sidewalks over the Rahway River, a winding waterway that is bounded by parklands for much of its length. The homes in the district are well-preserved examples of picturesque and academic Colonial Revival styles. Bridges 2003014, 2003072, both thru-girder spans, and 2003025, a reinforced concrete arch, are also located in the potential district.

1995 SURVEY RECOMMENDATION Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The one-span thru-girder bridge sits on concrete abutments. The rolled floorbeams are encased except for the bottom flanges. The cantilevered sidewalks are enclosed with fence-like metal railings. The bridge is a representative example of a common early-20th century bridge type, and is not technologically or historically distinguished by itself. It is significant because it was constructed during the period of significance of the potential district.

INFOR MATION

PHOTO: 159:6-7 (05/92 JPH (5/96)) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003014 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE SPRINGFIELD AVENUE OVER RAHWAY RIVER FACILITY SPRINGFIELD AVENUE

INTERSECTED

TOWNSHIP CRANFORD TOWNSHIP

TYPE THRU GIRDER DESIGN PARTIALLY ENCASED MATERIAL Steel

SPANS 1 LENGTH 86 ft WIDTH 30 ft

CONSTRUCTION DT 1916 ALTERATION DT 1979 SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER LOGAN CONSTRUCTION CO.

SETTING /
CONTEXT

The bridge is located on a main street in Cranford, and it carries two lanes and two sidewalks over the Rahway River. The neighborhood is dominated by well-preserved, architecturally significant early-20th century picturesque and academic Colonial Revival dwellings. The neighborhood has historic district potential. Two other thru-girder bridges contribute to the potential district, and one reinforced concrete

arch bridge.

1995 SURVEY RECOMMENDATION Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The one-span thru-girder bridge is supported by concrete abutments with wingwalls. The rolled floorbeams are encased except for the bottom flanges. The cantilevered sidewalks have reinforced concrete decks and the original iron railings. The bridge deck was replaced in 1979, with a slight crest curve and curbs on the inside face of the girders. Though a representative example of a common bridge type, the bridge is significant as a contributing element to the potential historic district.

INFOR MATION

PHOTO: 159:43-44 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003016 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE NORTH UNION AVENUE OVER RAHWAY RIVER FACILITY NORTH UNION AVENUE

INTERSECTED

TOWNSHIP CRANFORD TOWNSHIP

TYPE DECK ARCH DESIGN ELLIPTICAL MATERIAL Reinforced

SPANS 1 **LENGTH** 120 ft **WIDTH** 40 ft

Concrete

CONSTRUCTION DT 1916 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER WELDON CONTRACTING COMPNY

SETTING /
CONTEXT

The bridge is located in Sperry Park, a casually landscaped Union County park that is part of a greenway along the Rahway River. The bridge carries a two-lane, two sidewalk street over the river. The surrounding neighborhood is dominated by post-WW II residences and

commercial structures. The park does not have landscape architecture significance.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single reinforced concrete arch bridge has been rehabilitated with gunite on the fascias as well as the intrados. The repairs do not detract from the structural integrity. The original metal railings that cross the bridge are flanked at the approaches by concrete parapets.

The 1916 bridge is a representative example of a common bridge type from the early-20th century, and is one of 9 pre-World War II deck

arches in the county. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 157:34 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003025 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE EASTMAN STREET OVER RAHWAY RIVER FACILITY EASTMAN STREET

INTERSECTED

TOWNSHIP CRANFORD TOWNSHIP

TYPE DECK ARCH DESIGN ELLIPTICAL MATERIAL Reinforced

SPANS 1 **LENGTH** 105 ft **WIDTH** 29.8 ft

Concrete

CONSTRUCTION DT 1913 ALTERATION DT 1985ca SOURCE NJDOT/STYLE

DESIGNER/PATENT BUILDER

SETTING /
CONTEXT

The bridge carries two lanes and two sidewalks over the Rahway River. A greenway borders the winding river through the county, and this bridge is located next to McConnell Park. The neighborhood surrounding the park and bridge is early-20th century residences predominantly in the picturesque and academic Colonial Revival style. The area has historic district potential. The district includes three other bridges, all thru-girder spans from the period of significance of the district.

1995 SURVEY RECOMMENDATION Eligible HIS

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The reinforced concrete deck arch bridge has paneled spandrels and wingwalls. The arch creates a vertical crest curve over the bridge, which is skewed. A metal railing is bolted to the curb at the spandrel wall. Though the railing is not original, it is not intrusive into the character of the bridge or its surroundings. The bridge is significant because it was built during the period of significance of a potential historic district but is not technologically distinguished in its own right.

INFOR MATION

PHOTO: 159:4-5 (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2003045 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE LINCOLN AVENUE OVER RAHWAY RIVER FACILITY LINCOLN AVENUE

INTERSECTED

TOWNSHIP CRANFORD TOWNSHIP

TYPE BRICK ARCH DESIGN ELLIPTICAL MATERIAL Brick

SPANS 3 LENGTH 73 ft WIDTH 48 ft

CONSTRUCTION DT 1875 ALTERATION DT Demolished SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING /

The bridge is located in a wooded greenway along the Rahway River with some late-20th century residences nearby. The bridge carries a two-lane street with two sidewalks over the Rahway River downstream from National Register-listed Droescher's Mill. A dam

approximately 300' upstream creates a mill pond and adds to the park-like atmosphere of the mill and bridge.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Bridge was Individually Eligible. Potential Union County Park System Multiple Property nomination, May have contributed.

CONSULT DOCUMENTS SHPO Finding 07/18/90, Letter 03/12/01.

SUMMARY

The 1875 three-span brick arch bridge no longer carries the load of traffic. A Bailey truss was placed over the arches in 1985 due to the crumbling state of the southern arch. The arches are skewed using a ribbed pattern consisting of approximately 2' wide ribs stepped along the intrados. The arches have a stone fascia, and a metal railing that was placed in 1926. The ribbed brick intrados is a unique feature; the arches are deteriorating. Despite this, the bridge remains individually eligible for listing in the National Register of Historic Places under Criterion C.

under Chlerion C

Bibliography:

INFOR MATION

Cranford Board of Trade, Cranford, New Jersey, 1913.

County Engineer Office; Bridge File.

Physical Description: The 1875 three-span brick arch has a ribbed intrados. The bricks were laid in a stepped pattern to provide for the skew of the bridge as it crossed the waterway. Each rib is approximately 2' wide, and is stepped 6" from the preceding rib. The spandrel walls are ashlar with a concrete cap. The arches all have gauged ring stones. A concrete footing is present at the base of each arch, with a short buttress protruding from the upstream face of the structure. In 1926, the original metal railing was replaced with another metal railing, each type being finely detailed for this important bridge.

The arch action of the spans has been lost. The ashlar spandrel wall has fallen into the river, as have parts of the brick arches which has caused the bridge to fail.

In 1985, a Bailey truss was placed over the arch structure to carry the vehicular traffic across the river and the deteriorated arch. Additional precautions have been made for pedestrians to cross the bridge in a safe manner, with chain-link fencing and beam guide rails marking sidewalks.

Historical and Technological Significance: The ca. 1875 three-span brick arch bridge with the stepped intrados is a rare example of its design. No other example has been identified on a highway in the state. However, deterioration has cause the arch action of the span to fail. It is evaluated as not eligible due to its loss of structural integrity. The date of construction is based on the style and type, but it has not been documented.

PHOTO: 157:28-33 (05/92 JPH (5/96)) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003072 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE SPRINGFIELD AVENUE OVER RAHWAY RIVER FACILITY SPRINGFIELD AVENUE

INTERSECTED

TOWNSHIP CRANFORD TOWNSHIP

TYPE THRU GIRDER DESIGN PARTIALLY ENCASED MATERIAL Steel

SPANS 1 **LENGTH** 76 ft **WIDTH** 31.4 ft

CONSTRUCTION DT1914ALTERATION DTSOURCE PLAQUEDESIGNER/PATENTJACOB L.BAUER, COUNTY ENGINEERBUILDER JAS. E. GANO

SETTING / CONTEXT

The bridge is located in a potential historic district of predominantly early-20th century picturesque and academic Colonial Revival dwellings. The homes are well-maintained and well-preserved. The bridge carries a two-lane road with two sidewalks over the Rahway

River, a winding waterway that has a wooded greenway along both banks through most of Union County.

1995 SURVEY RECOMMENDATION Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The thru-girder bridge sits on concrete abutments. The floorbeams are built-up, and encased stringers support the concrete deck. The

original iron railings remain along the cantilevered sidewalks, with pipe railings bolted to the top flanges of the girders to protect pedestrians from traffic. The bridge is not technologically or historically distinguished, but is eligible because it contributes to a potential

historic district.

INFOR MATION

PHOTO: 159:1-3 (05/92) REVISED BY (DATE): QUAD: Roselle



NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003157 OWNER NJDOT CO UNION **MILEPOINT** 50.74

NAME & FEATURE US 22 OVER ECHO LAKE FACILITY US 22

INTERSECTED

SETTING /

MOUNTAINSIDE BOROUGH **TOWNSHIP**

TYPE STRINGER **DESIGN** ENCASED MATERIAL Steel

SPANS 1 LENGTH 26 ft WIDTH 81 ft

CONSTRUCTION DT 1929 **ALTERATION DT** SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

CONTEXT a creek that feeds Echo Lake.

The bridge is located at the edge of Echo Lake Park, a wooded reserve area with a small lake. Post-World War II single family dwellings and small commercial buildings are along US 22 near the bridge. The structure carries a four-lane divided highway and two sidewalks over

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The encased stringer span sits on concrete abutments. The low-rise bridge is very wide for its relatively short span. The concrete SUMMARY

balustrades flank the sidewalks on each side of the road. The highway is divided by a Jersey-type barrier. The bridge is a representative example of a common bridge type designed by the New Jersey State Highway Department Bridge Division. It is not technologically or

historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Roselle PHOTO: 159:8-9 (05/92)





STRUCTURE # 2003158 NJDOT CO UNION OWNER **MILEPOINT** 51.82

NAME & FEATURE US 22 WB OVER MOUNTAIN AVENUE FACILITY US 22 WESTBOUND

INTERSECTED

MOUNTAINSIDE BOROUGH **TOWNSHIP**

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

SPANS 1 LENGTH 55 ft WIDTH 32 ft

CONSTRUCTION DT 1941 **ALTERATION DT** SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

The bridge is located in an area of late-20th century commercial development. The structure carries two lanes of one-directional traffic,

CONTEXT one shoulder and two sidewalks over a one-lane access ramp from a divided highway to a local street.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The encased simple-span stringer bridge sits on concrete abutments. The substructure is detailed with a Moderne entablature and fluted SUMMARY

pilasters. The pilasters at the abutment corners rise into the stepped posts of the concrete balustrade. The bridge is a representative example of a common bridge type and style used by the State Highway Department for grade crossing elimination bridges. It is not

technologically or historically distinguished.

INFOR MATION

> PHOTO: 159:10-12 (05/92) REVISED BY (DATE): QUAD: Roselle



NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2003160 CO UNION OWNER NJDOT MILEPOINT 0.0

NAME & FEATURE

SPRINGFIELD AVENUE (CR 509 SPUR) OVER US 22 FACILITY SPRINGFIELD AVENUE (CR 509 SPUR)

INTERSECTED

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 **LENGTH** 127 ft **WIDTH** 42 ft

CONSTRUCTION DT 1941 ALTERATION DT SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER

SETTING / The bridge is located in a post-World War II commercial area. It carries a four-lane county route with a mountable median and two

CONTEXT sidewalks over a four-lane divided highway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge bears on a concrete substructure. The abutments have Moderne detailing and fluted pilasters. The pier is an eight-column bent with a concrete cap. The fluted pilasters at the fascia of the abutments and pier rise into stepped posts in the

pier is an eight-column bent with a concrete cap. The fluted pilasters at the fascia of the abutments and pier rise into stepped posts in the concrete balustrade. The bridge is not distinguished, but is a representative example of a common bridge type and style used by the State

Highway Department Bridge Division.

INFOR MATION

PHOTO: 158:22-23 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003161 CO UNION OWNER NJDOT MILEPOINT 53.12

NAME & FEATURE US 22 EB OVER RAHWAY RIVER FACILITY US 22 EASTBOUND

INTERSECTED

TOWNSHIP UNION TOWNSHIP

TYPE DECK ARCH DESIGN ELLIPTICAL MATERIAL Reinforced

SPANS 1 **LENGTH** 60 ft **WIDTH** 46.1 ft

Concrete

CONSTRUCTION DT 1917 ALTERATION DT 1926 SOURCE PLAQUES

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER AVERILL MATTHEWS (1917)

SETTING /
CONTEXT

The bridge is located in the Rahway River Parkway, a greenway following the river through Union County. The bridge carries three lanes of one-directional traffic, two shoulders and two sidewalks over the river. Opposing traffic is carried over the same water feature on 2003162. Post-World War II commercial structures line US 22 in the area. The bridges are located in the wooded linear greenway that parallels the

river through most of the county.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY

The plain, single-span reinforced concrete arch was built in 1917 and widened in-kind in 1926. The two faces of the bridge match, as do the concrete balustrades with paneled posts. Although the bridge is now a state-maintained structure, it was designed and built by the county. The bridge is not technologically or historically distinguished, but is a representative example of a common bridge type.

INFOR MATION

PHOTO: 158:24-25 (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2003162 CO UNION OWNER NJDOT MILEPOINT 53.12

NAME & FEATURE US 22 WB OVER RAHWAY RIVER FACILITY US 22 WESTBOUND

INTERSECTED

TOWNSHIP UNION TOWNSHIP

TYPE RIGID FRAME DESIGN MATERIAL Reinforced

SPANS 1 LENGTH 54 ft WIDTH 44 ft Concrete

CONSTRUCTION DT 1941 ALTERATION DT SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER

SETTING /
CONTEXT

The bridge is located in Rahway River Parkway, a forested greenway that follows the river through most of Union County. The bridge carries two lanes of one-directional traffic, two shoulders and two sidewalks over the river. Post-World War II structures line the highway in the vicinity of the bridge. The greenway does not appear to have historical or landscape architecture significance, and in this section the

bridge is not related to it as there is no linkage between the two.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY

The rigid frame bridge is nicely detailed. The concrete abutments have paneled posts at the corners. At the approaches are banded concrete bullnose parapets flanking a concrete balustrade. The balusters are octagonal and rise directly from the sidewalk to the scored concrete top rail. The posts are scored vertically. This is an early example of this common post WW II detailing and balustrade, but the rigid frame structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 158:26-29 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003166 UNION OWNER NJDOT **MILEPOINT** 54.83

NAME & FEATURE US 22 OVER CHESTNUT STREET (CR 626) FACILITY US 22

INTERSECTED

UNION TOWNSHIP TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

LENGTH 149 ft #SPANS 2 WIDTH 50 ft

CONSTRUCTION DT 1929 **ALTERATION DT** SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

The bridge is located in a residential area with well-maintained single family dwellings of mixed-20th century construction. It carries a four-

lane divided highway with 2 sidewalks over a busy 4-lane collector road.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The 2-span thru-girder bridge sits on a concrete substructure. The abutments and wingwalls are scored. The 7-column bent has octagonal SUMMARY columns with a brace near the tops. The encased girders support encased floorbeams that are braced with longitudinal diaphragms. The

cantilevered sidewalks are enclosed by a metal railing with concrete posts. Concrete obelisks mark the four ends of the girders, but are

missing original luminaries. The bridge is a representative example of a common NJDOT design.

INFOR MATION

> REVISED BY (DATE): QUAD: Roselle PHOTO: 156:29-31 (05/92)

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2003167 CO UNION OWNER NJDOT MILEPOINT 55.08

NAME & FEATURE US 22 EB OVER BURKE PARKWAY FACILITY US 22 EASTBOUND

INTERSECTED

SETTING /

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 LENGTH 68 ft WIDTH 30 ft

CONSTRUCTION DT 1941 ALTERATION DT SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER

context carries two lanes of one-dia structure (2003168) is loca

The bridge is located in a wooded area with some mid- to late-20th century commercial and residential structures nearby. The bridge carries two lanes of one-directional traffic of a divided highway and one sidewalk over a two-lane road. The bridge is skewed. A similar

structure (2003168) is located 10' to the north carrying westbound traffic.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete encased stringer bridge sits on concrete abutments. The abutments are detailed with shallow pilasters and entablature. The center pilaster is fluted, as are the fascia pilasters at the abutment corners. The concrete balustrade has stepped posts rising from the

fascia pilasters. The bridge is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:33-34 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2003168 CO UNION OWNER NJDOT MILEPOINT 55.26

NAME & FEATURE US 22 WB OVER BURKE PARKWAY FACILITY US 22 WESTBOUND

INTERSECTED

SETTING /

TOWNSHIP UNION TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 LENGTH 65 ft WIDTH 30 ft

CONSTRUCTION DT 1941 ALTERATION DT SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER

CONTEXT construction.

The bridge is located in a wooded area. Some residential and commercial structures in the vicinity are of mid- to late-20th century construction. The bridge carries two lanes and one sidewalk over a two-lane street. 10' to the south of the bridge another structure

(2003167) carries the eastbound traffic of the divided highway.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The skewed one-span encased stringer bridge sits on concrete abutments with vertically scored wingwalls. The abutments are detailed with Moderne pilasters, some of which are fluted, and banded decoration. The concrete balustrade has stepped posts at the abutments. The bridge is a common type and style designed by the New Jersey State Highway Department Bridge Division, and it is not

technologically or historically distinguished.

INFOR MATION

PHOTO: 156:35-36 (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2004001 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE SOUTH FRONT STREET OVER ELIZABETH RIVER FACILITY SOUTH FRONT STREET

INTERSECTED

TOWNSHIP ELIZABETH CITY

TYPE SINGLE LEAF BASCULE DESIGN STRAUSS HEEL TRUNNION MATERIAL Steel

SPANS 1 **LENGTH** 158 ft **WIDTH** 17.8 ft

CONSTRUCTION DT 1920 ALTERATION DT 1976 SOURCE PLANS/COUNTY ENGNR

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY BUILDER AMERICAN BRIDGE COMPANY

SETTING /

The bridge is located in an industrial area that is in the process of being cleared and redeveloped for recreational use. The one-lane bridge crosses a small waterway near its outlet into the Arthur Kill. The waterway is now used only for pleasure craft, as only a few hundred feet

of the river are navigable. The bridge provides access to a concrete plant located along the Arthur Kill.

1995 SURVEY RECOMMENDATION Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The skewed Strauss heel trunnion bridge has a Warren thru-truss moveable span. The bridge bears on concrete abutments. The concrete counterweight has been repaired several times. The original gearing is housed above the roadway, along with electric motors from 1940. The only operational moveable-span bridge in Union County, the bridge is a well-preserved example of an uncommon type and is

historically and technologically noteworthy.

INFOR MATION

Bibliography:

Hool and Kinne, Movable and Long-Span Steel Bridges, 1943.

Union County Engineer. Bridge File: EL1. 1902 Bauer Atlas of Union County.

Waddell, J.A.L. Bridge Engineering, 1925.

Physical Description: The 158'-long single-leaf Strauss heel trunnion bascule bridge has a rivet-connected Warren with verticals moveable span fabricated of traditionally composed members. Because the bridge is skewed, the trusses are different lengths; 131-8" on the west truss, 116'-5" on the east truss. The roadway is 17'-8" wide. The substructure is concrete. The flooring system, which includes an open grate deck, was strengthened in 1976, and the concrete counterweight, carried overhead by a framed truss that pivots on two trunnions when the bridge is in operation, was repaired in 1976. The operating machinery, made up of open gear sets and line shafts, is located in a corrugated metal-clad machinery closure adjacent to the operating strut fitted with a rack and the operating pinion. The controls are located in the small, gable-roofed brick tender's house adjacent to the span. A standard-design metal railing encloses the cantilevered sidewalk. The bridge is well preserved.

Historical and Technological Significance: The 1920 Strauss heel trunnion single-leaf bascule bridge, designed by the Strauss Bascule Bridge Company of Chicago and fabricated by American Bridge Company's Pencoyd plant, is a well-preserved example of a proprietary bridge type that is not common in New Jersey (criterion C). The heel trunnion is a variation on the patented articulated parallel-moving counterweight design Joseph B. Strauss developed in 1905. Unlike the articulated counterweight bridges, in the heel trunnion design the counterweight trunnion is a fixed pivotal point. It is located at the top of a stationary tower supported by the main column and an auxiliary column. The counterweight is carried by one end of a trussed frame. The other end of this trussed frame is connected by a pivot to a link which in turn attaches to the inclined end post of the thru truss superstructure by a pin. This arrangement provides a parallelogram of linkages with the side formed by the triangular counterweight tower with the initially mentioned fixed pivotal point. Near the center of the tower is an "operating strut" with a rack that is pulled by the operating pinion causing the parallelogram to close up thereby opening the leaf. This is one of only two documented road-carrying heel trunnion bridges in New Jersey; NJ 7 over the Passaic River in Bergen County (0208150) is the other. Several more survive on the state's rail lines.

Boundary Description and Justification: The bridge is evaluated as individually significant, and the boundary is limited to the superstructure and substructure of the bridge itself and the tender's house.

PHOTO: 152:14-20A (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2004002 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE SOUTH FIRST STREET OVER ELIZABETH RIVER FACILITY SOUTH FIRST STREET

INTERSECTED

TOWNSHIP ELIZABETH CITY

TYPE SINGLE LEAF BASCULE DESIGN STRAUSS OVERHEAD MATERIAL Steel

SPANS 1 **LENGTH** 80 ft **WIDTH** 24.8 ft

CONSTRUCTION DT 1908 ALTERATION DT 1984 SOURCE PLANS/COUNTY ENGNR

DESIGNER/PATENT STRAUSS BASCULE BRIDGE COMPANY BUILDER

SETTING / The bridge is located in an industrial area that is undergoing clearing and redevelopment for recreational use. The bridge carries a 2-lane road over a tidal river. This section of the river is used for recreational marine traffic only.

1995 SURVEY RECOMMENDATION Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The 1908 Strauss overhead articulated counterweight bridge is supported on a concrete substructure. The moveable span is riveted Warren pony trusses, and the concrete counterweight is enclosed by a lattice screen. Although the bridge was fixed in 1984 after the tenders shanty burned, the bridge remains as one of the earliest and most complete patented Strauss overhead counterweight bridges in the state. The bridge is a historically and technologically distinguished structure.

INFOR MATION

Bibliography:

Union County Engineer Office, Bridge File: 2004002.

Waddell, J.A.L. Bridge Engineering. 1925. 1902 Bauer Map of Union County.

Physical Description: The 80'-long single leaf bascule bridge is a Strauss articulated overhead counterweight type supported on a concrete substructure. The lift span is a rivet-connected Warren pony truss span with a 24'-8" roadway. It is traditionally composed of built-up members as are the trunnion columns, tower, and counterweight linkages that permit the counterweight to pivot and move parallel to itself during operation of the bridge. A distinctive detail of the 1907 bridge is the lattice, or lacing as it is identified on the Strauss Bascule and Concrete Bridge Company plans, enclosure of the counterweight that is located 30' above the roadway. The superstructure is remarkably complete. The steel grid deck was installed in 1976 as part of an upgrading of the floor system. The most significant alteration to the bridge is the loss of the operator's shanty and controls as the result of a fire in 1984. The bridge has consequently been fixed in the closed position, but the gear sets and shafts are still in place. Plans for the original mechanical systems are preserved in the County Engineer's office. The original pipe railings and safety gates are still place.

Historical and Technological Significance: The 1908 Strauss overhead articulated counterweight bascule bridge designed by the Strauss Bascule and Concrete Bridge Company of Chicago, Illinois, is one of the earliest and most complete examples of the technologically important bridge type in the state (criterion C). In addition to its early date of construction, this example of what would go on in the early-20th century to become the most popular moveable bridge type in the country is distinguished by the fact that it has an enclosure around the raw concrete counterweight. The metal lattice enclosure or screen was an aesthetic consideration, and the detail has been identified on only one other bridge in New Jersey; the 1906 Federal Street bridge in Camden (043B008). J. B. Strauss (1870-1938) invented the pivoting counterweight linkage used at the South First Street bridge, and he applied for a patent in 1905, the same year the first bridge of this type was built in Cleveland. That year he also founded the Strauss Bascule and Concrete Bridge Company in Chicago to market his bridge designs. Strauss went on to become the most widely respected moveable-span bridge engineer of the pre-World War II era.

Strauss reasoned that if, unlike the traditional trunnion bridge, which operates like a seesaw and moves in a vertical plane on a horizontal steel pivot, the entire weight of the counterweight could be concentrated at the end (tail) of the moveable leaf, it would then be possible to use a lighter counterweight. Such an arrangement also meant a shorter tail end to the leaf, thus saving on materials that the "counterweight could be made in such shape that no pit is required to receive it when the leaf is in the upright position" (Waddell, p. 704). The patented linkage, or arms, ensures that the counterweight will always move in a series of parallel positions and thus maintain the position of the weight at the tail end of the leaf.

When the Strauss overhead counterweight span at South First Street was erected, it was the first bridge at the crossing. A 1902 county map shows the area next to the industrialized Arthur Kill-Newark Bay waterfront as platted but not developed. The bridge was built just upstream from the South Front Street span. In 1984 a fire destroyed the original operator's house, electric motor that operated the span, and the controls. It was not replaced, and the bridge was fixed in the closed position at that time. A machinery plan for the bridge survives, so how the operating mechanism was arranged is well documented. Despite the loss of the operator's house, the superstructure survives in a remarkably complete state of preservation making this bridge one of the most important of its type in New Jersey. It is one of at least five Strauss overhead counterweight trunnion bridges built between 1907 and 1938 remaining in the state. Others include 043B008, 01M0001, 03H8001, and 1707150.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The significant boundary is thus limited to the substructure and superstructure and the operator's shanty.

PHOTO: 152:6A-13A (04/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2004150 OWNER NJDOT CO UNION **MILEPOINT**

FACILITY VAUXHALL ROAD NAME & FEATURE **VAUXHALL ROAD OVER US 22**

INTERSECTED

UNION TOWNSHIP TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED MATERIAL Steel

LENGTH 120 ft WIDTH 40 ft #SPANS 2

CONSTRUCTION DT 1940 **ALTERATION DT** SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / The bridge is located in a commercial area of mid- to late-20th century construction. The bridge carries a two-lane road with two sidewalks

CONTEXT over a four-lane divided highway with Jersey-type barriers.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The two-span encased stringer bridge is supported by a concrete substructure. The abutments are detailed with Moderne pilasters and SUMMARY

entablature. The pier is an eight-column bent. Closed course staircases service both abutments on the south face of the bridge. A concrete balustrade with an added high pedestrian fence crosses the bridge. The bridge is representative of the well-detailed State

Highway Department designs, but it is not technologically or historically distinguished.

INFOR MATION

> PHOTO: 153:21-22 (04/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # OWNER NJDOT 2004151 CO UNION **MILEPOINT** 56.7

NAME & FEATURE US 22 OVER ELIZABETH RIVER FACILITY US 22

INTERSECTED

HILLSIDE TOWNSHIP **TOWNSHIP**

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

LENGTH 71 ft # SPANS 1 WIDTH 60 ft

CONSTRUCTION DT 1940 **ALTERATION DT** SOURCE INSCRIPTION **DESIGNER/PATENT** NJ STATE HWY DEPT BRIDGE DIV **BUILDER UNKNOWN**

SETTING / CONTEXT The bridge is located on a divided highway lined with mid- to late-20th century commercial structures. The bridge carries the four-lane divided highway and two sidewalks over the Elizabeth River. The river is located in Elizabeth River Park, a greenway that follows the

waterway most of the way through the county.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, Might be Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span stringer bridge bears on concrete abutments. The stringers are deep, web-stiffened steel beams that are encased in concrete. The concrete balustrades are typical of pre-World War II State Highway Department Bridge Division designs. A New Jersey-type SUMMARY

barrier divides the highway. The bridge is a representative example of a common bridge type and style, and it is not technologically or

historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Elizabeth PHOTO: 153:23-24 (04/92)





STRUCTURE # 2004152 CO UNION OWNER NJDOT MILEPOINT 0.0

NAME & FEATURE BLOY STREET OVER US 22 FACILITY BLOY STREET

INTERSECTED

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 LENGTH 77 ft WIDTH 30 ft

CONSTRUCTION DT 1940 ALTERATION DT SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER

SETTING / The bridge is located in an area of altered turn-of-the-century residences mixed with late-20th century commercial buildings. The bridge

CONTEXT carries a two-lane street with two sidewalks over a four-lane divided highway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span stringer bridge is supported by concrete abutments with Moderne entablature and pilasters. The encasement at the

bottom flanges has been removed. Closed-course staircases are present at both abutments on the west face of the bridge. A concrete balustrade encloses the stairs and crosses the bridge with an added pedestrian fence. The bridge is a representative example of a

common pre-WWII State Highway Department design. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:16-18 (04/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2004153 CO UNION OWNER NJDOT MILEPOINT 57.12

NAME & FEATURE US 22 OVER LIBERTY AVENUE & CONRAIL FACILITY US 22

INTERSECTED

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 15 **LENGTH** 535 ft **WIDTH** 78 ft

CONSTRUCTION DT 1931 ALTERATION DT 1960 SOURCE NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV BUILDER

SETTING / The bridge is located in an area of post-World War II commercial development. It carries a four-lane divided highway with shoulders and **CONTEXT** two sidewalks over an urban area that includes a railroad, a two-lane street, an access road to a shopping center, and a parking lot.

1995 SURVEY RECOMMENDATION Not Eligible HISTOR

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 15-span viaduct is supported on a concrete substructure of column bents and hammerhead piers. In 1960 the structure was widened its full length with stringers, and it has a new parapet and railing on the north side. The south side is the original with 12 spans of 3-span

continuous concrete girders and 3 spans of simple encased steel girders. The bridge is distinguished only by its length. Otherwise it is an

altered, common example of a NJDOT design and is not historically noteworthy.

INFOR MATION

PHOTO: 153:12-15 (04/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2004155 OWNER NJDOT CO UNION **MILEPOINT**

NAME & FEATURE HILLSIDE AVENUE OVER US 22 FACILITY HILLSIDE AVENUE

INTERSECTED

HILLSIDE TOWNSHIP **TOWNSHIP**

TYPE STRINGER **DESIGN** ENCASED MATERIAL Steel

SPANS 1 LENGTH 77 ft WIDTH 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

The bridge is located along US 22, a divided highway that is lined with post-World War II commercial buildings. Single family dwellings of

the same era are also nearby. The bridge carries a two-lane road with two sidewalks over the four-lane highway with shoulders.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span encased stringer bridge bears on concrete abutments that are finished with Moderne detailing. The well-detailed bridge with SUMMARY

a concrete balustrade is a representative of a common design by the State Highway Department Bridge Division for grade crossing

elimination prior to World War II. It is not technologically or historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Elizabeth PHOTO: 153:8-9 (04/92)

NJDOT updated data 03-01-2001.





STRUCTURE # 2004157 CO UNION OWNER NJDOT MILEPOINT 0.0

NAME & FEATURE NORTH BROAD STREET (CR 623) OVER US 22 & FACILITY NORTH BROAD STREET (CR 623)

INTERSECTED CONRAIL

TOWNSHIP HILLSIDE TOWNSHIP

TYPE THRU GIRDER DESIGN MATERIAL Steel

SPANS 5 **LENGTH** 220 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT LEHIGH VALLEY RR ENGNRS OFFICE BUILDER BETHLEHEM STEEL COMPANY

SETTING /
CONTEXT

The bridge is located in an area of post-World War II commercial structures. It carries a local two-lane road with two sidewalks over a four-lane divided highway and four sets of railroad tracks. The tracks are part of the Lehigh Valley Railroad's main line, which was developed in 1888. It branched off the existing route in South Plainfield and headed to Jersey City via Newark. The original double-track was expanded to four tracks in 1901. Conrail took control of the line in 1976.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The bridge is composed of three types, all on a concrete substructure of 3-column hammerhead piers and abutments with wingwalls. The span over the tracks is a steel thru girder with floorbeams and stringers. The span over the highway is 3 deck girder span with floorbeams. There are also three encased stringer spans. A metal railing and new high pedestrian fence cross the span. None of the bridge types is distinguished technologically nor is the bridge historically noteworthy.

INFOR MATION

PHOTO: 153:6-7 (04/92) REVISED BY (DATE): QUAD: Elizabeth



NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # OWNER STATE AGENCY 2004158 CO UNION **MILEPOINT** NAME & FEATURE ABANDONED PUBLIC SERVICE TROLLEY OVER **FACILITY** ABANDONED PUBLIC SERVICE TROLLEY

INTERSECTED US 22

HILLSIDE TOWNSHIP **TOWNSHIP**

TYPE STRINGER **DESIGN** ENCASED MATERIAL Steel

LENGTH 80 ft **WIDTH** 22.7 ft #SPANS 2

CONSTRUCTION DT 1933 **ALTERATION DT** SOURCE INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

The bridge is located in an area of late-20th century commercial development. The bridge crosses a four-lane divided highway. The span CONTEXT

is fenced off at deck level so that nothing crosses it. It used to be a Public Service trolley right-of-way but that service has been

discontinued.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The two-span encased stringer bridge bears on concrete abutments and a pier with arched struts between the columns. The wingwalls SUMMARY

flanking the abutments are scored, but the abutments project approximately 2 feet from the face of the wingwalls. The concrete balustrade is a standard state-designed detail on this representative example of a common pre-World War II bridge type. The bridge is

technologically and historically undistinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Elizabeth PHOTO: 153:10-11 (04/92)





STRUCTURE # 2006151 CO UNION OWNER NJDOT MILEPOINT 28.42

NAME & FEATURE NJ 27 OVER ROBINSONS BRANCH RAHWAY RIVER FACILITY NJ 27

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE BRICK ARCH DESIGN PARABOLIC MATERIAL Brick

SPANS 3 LENGTH 72 ft WIDTH 80 ft

CONSTRUCTION DT1890caALTERATION DTUnknownSOURCE STYLEDESIGNER/PATENTUNKNOWNBUILDER UNKNOWN

SETTING / The bridge is located in a greenway that follows the Robinson's Branch of the Rahway River through a neighborhood of post-World War II **CONTEXT** residences. The bridge carries four lanes of traffic and two sidewalks over the stream.

1995 SURVEY RECOMMENDATION Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

CONSULT STATUS

The three-span brick arch bridge sits on ashlar footings. Concrete repairs were used to buttress the piers and form cutwater piers at the base of the arches. The spandrel walls are rusticated ashlar as are the ringstones. The bridge appears to have been widened in kind by 15'-20' on each side, and the stone parapets moved out with the face of the bridge. The bridge is a significant example of a brick arch bridge, one of four in Union County.

INFOR MATION

Bibliography:

Robinson, É. Atlas of Union County, New Jersey. 1882. Sanborn Insurance Atlas, Rahway, New Jersey, 1923.

Physical Description: The handsome three-span brick arch bridge rests on ashlar footings with concrete buttressing at the upstream face of the piers. The spandrel walls are ashlar, as are the ringstones. The bridge is 80' in width from the outside faces of the ashlar parapets. Approach guide rails do not cross the bridge or connect to the stone of the parapets. Iron signposts naming Robinson's Branch are present at the approaches to the bridge.

Historical and Technological Significance: The well-preserved ca. 1875 three-span brick arch bridge is a significant example of its type in the region based on its size and state of preservation (criterion C). The brick arch is a bridge type that was used in north New Jersey in the 1870s, 1880s, and early 1890s. No specific information about the date of construction or the builder could be located. The date is based on stylistic comparison with the 1875 Lincoln Avenue bridge (2003006).

On initial field inspection it appeared that the bridge had been widened in-kind at some point, but after researching old atlases and insurance maps, the bridge appears to have been 80' wide since at least 1882. The construction of such a wide bridge signifies the importance of the structure in the transportation system of the city, county, and state. The bridge is well-preserved, and is still very functional in its ability to handle traffic loads imposed on it in the late-20th century. It is the widest of three identified brick arch bridges in Union County.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. The significant boundary is limited to the span itself.

PHOTO: 151:9-12 (04/92 JPH (5/96)) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2006152 CO UNION OWNER NJDOT MILEPOINT 29.05

NAME & FEATURE NJ 27 OVER RAHWAY RIVER FACILITY NJ 27

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE DECK ARCH DESIGN ELLIPTICAL MATERIAL Reinforced

SPANS 2 **LENGTH** 102 ft **WIDTH** 62 ft

Concrete

CONSTRUCTION DT 1914 ALTERATION DT SOURCE PLANS

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in an open park surrounded by post-World War II residential and small-scale commercial structures. The bridge context carries a four-lane state route and two sidewalks over the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete deck arch bridge has two spans. The skewed bridge has been coated with gunite in many places. The original iron railings enclose the bridge along both sidewalks. Although it is the only 2-span example of its type in the county, which has eight other

reinforced concrete deck arch bridges, the bridge is not early nor is it technologically or historically distinguished. The more distinguished

local example of the type is 2013022

INFOR MATION

PHOTO: 151:17-18 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2007020 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE LIBERTY AVENUE OVER ELIZABETH RIVER FACILITY LIBERTY AVENUE

INTERSECTED

TOWNSHIP HILLSIDE TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 **LENGTH** 60 ft **WIDTH** 43.9 ft

CONSTRUCTION DT 1921 ALTERATION DT SOURCE
DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a county park surrounded by residences from the early- through the late-20th century. A dam approximately 30 **CONTEXT** feet upstream from the bridge creates a small recreational lake. The bridge carries a two-lane road with two sidewalks over the river.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge sits on a concrete substructure. The bridge is nicely detailed, with paneled posts at the abutments and pier, and haunched fascia stringer encasement. The concrete balustrade has posts with oval panels. The bridge is a representative example of

a common pre-World War II bridge type in New Jersey. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:25-27 (04/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2007032 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE CONANT STREET OVER STREAM 8-5 FACILITY CONANT STREET

INTERSECTED

TOWNSHIP HILLSIDE TOWNSHIP

TYPE CULVERT DESIGN MATERIAL Reinforced

SPANS 1 **LENGTH** 130 ft **WIDTH** 30 ft

Concrete

CONSTRUCTION DT 1930 ALTERATION DT SOURCE NJDOT

DESIGNER/PATENT BUILDER

SETTING / The opening of the culvert is located in a greenway, near an elevated railroad track. The culvert winds under a local two-lane street and the track, which is elevated above the roadway on a bridge with a rusticated ashlar substructure.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The culvert is only 15' wide at the opening, but increases in span below the street because it is skewed. A pipe railing is mounted in the

concrete over the outlet. Concrete wingwalls and channel protection bound the stream at the outlet. The structure is not technologically or

historically distinguished.

INFOR MATION

PHOTO: 153:28 (04/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2007151 CO UNION OWNER UNKNOWN MILEPOINT 34.0

NAME & FEATURE NJ 27 (CHERRY ST) OVER CONRAIL ELIZABETH FACILITY NJ 27 (CHERRY STREET)

INTERSECTED BRANCH

TOWNSHIP ELIZABETH CITY

TYPE THRU TRUSS DESIGN WARREN MATERIAL Steel

SPANS 1 LENGTH 93 ft WIDTH 36 ft

CONSTRUCTION DT 1921 ALTERATION DT SOURCE INSCRIPTION/PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE BUILDER AMERICAN BRIDGE COMPANY

SETTING /
CONTEXT

The bridge is located in a neighborhood of late-19th and early-20th century residences, with a school nearby. The span carries a two-lane road with two sidewalks over one abandoned track. The Elizabeth Branch of the Central RR of New Jersey was developed in the 1830's and originally operated with horse-drawn streetcars. By 1840 it was using steam engines and soon was expanded to Somerville from Elizabeth. It was four-tracked by 1882. This branch of the line went out of use in 1967.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SUMMARY The 6-panel Warren thru truss span has concrete abutments. The riveted members are built-up from angles, plates and lacing. Struts

between the top chords have lattice webs. The bottom chord is encased, as are the stringers and floorbeams. The cantilevered sidewalks retain the original metal railings. One of 5 similar spans built by the CNJ in the vicinity, this one is not as old or interestingly detailed as

several of the others. It is not technologically notable. Tuttle Parkway is noteworthy.

INFOR MATION

PHOTO: 154:22-25 (05/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # OWNER RAILROAD 2008158 CO UNION MILEPOINT 16.86

NAME & FEATURE LEHIGH VALLEY MAIN LINE RR OVER NJ 28 FACILITY LEHIGH VALLEY MAIN LINE RAILROAD

INTERSECTED

ROSELLE PARK BOROUGH TOWNSHIP

TYPE MULTI GIRDER DESIGN **MATERIAL** Steel

SPANS 3 LENGTH 235 ft WIDTH 24 ft

CONSTRUCTION DT 1927 **ALTERATION DT** 1959 **SOURCE PLANS**

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER**

SETTING / CONTEXT The bridge is located in a 20th century residential and commercial area. The ca. 1914 brick factory that manufactured Marconi Wireless equipment through the war is adjacent to the bridge. It carries 2 tracks over a 4-lane state route divided by a mountable median. The railroad was developed by the Lehigh Valley Railroad in the late-1880s. The grade crossing was eliminated prior to 1908. The line is used

by NJT and Conrail.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing. **CONSULT STATUS**

SHPO Letter 6/30/95. DOE 11/30/95 CONSULT DOCUMENTS

SUMMARY

The three-span deck girder bridge is supported on ashlar piers, one concrete abutment and one ashlar abutment. The deeper end span was placed in 1959. It sits on the concrete abutment and an ashlar pier with a concrete cap. The pier was reduced in height to accommodate the deeper 1959 girders. The existing girders were modified to extend down to the new bearings. Each track is supported by a pair of girders that have lateral K-bracing. The bridge is not historically distinguished.

INFOR MATION

> PHOTO: 157:20-24 (05/92) REVISED BY (DATE): QUAD: Roselle

NJDOT updated data 03-01-2001.



NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2009010 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE ELIZABETH AVENUE OVER STORM SEWER FACILITY ELIZABETH AVENUE

INTERSECTED (ELIZABETH RIVER TRIBUTARY)

TOWNSHIP LINDEN CITY

TYPE SLAB DESIGN MATERIAL Reinforced

SPANS 1 **LENGTH** 28 ft **WIDTH** 40 ft

Concrete

CONSTRUCTION DT 1931 ALTERATION DT SOURCE NJDOT

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a post-World War II residential neighborhood. It carries an Y-intersection of two two-lane roads over a storm

CONTEXT sewer.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a concrete box culvert that is entirely underground. It has no technological or historical distinction.

INFOR MATION

PHOTO: 158:39 (05/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2009014 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE ELIZABETH AVENUE OVER WEST BROOK FACILITY ELIZABETH AVENUE

INTERSECTED

TOWNSHIP LINDEN CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 LENGTH 30 ft WIDTH 36 ft

CONSTRUCTION DT 1925 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER WILLIAMS AND CACCHIONE

SETTING / The bridge is located in an early- to mid-20th century industrial area. It carries a two-lane road with two sidewalks over a channel lined with

CONTEXT concrete walls.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span stringer bridge sits on concrete abutments. The stringers are encased and support a concrete deck. The bridge has

paneled concrete parapets. The bridge is not technologically or historically distinguished, being one of over 25 pre-World War II extant

stringer bridges in Union County.

INFOR MATION

PHOTO: 151:26-27 (04/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2009015 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE LINDEN AVENUE OVER PEACH ORCHARD BROOK FACILITY LINDEN AVENUE

INTERSECTED

TOWNSHIP LINDEN CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 **LENGTH** 26 ft **WIDTH** 22 ft

CONSTRUCTION DT 1925 ALTERATION DT SOURCE COUNTY ENGINEER OFFC

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a post-World War II industrial area. It carries a two-lane road with shoulders across a stream.

CONTEXT

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed stringer bridge sits on concrete abutments with wingwalls. The stringers are encased, and support a concrete deck. Pipe

railings are set in the curbs of the bridge at both fascias. Three utility mains span the stream at the west face of the bridge. The bridge is

not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:28-29 (04/92) REVISED BY (DATE): QUAD: Elizabeth



FACILITY UNION STREET



STRUCTURE # 2009024 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE UNION STREET OVER PEACH ORCHARD BROOK

INTERSECTED

TOWNSHIP LINDEN CITY

TYPE STRINGER/CULVERT DESIGN MATERIAL Steel,

SPANS 1 **LENGTH** 28 ft **WIDTH** 36 ft

Concrete

CONSTRUCTION DT 1922 ALTERATION DT SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING / The bridge carries a two-lane residential street over a stream that is carried underground several blocks under Union Street. The inlet of

CONTEXT the stream into the underground culvert is 30' from the west edge of the roadway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the bridge is a skewed underground structure composed of stringers on concrete abutments and a box

culvert system. The bridge is neither historically nor technologically distinguished.

INFOR MATION

PHOTO: 158:40 (05/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2009025 CO UNION OWNER CITY OR MUNC. MILEPOINT 0.0

NAME & FEATURE CLINTON STREET OVER STREAM 9-1-4 FACILITY CLINTON STREET

INTERSECTED

TOWNSHIP LINDEN CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 LENGTH 26 ft WIDTH 36 ft

CONSTRUCTION DT 1923 ALTERATION DT SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a 1950s residential area. It carries a two-lane street with two sidewalks over an underground stream in a channel

CONTEXT used for a storm water collection.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the one-span encased stringer bridge rests on concrete abutments. The roadway is slightly raised at the bridge. In 1939, the City of Linden relocated the stream to a pipe that runs along the street. A smaller pipe carries local drainage under

the bridge to the other pipe. Fill was placed under the structure to about 2' below the deck. The bridge is not technologically or historically

distinguished.

INFOR MATION

PHOTO: 158:38 (05/92) REVISED BY (DATE): QUAD: Elizabeth





NEW JERSEY HISTORIC BRIDGE DATA

OWNER COUNTY STRUCTURE # 2010037 CO UNION **MILEPOINT**

NAME & FEATURE W.R.TRACY DRIVE OVER SURPRISE LAKE FACILITY W.R.TRACY DRIVE

INTERSECTED

MOUNTAINSIDE BOROUGH **TOWNSHIP**

TYPE SLAB **DESIGN MATERIAL** Reinforced

SPANS 1 LENGTH 27 ft WIDTH 24 ft Concrete

CONSTRUCTION DT 1935 **ALTERATION DT SOURCE NJDOT**

DESIGNER/PATENT BUILDER

The bridge is located in the Watchung Reservation, a large park where wildlife dominates the area. The structure carries a two-lane road SETTING /

CONTEXT with narrow shoulders across a narrow point in Surprise Lake.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span slab bridge sits on fieldstone abutments. A concrete railing of posts and two rails crosses the bridge at each face. The SUMMARY

bridge is not technologically or historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Roselle PHOTO: 158:20-21 (05/92)

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # UNION OWNER COUNTY 2011007 **MILEPOINT**

NAME & FEATURE SOUTH STREET OVER STREAM 3-51 **FACILITY** SOUTH STREET

INTERSECTED

NEW PROVIDENCE BOROUGH TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED MATERIAL Steel

LENGTH 29 ft # SPANS 1 WIDTH 40 ft

SOURCE NJDOT CONSTRUCTION DT 1928 **ALTERATION DT**

DESIGNER/PATENT BUILDER

The bridge is located next to a park in a post-World War II commercial area. It carries a two-lane street with two sidewalks over a stream. SETTING /

CONTEXT

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span stringer bridge bears on concrete abutments. The stringers have deteriorated encasement, and support a concrete deck SUMMARY with bituminous paving. Well-detailed paneled concrete parapets frame the bridge and match the fascia paneling. A representative

example of a common pre-World War II type, the bridge is not technologically or historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Chatham PHOTO: 156:9-10 (05/92)





STRUCTURE # UNION **OWNER** COUNTY 2011039 **MILEPOINT**

NAME & FEATURE SOUTH STREET OVER STREAM 3-51-2 **FACILITY** SOUTH STREET

INTERSECTED

NEW PROVIDENCE BOROUGH TOWNSHIP

TYPE SLAB **DESIGN** MATERIAL Concrete

SPANS 1 LENGTH 38 ft WIDTH 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1983 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT BUILDER

The bridge is located in a late-20th century commercial area surrounded by early- to mid-20th century residences. The bridge carries three SETTING /

CONTEXT lanes of traffic and two sidewalks over a channeled stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The skewed concrete slab superstructure sits on concrete abutments that are flanked by concrete flumes upstream and downstream. The SUMMARY substructure remains from 1928. The superstructure was originally stringers, but in 1983 it was replaced by a slab, with the fascia beams

salvaged from the original bridge. A new aluminum railing crossed the bridge at each face. The bridge is not technologically or historically

distinguished.

INFOR MATION

> QUAD: Chatham REVISED BY (DATE): PHOTO: 156:7-8 (05/92)





STRUCTURE # 2011055 UNION OWNER COUNTY **MILEPOINT**

NAME & FEATURE **DIVISION AVENUE OVER STREAM 3-51** FACILITY DIVISION AVENUE

INTERSECTED

NEW PROVIDENCE BOROUGH TOWNSHIP

TYPE STRINGER **DESIGN JACK ARCH (BRICK)** MATERIAL Steel

LENGTH 22 ft **WIDTH** 25.3 ft # SPANS 1

CONSTRUCTION DT 1905ca **ALTERATION DT** 1931 SOURCE STYLE/COUNTY ENGNR

DESIGNER/PATENT BUILDER

The bridge is located in a well-maintained 1920s residential neighborhood. It carries a two-lane road with one sidewalk over a minor SETTING /

CONTEXT stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The short stringer bridge is supported on ashlar abutments. Brick jack-arches that have been coated with gunite are supported by the SUMMARY stringers at the bottom flanges. A concrete paneled parapet was placed at each face of the bridge in 1931. The age of the structural

components of the bridge is undocumented, but can be dated by style to circa 1905. The bridge is not technologically or historically

distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Chatham PHOTO: 156:5-6 (05/92)

NJDOT updated data 03-01-2001.





STRUCTURE # 2011062 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE CENTRAL AVENUE OVER PASSAIC RIVER FACILITY CENTRAL AVENUE

INTERSECTED

TOWNSHIP NEW PROVIDENCE BOROUGH

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 89 ft WIDTH 30 ft

CONSTRUCTION DT1928ALTERATION DTSOURCE PLAQUEDESIGNER/PATENTBAUER(UNION) & HOPKINS(MORRIS)BUILDER A. L. TRIMPI

SETTING / The bridge is located in Passaic River Park, a greenway located along the river which separates Union and Morris Counties. The bridge **CONTEXT** carries a two-lane residential street with two sidewalks over the river. The residences are from the mid- to late-20th century.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported by rusticated concrete abutments and a pier. The encased stringers support a concrete deck and paneled parapets. The original light standards have been removed from the parapet posts. The bridge is a representative example of

a common type and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:11-12 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # 2012001 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE STELLE AVENUE OVER CEDAR BROOK FACILITY STELLE AVENUE

INTERSECTED

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 **LENGTH** 26 ft **WIDTH** 36.3 ft

CONSTRUCTION DT 1917 ALTERATION DT SOURCE
DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a park that follows Cedar Brook through a 1920s single family residential area with a 1950s multi-unit housing

CONTEXT nearby. The bridge carries a two-lane road and two sidewalks over the cobblestone-lined stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments. The stringers are encased except for the bottom flanges. The pipe railings that cross the bridge are set directly in the concrete sidewalks. The short bridge, one of over 25 pre-World War II stringer spans in the county,

is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:13-14 (05/92) REVISED BY (DATE): QUAD: Plainfield





STRUCTURE # 2012003 CO UNION OWNER CITY OR MUNC. MILEPOINT

NAME & FEATURE PARK AVENUE OVER CEDAR BROOK FACILITY PARK AVENUE

INTERSECTED

SETTING / CONTEXT

TOWNSHIP PLAINFIELD CITY

TYPE CULVERT DESIGN MATERIAL Concrete

SPANS 2 LENGTH 30 ft WIDTH 40 ft

CONSTRUCTION DT 1930 ALTERATION DT SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

water collector.

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

1995 SURVEY RECOMMENDATION Not Eligible
CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The reinforced concrete box culvert bridge is underground. The structure is part of a storm water collection system that outlets into Cedar Brook. The channeled stream surfaces approximately 1000' downstream from this bridge, where a pipe railing is set in concrete over the

The bridge is located on heavily travelled two-lane street that passes through a mixed 20th century neighborhood of residences and

homes converted to commercial space. It carries the road over a stream that has been channeled underground and acts as the storm

opening of the culvert. The structure is not technologically or historically distinguished.

INFOR MATION

PHOTO: 163:6-7 (05/92) REVISED BY (DATE): QUAD: Plainfield





STRUCTURE # 2012004 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE FARRAGUT ROAD OVER GREEN BROOK FACILITY FARRAGUT ROAD

INTERSECTED

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 1 **LENGTH** 46 ft **WIDTH** 36.2 ft

CONSTRUCTION DT 1925 ALTERATION DT SOURCE PLAQUES

DESIGNER/PATENT BAUER(UNION)& VAN EMBURGH(SOM) BUILDER CHARLES A. PETERSON

SETTING / The bridge is located in a residential area of single family homes from the first half of the 20th century. A 1920s school building is near the context structure. The bridge carries two lanes and two sidewalks over Green Brook, the waterway dividing Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span stringer bridge sits on concrete abutments. One abutment has a concrete toe wall that was added at a later date. A stone

retaining wall is present at the end of the eastern wingwall. The encased stringers support a concrete deck and paneled concrete parapets. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:1-2 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # 2012010 OWNER COUNTY UNION **MILEPOINT**

FACILITY ROOSEVELT AVENUE NAME & FEATURE ROOSEVELT AVENUE OVER GREEN BROOK

INTERSECTED

PLAINFIELD CITY **TOWNSHIP**

TYPE THRU GIRDER DESIGN MATERIAL Steel

LENGTH 64 ft **WIDTH** 25.2 ft # SPANS 1

CONSTRUCTION DT 1922 **ALTERATION DT** SOURCE PLAQUES

DESIGNER/PATENT BAUER(UNION)& VAN EMBURGH(SOM) **BUILDER DOVER BOILER WORKS**

SETTING / CONTEXT

The bridge is located in a residential area of ca.1900 single family dwellings with later infill structures. The area does not appear to have historic district potential. The bridge carries a one-way one-lane road with two parking lanes and two sidewalks over the stream that

separates Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span thru-girder bridge is supported on concrete abutments. The substructure has been repaired with gunite and with concrete SUMMARY toe walls. The built-up riveted girders support rolled floorbeams and encased stringers that have exposed bottom flanges. The sidewalks are cantilevered from the girder on built-up brackets, with original picket fence-like railings. The bridge is a representative example of a

common bridge type, and is not technologically or historically distinguished.

INFOR MATION

> QUAD: Plainfield REVISED BY (DATE): PHOTO: 155:6-9 (05/92)





STRUCTURE # 2012011 UNION **OWNER** COUNTY CO **MILEPOINT**

NAME & FEATURE RANDOLPH ROAD OVER CEDAR BROOK **FACILITY** RANDOLPH ROAD

INTERSECTED

PLAINFIELD CITY **TOWNSHIP**

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

LENGTH 36 ft # SPANS 1 WIDTH 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** 1930 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a park that follows Cedar Brook through a 1920s residential neighborhood. It carries two lanes and two sidewalks

CONTEXT across the cobblestone-lined stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span stringer bridge sits on concrete abutments. The original superstructure was removed and replaced in 1930 with similar SUMMARY

encased steel stringers. The concrete sidewalks have metal picket fence-like railings. The bridge is a representative example of a

common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

> QUAD: Plainfield REVISED BY (DATE): PHOTO: 155:15-16 (05/92)





STRUCTURE # 2012014 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE SANDFORD AVENUE OVER GREEN BROOK FACILITY SANDFORD AVENUE

INTERSECTED

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 54 ft WIDTH 35 ft

CONSTRUCTION DT 1919 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB BAUER(UNION)& SOM CO ENG BUILDER ARTHUR E. SMITH

SETTING / The bridge is located in a single-family dwelling neighborhood with houses dating from around 1900. The bridge carries a two-lane street **CONTEXT** with two sidewalks over the stream that forms the boundary between Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge sits on concrete abutments and a "round nose" pier. Concrete walls line the channel, protecting buildings that are close to the stream from slope erosion. The stringers are encased (except for one) in concrete. The bridge has concrete

balustrades with paneled posts and scored fascias. The bridge is a representative example of a common type, and is not technologically

or historically distinguished.

INFOR MATION

PHOTO: 155:42-43 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # 2012018 OWNER COUNTY CO UNION **MILEPOINT**

FACILITY NORWOOD AVENUE NAME & FEATURE NORWOOD AVENUE OVER GREEN BROOK

INTERSECTED

PLAINFIELD CITY **TOWNSHIP**

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced

LENGTH 80 ft Concrete # SPANS 1 WIDTH 36 ft

CONSTRUCTION DT 1917 **ALTERATION DT** SOURCE PLAQUES

DESIGNER/PATENT BAUER(UNION) & DOUGHTY(SOM) **BUILDER F. W. SCHWIERS JR. COMPANY**

The bridge is located in a neighborhood of single family dwellings dating from the first half of the 20th century. It carries a two-lane street

with two sidewalks over a stream. Green Brook is the dividing line between Union and Somerset counties.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The reinforced concrete arch bridge has concrete abutments and wingwalls. The arch has been repaired with gunite throughout. The SUMMARY

bridge is bounded by concrete balustrades that are parallel with the vertical crest over the span. Pipe railings are present at the approaches, attached to the concrete end posts of the balustrade. The bridge is a representative example of a common early-20th century

bridge type. It is not technologically or historically distinguished. 2013022 is more noteworthy.

INFOR MATION

> REVISED BY (DATE): QUAD: Chatham PHOTO: 155:39-40 (05/92)





STRUCTURE # 2012020 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE RAYMOND AVENUE OVER GREEN BROOK FACILITY RAYMOND AVENUE

INTERSECTED

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 58 ft WIDTH 36 ft

CONSTRUCTION DT 1931 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT COLLINS(UNION) & O.SMITH(SOM)

BUILDER RICHARDS & GASTON INC.

SETTING / The bridge is located at the border of Union and Somerset Counties. It carries a two-lane road with shoulders and sidewalks over Green

CONTEXT Brook. The stream is the transition between a 1920s residential area and a large scale commercial area lining US 22.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported on a concrete substructure. The round nose pier and abutments are unadorned, as they rise

only a few feet above the water. The encased stringers support the concrete deck. The balustrades with paneled posts are typical of county-designed bridges. The bridge is a representative example of a common bridge type, of which over 25 from the pre-WW II era

remain in the county, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 154:39-40 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # 2012021 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE WESTERVELT AVENUE OVER GREEN BROOK FACILITY WESTERVELT AVENUE

INTERSECTED

TOWNSHIP PLAINFIELD CITY

TYPE THRU GIRDER DESIGN MATERIAL Steel

SPANS 1 **LENGTH** 57 ft **WIDTH** 28.2 ft

CONSTRUCTION DT 1916 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT BAUER(UNION) & DOUGHTY(SOM) BUILDER ARTHUR E. SMITH

SETTING / The bridge is located at the border of Union and Somerset Counties. It carries one lane of one-directional traffic and two cantilevered

CONTEXT sidewalks over the stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed one-span thru-girder bridge sits on concrete abutments. The members of the bridge are riveted, built-up beams with the

exception of the rolled stringers, which are encased except for the bottom flange. The built-up floorbeams hang from the girders, connecting to each girder's bottom flange. This is an uncommon detail on an otherwise ordinary bridge type. The sidewalks are

cantilevered from the girder. The bridge is not technologically or historically distinctive.

INFOR MATION

PHOTO: 155:44,1-5 (05/92) REVISED BY (DATE): QUAD: Plainfield



FACILITY WATCHUNG AVENUE



STRUCTURE # 2012036 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE WATCHUNG AVENUE OVER GREEN BROOK

INTERSECTED

TOWNSHIP PLAINFIELD CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 78 ft WIDTH 40 ft

CONSTRUCTION DT 1930 ALTERATION DT SOURCE STYLE

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a mid-20th century commercial area in downtown Plainfield. The bridge crosses Green Brook, the boundary

CONTEXT between Union and Somerset Counties. It carries a two-lane road with parking lanes and sidewalks over the waterway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span encased stringer bridge sits on a masonry substructure. The piers and abutments are stone with a concrete cap that was added when the new superstructure was placed in 1930. The stringers support a concrete deck with a concrete balustrade at one face.

The other face of the roadway bridge abuts a structure supporting a commercial building which is also built over the brook. The bridge is

not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:10-12 (05/92) REVISED BY (DATE): QUAD: Plainfield





STRUCTURE # 2012037 OWNER COUNTY CO UNION **MILEPOINT**

NAME & FEATURE NETHERWOOD AVENUE OVER GREEN BROOK **FACILITY NETHERWOOD AVENUE**

INTERSECTED

PLAINFIELD CITY **TOWNSHIP**

TYPE STRINGER **DESIGN** ENCASED MATERIAL Steel

LENGTH 55 ft #SPANS 2 **WIDTH** 35.9 ft

CONSTRUCTION DT 1928 **ALTERATION DT** SOURCE PLAQUE

DESIGNER/PATENT J. BAUER(UNION) & O.SMITH(SOM) **BUILDER** ARTHUR E. SMITH

The bridge is located in a residential area of mid-20th century single-family dwellings mixed with 1920s bungalows. The bridge carries two

CONTEXT lanes of traffic and two sidewalks over the stream that divides Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The two-span stringer bridge is supported by concrete abutments and a cutwater pier. The stringers are encased, and support the SUMMARY

concrete deck. Paneled concrete parapets with paneled posts line the faces of the bridge above the paneled fascia stringers. The bridge

is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Chatham PHOTO: 154:43-44 (05/92)





STRUCTURE # 2012051 CITY OR MUNC. UNION OWNER **MILEPOINT**

NAME & FEATURE FACILITY PROSPECT AVENUE PROSPECT AVENUE OVER CEDAR BROOK

INTERSECTED

SETTING /

PLAINFIELD CITY **TOWNSHIP**

TYPE CULVERT **DESIGN** MATERIAL Concrete

LENGTH 28 ft #SPANS 2 **WIDTH** 39.6 ft

CONSTRUCTION DT 1929 **ALTERATION DT SOURCE COUNTY ENGINEER**

DESIGNER/PATENT BUILDER

The bridge is an underground structure. It is located below a two-lane residential street of mixed 20th century construction. The "stream" CONTEXT that it crosses is part of the storm water collection system of the City of Plainfield. The opening of the channel is approximately 1000'

downstream from this structure.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span concrete culvert bridge is unmarked above ground. According to the County Engineer, it is a reinforced concrete two-cell

culvert. The bridge is not technologically or historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Plainfield PHOTO: 155:20 (05/92)





2012052 OWNER CITY OR MUNC. STRUCTURE # UNION **MILEPOINT**

FACILITY WATCHUNG AVENUE NAME & FEATURE WATCHUNG AVENUE OVER CEDAR BROOK

INTERSECTED

SETTING / CONTEXT

PLAINFIELD CITY **TOWNSHIP**

TYPE CULVERT **DESIGN MATERIAL** Reinforced

Concrete LENGTH 26 ft #SPANS 2 WIDTH 36 ft

CONSTRUCTION DT 1930 **ALTERATION DT SOURCE** COUNTY ENGINEER OFFC

DESIGNER/PATENT BUILDER

The bridge is entirely underground. It is located below a two-lane residential street in a mixed-20th century neighborhood. The "stream" is part of the City of Plainfield's storm sewer system. The stream outlets from underground approximately 2500' downstream from this structure.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

According to the County Engineer, the two-span bridge is a reinforced concrete two-cell culvert. The stream outlets from its underground SUMMARY location on the grounds of a nearby middle school. At the structure outlet a pipe railing is set in the concrete above the opening. The

bridge is not technologically or historically distinguished. A photograph of the outlet (not at this site) is attached.

INFOR MATION

> REVISED BY (DATE): QUAD: Plainfield PHOTO: 155:21,163:9 (05/92)





2012053 CITY OR MUNC. STRUCTURE # UNION OWNER **MILEPOINT**

FACILITY PUTNAM AVENUE NAME & FEATURE PUTNAM AVENUE OVER CEDAR BROOK

INTERSECTED

SPANS 1

PLAINFIELD CITY **TOWNSHIP**

TYPE CULVERT **DESIGN MATERIAL** Reinforced LENGTH 23 ft

Concrete

CONSTRUCTION DT 1930 **ALTERATION DT SOURCE** COUNTY ENGINEER OFFC

WIDTH 60 ft

DESIGNER/PATENT BUILDER

The bridge is located entirely underground. It carries a two-lane street in a residential neighborhood of mixed-20th century construction. SETTING / CONTEXT The "stream" crossed is part of the local storm sewer system. The culvert outlet is approximately 3000' downstream from the structure. A

photograph of the outlet, which is approximately 3000' downstream from this structure, is also attached.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The bridge is unmarked at street level. According to the County Engineer, the structure is a single-cell reinforced concrete box culvert. SUMMARY

The outlet is more than half a mile from the structure, on the grounds of the local middle school. A pipe railing is set in the concrete over

the opening of the culvert. The bridge is technologically and historically undistinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Plainfield PHOTO: 155:22 (05/92)





STRUCTURE # 2012150 CO UNION OWNER NJDOT MILEPOINT 0.38

NAME & FEATURE MORRIS AVENUE (NJ 82) OVER RAHWAY RIVER FACILITY MORRIS AVENUE (NJ 82)

INTERSECTED

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STONE ARCH DESIGN BARREL MATERIAL Stone

SPANS 3 **LENGTH** 90 ft **WIDTH** 55.8 ft

CONSTRUCTION DT1872ALTERATION DT1935SOURCE NJDOT/PLANSDESIGNER/PATENTUNKNOWNBUILDER UNKNOWN

SETTING / The bridge is located in a linear greenway that follows the Rahway River as it winds through Union County. The bridge carries a four-lane

CONTEXT state route over the river.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute.

CONSULT DOCUMENTS SHPO Finding 8/13/82, Letter 6/30/95. DOE 10/28/83.

SUMMARY The 3-span stone arch bridge stone with a rubble stone intrados has vermiculated-finish coursed ashlar spandrel walls and ringstones.

The intrados of the arches have been coated with gunite. In 1935 the county added concrete balustrades at both faces. The bridge was determined not eligible "on the basis of evidence presented in" two studies dated 1980 and 1982 for the Route 82 Rahway River bridge

replacement. A Section 4(f) evaluation was done and is dated May, 1985.

INFOR MATION

PHOTO: 156:40-44 (05/92) REVISED BY (DATE): QUAD: Roselle



NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2012151 CO UNION OWNER RAILROAD MILEPOINT 0.1

NAME & FEATURE RAHWAY VALLEY-HILTON BRANCH RR OVER FACILITY RAHWAY VALLEY HILTON BRANCH RR

INTERSECTED MORRIS AVENUE (NJ 82)

TOWNSHIP UNION TOWNSHIP

TYPE THRU GIRDER DESIGN PARTIALLY ENCASED MATERIAL Steel

SPANS 1 LENGTH 50 ft WIDTH 10 ft

CONSTRUCTION DT 1915 ALTERATION DT SOURCE INSCRIPTION

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a commercial area of post-World War II development. The structure carries one abandoned track of the Rahway

CONTEXT Valley Hilton Branch Railroad.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The one-span thru-girder bridge is supported on concrete abutments with wingwalls. The floorbeams are completely encased in the concrete deck, with knee braces on the inside face of the riveted girders. The abutments are wide enough for two pairs of girders. The

bridge is a representative example of a common bridge type, and it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 156:37-39 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2013007 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE WHITTIER STREET OVER RAHWAY RIVER FACILITY WHITTIER STREET

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 **LENGTH** 74 ft **WIDTH** 36.1 ft

CONSTRUCTION DT 1925 ALTERATION DT SOURCE NJDOT

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a linear greenway that follows the Rahway River through Union County. Surrounding the greenway are mixed

CONTEXT 19th- and 20th-century single family dwellings. The bridge carries two lanes and two sidewalks over the waterway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The two-span stringer bridge sits on concrete abutments and a round nose pier. The stringers are encased in concrete, with the fascia

stringer paneled. The concrete parapets are also paneled and broken by paneled posts. The structure is a representative example of a

common pre-World War II bridge type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:21-22 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013008 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE JEFFERSON AVE OVER ROBINSONS BRANCH FACILITY JEFFERSON AVENUE

INTERSECTED RAHWAY RIVER

TOWNSHIP RAHWAY CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 60 ft WIDTH 30 ft

CONSTRUCTION DT 1924 ALTERATION DT SOURCE NJDOT

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a residential area of early- through late-20th century single-family dwellings. It carries a two-lane road with two

CONTEXT sidewalks over a stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge is supported on a concrete pier and ashlar abutments that have concrete caps. The stringers are encased in concrete, with paneled fascias. The concrete parapets are paneled, as are the posts. Metal pipe railings are present on top of the walls

that parallel the channel at the four corners of the bridge. The structure is a representative example of a common pre-World War II bridge

type, and is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:13-14 (04/92) REVISED BY (DATE): QUAD: Perth Amboy



NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2013009 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE EAST HAZELWOOD AVE OVER SOUTH BRANCH FACILITY EAST HAZELWOOD AVENUE

INTERSECTED RAHWAY RIVER

TOWNSHIP RAHWAY CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 85 ft WIDTH 40 ft

CONSTRUCTION DT 1921 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER CHARLES A. PETERSON

SETTING / The bridge is located between a 1960s high-rise apartment building and a late-19th century single family dwelling neighborhood. The

CONTEXT bridge carries a busy two-lane street with sidewalks over the South Branch of the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span stringer bridge sits on concrete abutments and a pier. The stringers are encased, with paneled fascias. The concrete

parapets are also paneled. The bridge is a representative example of a common pre-World War II bridge type. It is not technologically or

historically distinguished.

INFOR MATION

PHOTO: 150:12-13 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013010 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE IRVING STREET OVER ROBINSONS BRANCH FACILITY IRVING STREET

INTERSECTED RAHWAY RIVER

TOWNSHIP RAHWAY CITY

TYPE STONE ARCH DESIGN ELLIPTICAL MATERIAL Stone, Brick

SPANS 3 **LENGTH** 68 ft **WIDTH** 66.2 ft

CONSTRUCTION DT1875caALTERATION DT1924SOURCE STYLE/PLAQUEDESIGNER/PATENTUNKNOWNBUILDER UNKNOWN

SETTING /

The bridge is located in downtown Rahway City, surrounded by mid- to late-19th century commercial structures and 20th century multi-unit housing. The bridge is on a two-lane street with parking lanes and sidewalks. It crosses the Robinson Branch of the Rahway River, a waterway that is channeled through the city with rubble stone as well as concrete retaining walls.

1995 SURVEY RECOMMENDATION Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The undocumented three-span bridge is a combination of stone and brick arches founded on rusticated ashlar cutwater piers and abutments. The center section of each arch is stone, with 13' of brick arch widening on each side at an unknown date. The spandrels are coursed ashlar with gauged ringstones. In 1924, paneled concrete parapets were added by the county. One of only two stone arch spans in the county (2012150 is other), this bridge is historically and technologically distinguished.

INFOR MATION

Bibliography:

Robinson, E. Atlas of Union County, New Jersey. 1882.; Sanborn Insurance Atlas, Rahway, New Jersey, 1886, 1891, 1896, 1901, 1908, 1915, 1923.

1902 Bauer Atlas of Union County.

Physical Description: The three-span arch bridge is a combination of stone and brick arches. The center portion of the bridge is a stone arch structure, approximately 40' wide. On each side of the stone arch is a brick arch approximately 13' wide. The arches are founded on ashlar footings with cutwater pier heads. In 1924, paneled concrete parapets were added to the structure above the ashlar spandrel walls.

The bridge underside is inaccessible from the street as the parapets abut buildings and privacy walls that follow the banks of the river to the edge of the sidewalk. Stone retaining walls line the banks of the river in this densely developed urban setting.

Historical and Technological Significance: The ca. 1875 stone and brick arch bridge is one of the oldest bridges in Rahway, and is one of two stone arch spans in the county. The stone structure dates stylistically to circa 1875. The date of the brick arch extensions is not known, but research of 19th- and early-20th century atlases and maps show the bridge to be 66' wide, its present width, as early as 1882.

Despite the 1924 concrete parapet, the structural integrity of the arches has been maintained, and the bridge ranks as a locally significant example of a bridge technology that is not common in the county (criterion C). The other stone arch bridge, the 1872 Morris Avenue (NJ 82) over the Rahway River (2012150) was determined not eligible by the SHPO in 1985.

Boundary Description and Justification: The bridge is evaluated as individually distinguished, and the significant boundary is limited to the span itself.

PHOTO: 150:32-34 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013013 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE EAST INMAN AVENUE OVER SOUTH BRANCH FACILITY EAST INMAN AVENUE

INTERSECTED RAHWAY RIVER

TOWNSHIP RAHWAY CITY

TYPE PONY TRUSS DESIGN PRATT HALF HIP MATERIAL Steel

SPANS 1 **LENGTH** 54 ft **WIDTH** 22.3 ft

CONSTRUCTION DT 1890ca ALTERATION DT 1932, 1956 SOURCE STYLE/COUNTY ENGNR

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in an area dominated by modern commercial and warehouse facilities. The bridge carries a two-lane road and two

CONTEXT cantilevered sidewalks over the South Branch of the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The half-hip pin-connected Pratt pony truss bridge sits on ashlar abutments with concrete seats. In 1931-32, the bridge was widened and strengthened by the addition of welded plates to most of the members and new vertical sections. A new steel deck was added in 1956.

strengthened by the addition of welded plates to most of the members and new vertical sections. A new steel deck was added in 1956. Through all of the repairs and modifications to the bridge, the original structure has not retained its design integrity. Despite it being the

only pony truss in the county, it is not technologically or historically distinguished.

INFOR MATION

PHOTO: 150:6-11 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013020 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE CENTRAL AVENUE OVER ROBINSONS BRANCH FACILITY CENTRAL AVENUE

INTERSECTED RAHWAY RIVER

TOWNSHIP RAHWAY CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 **LENGTH** 53 ft **WIDTH** 39.5 ft

CONSTRUCTION DT 1921 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER BUILDER T. FOSTER CALLAHAN

SETTING / The bridge is located in a linear greenway that follows the Robinsons Branch of the Rahway River through an area of early- through late-

CONTEXT 20th century single-family dwellings. The structure carries a two-lane street and two sidewalks over the stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The two-span stringer bridge is supported on earlier stone abutments and a stone pier that has been widened on both sides with concrete.

The stringers are concrete-encased, and the fascia encasement is paneled. The concrete parapet is also paneled, and is flanked at the approaches by pipe railings. The bridge is a representative example of a common bridge type, and it is not technologically or historically

distinguished.

INFOR MATION

PHOTO: 151:7-8 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013022 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE NEW CHURCH STREET OVER ROBINSONS FACILITY NEW CHURCH STREET

INTERSECTED BRANCH RAHWAY RIVER

TOWNSHIP RAHWAY CITY

TYPE DECK ARCH DESIGN ELLIPTICAL MATERIAL Reinforced

SPANS 1 **LENGTH** 97 ft **WIDTH** 30.1 ft

Concrete

CONSTRUCTION DT 1907 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** ARTHUR E. SMITH

SETTING / The bridge is located in a neighborhood of first quarter of the 20th century houses that have been altered. The area does not possess **CONTEXT** historic district potential. The structure carries a two-lane road with two sidewalks over the Robinsons Branch of the Rahway River.

1995 SURVEY RECOMMENDATION Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

CONSULT STATUS Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The reinforced concrete deck arch bridge has scored spandrels and wingwalls. The concrete has been repaired selectively with gunite. A

metal fence-like railing crosses the bridge, with concrete posts at the ends and third points of the span. The handsome structure is the earliest of nine reinforced concrete deck arch bridges in Union County. It is a well-preserved representative example of a common

technology from the early-20th century.

INFOR MATION

PHOTO: 151:15-16 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2013023 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE LAWRENCE STREET OVER RAHWAY RIVER FACILITY LAWRENCE STREET

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE SWING SPAN DESIGN CENTER BEARING MATERIAL Steel

SPANS 3 **LENGTH** 234 ft **WIDTH** 22 ft

CONSTRUCTION DT1912ALTERATION DTVariousSOURCE PLAQUES,COUNTY ENGNRDESIGNER/PATENTJACOB L.BAUER, COUNTY ENGINEERBUILDER OWEGO BRIDGE COMPANY

SETTING / The bridge is located in an industrial area of early-20th century construction. A green area follows the Rahway River through this area. The bridge carries a two-lane road with two cantilevered sidewalks over the river.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS

Bridge was Not Individually Eligible. Potential Rahway River Park, May have contributed. Potential Union County Park

System Multiple Property nomination. May have contributed.

CONSULT DOCUMENTS DOE 10/28/83, SHPO Letter 6/30/95

SUMMARY

The Pratt thru-truss bridge with deck girder approach spans was originally a 21' wide riveted center-bearing swing span. It was extensively altered in 1930 when it was widened approximately 5'. The verticals and diagonals were reinforced with welded plates, and the cantilevered sidewalks were added. The bridge was "fixed", and the operating mechanism has been removed. The numerous alterations and inoperable condition make the bridge an undistinguished example of a well-represented bridge type.

INFOR MATION

Bibliography:

Darnell, Victor. Directory of American Bridge Companies. 1984.

Union County Engineer. Bridge File: RA23.

Physical Description: The main span of the 3-span bridge is a 158'-7' long, 10-panel Pratt thru truss rim-bearing swing span bridge of riveted construction. The approach spans are rolled section deck girders with floor beams and stringers. The substructure is concrete. The members are traditionally composed with built-up box sections for the top chord and inclined end posts, laced verticals, and diagonals and counters of angles joined by battens. There are numerous welded repairs and reinforcing.

In 1930, the originally 21' out-to-out bridge was widened 5', and most of the members were strengthened by welding steel plates to the existing fabric. The cantilevered sidewalks were also added in the 1930 project. The brackets were welded to the bottom chord of the trusses. New stringers were installed in the approach spans, and the concrete substructure was extended inkind to accommodate the widening. Floor beams were spliced. The original portal brace was replaced in 1930, and again in 1991 with a channel section welded to the inclined end posts. Many of the original riveted connections have been replaced by welds. The truss span was fixed in place in 1970 with new rocker bearings. Most of the operating machinery has been removed.

Historical and Technological Significance: The significance of the 1912 center-bearing swing span bridge fabricated by the Owego Bridge Company of Owego, New York has been lost due to major alterations that have irreversibly changed its appearance and function. Originally measuring 21' out-to-out, and built with no sidewalks, the span was widened approximately 5' in 1930. In addition to splicing many of the transverse members, the diagonals and verticals were strengthened by the addition of section and/or plate welded to the original fabric and replacement of riveted connections with welded ones. In 1970 new bearings for the moveable span were installed, and the bridge was fixed in the closed position. Most operating machinery has also been removed.

The original bridge was built by the Owego Bridge Company of Owego, New York. The company was founded in 1891, and it was a viable concern well into this century. The 1912 span was the first to cross the Rahway River at Lawrence Street, but the present structure resembles the original in profile only. It is too altered to be evaluated as a significant example of a moveable bridge technology that is well represented in New Jersey.

PHOTO: 150:17-22 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013024 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE MONROE STREET OVER RAHWAY RIVER FACILITY MONROE STREET

INTERSECTED

SETTING / CONTEXT

TOWNSHIP RAHWAY CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 3 **LENGTH** 112 ft **WIDTH** 35.9 ft

CONSTRUCTION DT 1919 ALTERATION DT SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased stringer bridge sits on earlier ashlar piers and abutments with concrete seats. The fascia encasement is paneled and the concrete balustrade with paneled posts is typical of county-designed bridges. Metal fences line the approaches of the bridge. The

The bridge is located in an area of urban transition from commercial to residential structures. The majority of nearby buildings are from the

early 20th century. An electrical substation is located adjacent to the bridge. The bridge carries a two-lane street with two sidewalks over

structure is a representative example of a common bridge type. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 150:27-28 (04/92) REVISED BY (DATE): QUAD: Perth Amboy

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2013025 OWNER COUNTY CO UNION **MILEPOINT**

FACILITY BRIDGE STREET NAME & FEATURE BRIDGE STREET OVER RAHWAY RIVER

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE THRU GIRDER **DESIGN JACK ARCH (CONCRETE) MATERIAL** Steel

LENGTH 130 ft #SPANS 2 **WIDTH** 19.4 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1938 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT BUILDER

The bridge is located in an urban area at a transition from commercial to residential structures. The buildings were built in the early 20th SETTING / CONTEXT century. The structure carried two lanes of traffic and one cantilevered sidewalk, but was closed in 1990 due its unsafe condition.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The two-span thru-girder with rolled floorbeams bridge is supported on scored concrete abutments and a pier that were refaced in 1938. SUMMARY

The deck is supported by concrete jack arches set between the stringers. The cantilevered sidewalk has its original iron lattice railing. The bridge is a complete example of a common bridge type, but is not technologically or historically distinguished. An earlier, notable,

functioning examples remain in the county (2016059), and there are several in Cranford.

INFOR MATION

> REVISED BY (DATE): PHOTO: 150:23-26 (04/92) QUAD: Perth Amboy

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2013029 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE HAMILTON STREET OVER ROBINSONS BRANCH FACILITY HAMILTON STREET

INTERSECTED RAHWAY RIVER

TOWNSHIP RAHWAY CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 65 ft WIDTH 40 ft

CONSTRUCTION DT 1930 ALTERATION DT 1970 SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in downtown Rahway. It carries a two-lane street with two sidewalks over the Robinson's Branch of the Rahway

CONTEXT River.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The two-span encased stringer bridge bears on a concrete substructure. The abutments and wingwalls are plain concrete, as is the

roundnose pier. The concrete parapet spanning the bridge and following the wingwalls along the channeled stream are paneled. In 1970, a new reinforced concrete deck slab was constructed. The bridge is a well-preserved representative example of a common pre-World War

Il bridge type and design.

INFOR MATION

PHOTO: 150:35-36 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013030 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE WEST GRAND AVENUE OVER RAHWAY RIVER FACILITY WEST GRAND AVENUE

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE DECK ARCH DESIGN ELLIPTICAL MATERIAL Reinforced

SPANS 1 **LENGTH** 98 ft **WIDTH** 39.5 ft

Concrete

CONSTRUCTION DT 1917 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** ARTHUR E. SMITH

SETTING / The bridge is located in a park that is surrounded by a mixed-use late-19th and 20th century area. The bridge carries a two-lane street with

CONTEXT two sidewalks over the Rahway River.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The one-span elliptical reinforced concrete arch bridge is supported on concrete footings. The face of the bridge is scored to accent the

arch structure. The concrete parapet is parallel to the roadway, which has a vertical crest curve over the bridge. The bridge is a representative example of a common bridge type, being one of nine pre-World War II reinforced concrete deck arches in Union County.

2013022 is more notable. This one is not technologically or historically distinguished.

INFOR MATION

PHOTO: 150:29-31 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2013050 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE CHURCH STREET OVER RAHWAY RIVER FACILITY CHURCH STREET

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 **LENGTH** 83 ft **WIDTH** 34.2 ft

CONSTRUCTION DT 1937 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT ROI C. COLLINS, CO ENGINEER BUILDER LOUIS DI FRANCESCO

SETTING / The bridge is located in a greenway that follows the Rahway River through Union County. Late-19th century through mid-20th century context single-family dwellings surround the green area. The bridge carries a two-lane street with two sidewalks.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The two-span stringer bridge sits on concrete abutments and a pier. Some stonework is present at the base of the wingwalls and at the

nose of the cutwater pier. The face of the bridge has been constructed to appear like a two-span elliptical arch bridge. The parapets are

arched to accent the appearance. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 151:19-20 (04/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # OWNER COUNTY 2013051 UNION MILEPOINT

NAME & FEATURE WHITTIER STREET OVER RAHWAY RIVER **FACILITY** WHITTIER STREET

INTERSECTED

RAHWAY CITY **TOWNSHIP**

TYPE BRICK ARCH **DESIGN PARABOLIC** MATERIAL Brick

LENGTH 30 ft # SPANS 1 WIDTH 65 ft

CONSTRUCTION DT 1875ca **ALTERATION DT** 1953-54 SOURCE STYLE/COUNTY ENGNR

DESIGNER/PATENT UNKNOWN BUILDER UNKNOWN

SETTING / CONTEXT

The bridge is located in a greenway that follows the Rahway River through Union County. The greenway is surrounded by late-19th century housing in this area. The bridge carries a two-lane street with two sidewalks. The greenway is a narrow park that does not appear to have any distinguishing features that would make it a potential historic district. It is casually landscaped. The bridge predates the greenway, and there is no access to the bridge from within the greenway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOF 10/28/83, SHPO Letter 6/30/95.

SUMMARY

The 30'brick arch bridge has ashlar spandrel walls and gauged ringstones at both faces and ashlar footings. Much of the intrados has been coated with gunite. The concrete parapets were added one at a time in 1953 and 1954, detracting from the historic character of the bridge, but its structural integrity is intact. The structure is a short, altered example of a well-represented type from the later-19th century. Other brick arch bridges (2013010) have been evaluated as more noteworthy than this.

INFOR MATION Bibliography:

Robinson, E. Atlas of Union County, New Jersey, 1882. Sanborn Insurance Atlas, Rahway, New Jersey. 1923.

1902 Bauer Atlas of Union County.

Physical Description: The one-span brick arch bridge sits on ashlar footings, and has rusticated ashlar spandrell walls and gauged ringstones. The span length is 30', a normal distance for a brick arch bridge. The intrados of the arch has been partially coated with qunite. In 1953 and 1954, concrete parapets were built above the spandrel walls (one each year).

Historical and Technological Significance: The single-arch bridge is the smallest of the four brick arch bridges identified in Union County. The others are all three-span bridges, and all are as well-preserved as this structure, if not better. Though the structural components of the bridge have been preserved, the addition of 1950s style parapets detracts from the historical integrity of the structure.

Through research of 19th and 20th century maps and atlases, it appears that the span has always been the width that it is now. The masonry arch bridges of the 1800s that do remain have in common the width of structure capable of handling the increased road use of the 20th century. This structure, though it is one of the older spans in the county, is not historically distinguished due to the existence of larger and more well-preserved examples of the same type of bridge. Technologically it employs a commonly used design for the situation in which it exists.

REVISED BY (DATE): QUAD: Perth Ambov PHOTO: 151:23-25 (04/92)





STRUCTURE # 2013150 CO UNION OWNER RAILROAD MILEPOINT 15.

NAME & FEATURE AMTRAK NORTHEAST CORRIDOR OVER ELMORA FACILITY AMTRAK NORTHEAST CORRIDOR RAIL LINE

INTERSECTED AVENUE (CR 439)

TOWNSHIP ELIZABETH CITY

TYPE THRU GIRDER DESIGN MATERIAL Steel

SPANS 1 LENGTH 83 ft WIDTH 76 ft

CONSTRUCTION DT 1916 ALTERATION DT SOURCE NJDOT

DESIGNER/PATENT BUILDER

SETTING / CONTEXT

The bridge is located in a post-World War II commercial area that runs along a busy four-lane county route. The bridge carries 6 electrified tracks of Amtrak's Northeast Corridor over that road. The RR line was developed by several different rail companies, and consolidated by the Pennsylvania Railroad in 1871 to form one main corridor for passenger traffic from New York to Washington. Amtrak took control of

the Northeast Corridor in 1971, after the Penn Central RR went bankrupt.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single span thru-girder bridge with a ballasted deck sits on ashlar abutments with concrete seats. The riveted girders are encased above the bottom flange of the rolled floorbeams, which are encased except for the bottom flanges. The girders are encased above the

concrete deck to the bottom of the top flanges. The bridge is a representative example of girder technology and is not technologically or

historically distinguished.

INFOR MATION

PHOTO: 154:29-31 (05/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2013151 OWNER RAILROAD UNION MILEPOINT 12.47

NAME & FEATURE CONRAIL ELIZABETH BRANCH OVER ELMORA **FACILITY** CONRAIL ELIZABETH BRANCH

INTERSECTED AVE (CR 439)

ELIZABETH CITY TOWNSHIP

TYPE THRU GIRDER **DESIGN MATERIAL** Steel

LENGTH 86 ft # **SPANS** 3 WIDTH 50 ft

SOURCE INSCRIPTION CONSTRUCTION DT 1907 **ALTERATION DT**

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE **BUILDER**

SETTING / CONTEXT The bridge is located in a late-20th century commercial area. The bridge carries one abandoned track on a four-track-wide structure over a two-lane street. The rail line was developed in the 1830s in Elizabeth, and extended west to Phillipsburg, NJ, by 1852. The line was fourtracked from Elizabeth to Westfield by 1882. Use of this line was discontinued by the CNJ in 1967, when they diverted commuter traffic to

the mainline of the Lehigh Valley Railroad.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing. **CONSULT STATUS**

DOE 11/30/95. SHPO Letter 6/30/95. CONSULT DOCUMENTS

The three-span multi-thru girder bridge sits on steel bents and concrete abutments. The riveted bents are built-up using plates, angles and lattice bars. The rolled floorbeams support a steel plate deck. The girders are protected from the ballast with brick curbs above the deck. Pipe railings are present along inside the fascia girders at both faces of the bridge. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Elizabeth PHOTO: 154:32-35 (05/92)

NJDOT updated data 03-01-2001.





STRUCTURE # 2014071 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE PARK DRIVE OVER STREAM 9-2-3 FACILITY PARK DRIVE

INTERSECTED

TOWNSHIP ROSELLE BOROUGH

TYPE SLAB DESIGN MATERIAL Reinforced

SPANS 1 LENGTH 26 ft WIDTH 34 ft

Concrete

CONSTRUCTION DT 1938 ALTERATION DT SOURCE
DESIGNER/PATENT BUILDER

SETTING / The bridge is located in Warinanco Park, a large green area with a small lake and winding roads. The two-lane, two-sidewalk bridge

CONTEXT crosses a stream leading from the lake.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab bridge sits on concrete abutments. The structure of the bridge is hidden behind a stone arch facade. The bridge has stone parapets and spandrel walls. It was adorned with stonework because of its location in a park. The bridge is not technologically or

historically distinguished.

INFOR MATION

PHOTO: 157:44,1-2 (05/92) REVISED BY (DATE): QUAD: Elizabeth

NEW JERSEY HISTORIC BRIDGE DATA



OWNER COUNTY STRUCTURE # 2016013 CO UNION **MILEPOINT**

FACILITY PARK AVENUE NAME & FEATURE PARK AVENUE OVER GREEN BROOK

INTERSECTED

SCOTCH PLAINS TOWNSHIP **TOWNSHIP**

TYPE DECK ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced

SPANS 1 LENGTH 86 ft **WIDTH** 22.2 ft Concrete

CONSTRUCTION DT 1920 **ALTERATION DT** SOURCE PLAQUE

DESIGNER/PATENT J. BAUER(UNION) & SOM CO ENGN **BUILDER** ARTHUR E. SMITH

The bridge is located in a park setting with early- and late-20th century commercial structures surrounding the green area. The bridge CONTEXT carries two traffic lanes and two sidewalks over a stream. The waterway is Green Brook, which divides Union and Somerset Counties.

1995 SURVEY RECOMMENDATION Not Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span reinforced concrete arch bridge is skewed. The intrados and spandrel walls have been repaired with gunite throughout the SUMMARY

structure. The concrete parapets are paneled, and are arched parallel to the vertical crest curve created by the arch. The bridge is not technologically or historically distinguished, being one of nine pre-World War II reinforced concrete deck arches in Union County, 2013022

is a more distinguished example of the type.

INFOR MATION

> REVISED BY (DATE): QUAD: Chatham PHOTO: 158:10-11 (05/92)

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2016059 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE UNION AVENUE OVER GREEN BROOK FACILITY UNION AVENUE

INTERSECTED

TOWNSHIP SCOTCH PLAINS TOWNSHIP

TYPE THRU GIRDER DESIGN JACK ARCH (CONCRETE) MATERIAL Steel

SPANS 1 LENGTH 46 ft WIDTH 20 ft

CONSTRUCTION DT 1905 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT HUBBARD(UNION) & DOUGHTY(SOM) BUILDER LEVERING & GARRIGUES CO.

SETTING / The bridge is located at the southern end of the Watchung Reservation over Green Brook, the boundary between Union and Somerset counties. The brook is dammed approximately 20' upstream from the bridge. The bridge carries two lanes of traffic over the brook.

1995 SURVEY RECOMMENDATION Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The one-span thru-girder bridge sits on concrete abutments. The riveted girders support rolled floorbeams. Concrete jack arches span between the floorbeams with tie-rods exposed in the arches. Pipe railings are bolted to the top flanges of the girders. The bridge is a well-

preserved representative example of a thru-girder with jack arches, a common bridge type that is becoming increasingly rare.

INFOR MATION

PHOTO: 158:12-15 (05/92) REVISED BY (DATE): QUAD: Chatham





STRUCTURE # 2016076 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE ELIZABETH AVENUE OVER STREAM 10-7-17 FACILITY ELIZABETH AVENUE

INTERSECTED

TOWNSHIP SCOTCH PLAINS TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 52 ft WIDTH 36 ft

CONSTRUCTION DT 1931 ALTERATION DT 1939 SOURCE PLAQUE

DESIGNER/PATENT ROI C. COLLINS, CO ENGINEER BUILDER DAN CARRO & COMPANY

SETTING / The bridge is located at the edge of the wooded Brookside Park Wildlife Preserve. The street carried over the bridge separates the park CONTEXT from a 1960s residential area of single family dwellings. Two lanes and two shoulders cross the bridge over a stream.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The heavily skewed two-span stringer bridge is set on concrete abutments and a roundnose pier. The encased stringers support a concrete deck and paneled concrete parapets. The bridge was increased from a one-span to a two-span bridge in 1939 with the addition of the pier, the east span and abutment. The bridge is a representative example of a common bridge type. It is not technologically or

historically distinguished.

INFOR MATION

PHOTO: 154:36-38 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2017033 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE MEISEL AVENUE OVER STREAM 10-35 FACILITY MEISEL AVENUE

INTERSECTED

TOWNSHIP SPRINGFIELD TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 2 LENGTH 49 ft WIDTH 46 ft

CONSTRUCTION DT 1926 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT JACOB L.BAUER, COUNTY ENGINEER **BUILDER** J. F. CHAPMAN & SON

SETTING / The bridge is located in the Rahway River Parkway, a greenway that follows the river through most of Union County. The structure carries

CONTEXT a two-lane road with two sidewalks over a stream that empties into the Rahway.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property

nomination, May contribute.

CONSULT DOCUMENTS DOE 10/28/83. SHPO Letter 6/30/95.

SUMMARY The nicely-detailed 2-span encased stringer bridge bears on concrete abutments. The substructure is scored to appear as ashlar. The

fascia encasement is paneled and slightly arched. The concrete balustrade has paneled posts with a textured finish. Although it is more elaborately finished than most other stringer bridges, it is still a representative example of a common bridge type. The bridge is not

technologically or historically distinguished.

INFOR MATION

PHOTO: 158:30-32 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2019028 OWNER COUNTY UNION **MILEPOINT**

FACILITY VAUXHALL ROAD NAME & FEATURE VAUXHALL ROAD OVER EAST BRANCH RAHWAY

INTERSECTED RIVER

UNION TOWNSHIP TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

LENGTH 42 ft # SPANS 1 WIDTH 40 ft

CONSTRUCTION DT 1928 **ALTERATION DT** SOURCE INSCRIPTION

DESIGNER/PATENT BAUER(UNION) & STICKEL(ESSEX) **BUILDER JOHN W. HELLER COMPANY**

The bridge is located in an area of post-World War II commercial development. The bridge carries a three-lane road with two sidewalks

CONTEXT over a stream. The stream delineates the boundary between Union and Essex Counties.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The one-span stringer bridge rests on concrete abutments that are rusticated at the corners. The skewed stringers are encased in SUMMARY concrete. The encasement at the fascia stringer is detailed with panels and a keystone at the center of the span. The concrete balustrade

has paneled posts. Two of the posts bear plaques commemorating historic area events and war heroes. The bridge is a nicely-detailed

joint-county span, but it is not technologically, stylistically or historically distinguished.

INFOR MATION

> REVISED BY (DATE): QUAD: Roselle PHOTO: 156:1-2 (05/92)





STRUCTURE # 2019040 **OWNER** COUNTY CO UNION **MILEPOINT**

NAME & FEATURE UNION AVENUE OVER ELIZABETH RIVER **FACILITY** UNION AVENUE

INTERSECTED

UNION TOWNSHIP TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

LENGTH 60 ft WIDTH 26 ft #SPANS 2

CONSTRUCTION DT 1925 **ALTERATION DT SOURCE** COUNTY ENGINEER

DESIGNER/PATENT BUILDER

The bridge is located in a mid- to late-20th century industrial area. It carries a two-lane street with two sidewalks over a stream. SETTING /

CONTEXT

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. CONSULT DOCUMENTS SHPO Letter 6/30/95

The two-span stringer bridge sits on concrete abutments and a round nose pier. The stream bed under the bridge has an invert slab, and SUMMARY the wingwalls are rubble-course stone. The encased stringers support a reinforced concrete deck. Pipe railings are set in the concrete

deck at each face of the bridge. The bridge is a representative example of a common bridge type in New Jersey. It is not a technologically

or historically distinguished structure.

INFOR MATION

> QUAD: Elizabeth PHOTO: 153:19-20 (04/92) REVISED BY (DATE):





STRUCTURE # 2020007 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE ELM STREET OVER STREAM 10-7-15 FACILITY ELM STREET

INTERSECTED

TOWNSHIP WESTFIELD TOWN

TYPE STRINGER DESIGN MATERIAL Steel

SPANS 1 **LENGTH** 36 ft **WIDTH** 45 ft

CONSTRUCTION DT 1926 ALTERATION DT 1936, 1985 SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in downtown Westfield, in an area of 1960s commercial development. It carries a two-lane street with sidewalks over

CONTEXT a stream that is part of the municipal storm water collection system.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the hidden underground single-span stringer bridge sits on concrete abutments. In 1936 most of the original superstructure was replaced with encased stringers. The structure mostly remains a stringer bridge, although in 1985 part of it

was replaced with a slab. The bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:13 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2020019 CO UNION OWNER COUNTY MILEPOINT 0.0

NAME & FEATURE RAHWAY AVENUE OVER STREAM 10-7-15 FACILITY RAHWAY AVENUE

INTERSECTED

TOWNSHIP WESTFIELD TOWN

TYPE STRINGER DESIGN MATERIAL Steel

SPANS 1 LENGTH 37 ft WIDTH 36 ft

CONSTRUCTION DT 1937 ALTERATION DT SOURCE COUNTY ENGINEER

DESIGNER/PATENT BUILDER

SETTING / The bridge is located in a residential area of early- to mid-20th century structures. The bridge carries a two-lane road over a stream that is

CONTEXT part of the municipal storm water collection system.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to the County Engineer, the hidden underground one-span skewed stringer bridge sits on concrete abutments. It is not a

technologically or historically distinguished structure.

INFOR MATION

PHOTO: 159:14 (05/92) REVISED BY (DATE): QUAD: Roselle



NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 2022151 CO UNION OWNER RAILROAD MILEPOINT 20.5

NAME & FEATURE AMTRAK NORTHEAST CORRIDOR OVER NJ 35 FACILITY AMTRAK NORTHEAST CORRIDOR RAIL LINE

INTERSECTED

TOWNSHIP RAHWAY CITY

TYPE DECK GIRDER DESIGN MATERIAL Steel

SPANS 1 **LENGTH** 106 ft **WIDTH** 70 ft

CONSTRUCTION DT 1913 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT PENNSYLVANIA RR OFFICE OF ENG

BUILDER PENNSYLVANIA STEEL COMPANY

SETTING / The bridge is located in a busy commercial area of mid- to late-20th century construction. The span carries 6 electrified tracks over a four-

CONTEXT lane highway at the junction of two state routes (NJ 35 and NJ27).

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed multi-deck-girder bridge sits on scored concrete abutments. Pairs of girders are joined by K-bracing at the bottom flanges and support a concrete deck. The decks are covered with ballast. Catenary structures carry electrification lines over each track. The

bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 159:19-21 (05/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2049161 CO UNION OWNER RAILROAD MILEPOINT 0.

NAME & FEATURE HAND PLACE OVER AMTRAK NORTHEAST FACILITY HAND PLACE

INTERSECTED CORRIDOR

TOWNSHIP ELIZABETH CITY

TYPE THRU GIRDER DESIGN PARTIALLY ENCASED MATERIAL Steel

SPANS 1 LENGTH 87 ft WIDTH 18 ft

CONSTRUCTION DT 1936 ALTERATION DT SOURCE NJDOT

DESIGNER/PATENT BUILDER

SETTING / The bridge is located adjacent to a 1960s multi-unit housing complex. It carries a one-lane road with a closed sidewalk over four electrified

CONTEXT tracks.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The riveted thru-girder bridge sits on ashlar abutments with concrete seats. The abutments continue beyond the superstructure to a width

twice that in use. The girders are encased below the deck with the exception of the bottom flanges. The floorbeams are encased. The sidewalk is cantilevered from one girder, and is enclosed by a high corrugated metal barrier. The sidewalk is closed to pedestrians. The

bridge is not technologically or historically distinguished.

INFOR MATION

PHOTO: 153:3-5 (04/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2050150 CO UNION OWNER UNKNOWN MILEPOINT 1.477

NAME & FEATURE GORDON STREET OVER ELIZABETH BRANCH RR FACILITY GORDON STREET

INTERSECTED

TOWNSHIP ROSELLE BOROUGH

TYPE THRU TRUSS DESIGN WARREN MATERIAL Steel, Wood

SPANS 6 **LENGTH** 171 ft **WIDTH** 21.4 ft

CONSTRUCTION DT 1911 ALTERATION DT 1990ca SOURCE PLAQUE, INSC., PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE BUILDER PA STEEL COMPANY, STEELTON, PA

SETTING /
CONTEXT

The bridge carries a two-lane road with one sidewalk over one abandoned track. The tracks run through an early-20th century industrial area. The Central RR of NJ developed the line in the 1830s as a streetcar line, and it soon evolved into a larger system, stretching from Elizabeth to Somerville. It was four-tracked by 1882. The early-20th century was marked by grade-crossing elimination projects, resulting

in several bridges in this area.

1995 SURVEY RECOMMENDATION Eliqible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

CONSULT STATUS Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS DOE 11/30/95. SHPO Letter 6/30/95.

SUMMARY

The 7-panel Warren thru truss bridge is supported by a concrete pier and abutment. The opposite abutment is stone with concrete and timber additions. The truss members are riveted, built-up of angles, plates and lacing bars. The south approach is a five-span continuous glulam structure supported by timber bents. The bridge, 1 of 5 over the main line in the area, is a technologically and historically distinguished example based on its age, design, and association.

INFOR MATION

PHOTO: 157:14-19 (05/92 JPH (5/96)) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2050161 CO UNION OWNER UNKNOWN MILEPOINT 13.89

NAME & FEATURE WALNUT STREET OVER ELIZABETH BRANCH RR FACILITY WALNUT STREET

INTERSECTED

TOWNSHIP ROSELLE BOROUGH

TYPE THRU TRUSS DESIGN WARREN MATERIAL Steel

SPANS 1 LENGTH 95 ft WIDTH 28 ft

CONSTRUCTION DT 1911 ALTERATION DT SOURCE PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE BUILDER PA STEEL COMPANY, STEELTON, PA

SETTING / CONTEXT

The bridge is located in an area of late-20th century commercial development. It carries a two-lane road and one sidewalk over one inactive track. The line is the Elizabeth Branch of the Central RR of New Jersey. The CNJ developed this line in the 1830s, and it was four-tracked from Elizabeth to Westfield by 1882, with lesser tracking extending to Somerville. The early-20th century was marked by

construction of grade-crossing elimination bridges.

1995 SURVEY RECOMMENDATION Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) Yes

CONSULT STATUS Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS DOE 11/30/95. SHPO Letter 6/30/95.

SUMMARY

The cambered Warren with verticals thru-truss bridge sits on concrete abutments. It has unusual design details including large asymmetric gusset plates and a longitudinal center strut. Some of the original sidewalk railings survive. The bridge, 1 of 5 similar spans built by the CNJ in the area, is technologically and historically distinguished based on its design, age, state of preservation, and associations.

INFOR MATION

PHOTO: 157:4-10 (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY HISTORIC BRIDGE DATA



STRUCTURE # 2050162 CO UNION OWNER UNKNOWN MILEPOINT 1.192

NAME & FEATURE CHILTON STREET OVER CONRAIL ELIZABETH FACILITY CHILTON STREET

INTERSECTED BRANCH

TOWNSHIP ELIZABETH CITY

TYPE THRU TRUSS DESIGN WARREN MATERIAL Steel

SPANS 1 LENGTH 96 ft WIDTH 36 ft

CONSTRUCTION DT 1926 ALTERATION DT SOURCE INSCRIPTION/PLANS

DESIGNER/PATENT CRR NJ CHIEF ENGINEERS OFFICE BUILDER MCCLINTIC-MARSHALL CO.

SETTING /
CONTEXT

The bridge is located in an area of late-19th century single family residences with 20th century intrusions. The bridge carries a two-lane one-way road with two sidewalks over one abandoned railroad track. The Central RR of NJ was developed in the 1830s from Elizabethport to Plainfield. It soon extended to Somerville, and later to Phillipsburg. The line was four-tracked in Elizabeth by 1882. In 1967, this branch

went out of use by CNJ.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95. DOE 11/30/95.

SHIMMARY

The cambered Warren thru-truss bridge bears on concrete abutments. The members of the truss are riveted, built-up sections using angles and web plates. The bottom chord is encased, as are the floorbeams (bottom flange exposed) and stringers. Some of the blast plates remain in place. The sidewalks are cantilevered on both faces. The bridge, a common CNJ type, is the most recent example of five Warren thru truss bridges along this line in Union County. Tuttle Parkway is older and more noteworthy.

INFOR MATION

PHOTO: 154:18-21 (05/92) REVISED BY (DATE): QUAD: Elizabeth





STRUCTURE # 2053160 CO UNION OWNER UNKNOWN MILEPOINT 0.0

NAME & FEATURE LAKE AVENUE OVER CONRAIL & ROBINSON FACILITY LAKE AVENUE

INTERSECTED BRANCH RAHWAY RIVER

TOWNSHIP CLARK TOWNSHIP

TYPE STRINGER DESIGN ENCASED MATERIAL Steel

SPANS 4 **LENGTH** 210 ft **WIDTH** 34 ft

CONSTRUCTION DT 1936 ALTERATION DT SOURCE PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR BUILDER

SETTING /
CONTEXT

The bridge is located in an area dominated by late-20th century multi-unit housing and 1970's light industrial structures. The bridge carries a two-lane road with two sidewalks over two active tracks. The rail line was built by the Lehigh Valley Railroad in 1888 as the Jersey City Extension. It became the main line soon after the extension was finished. It was changed from four-tracks to double-track in the 1950s or

1960s. Conrail took over the line in 1976.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The four-span stringer bridge bears on a concrete substructure of stub abutments and 3-column hammerhead piers. The stringers are encased in concrete, and support a concrete deck. Four blast plates remain fastened to the stringers. The parapets are paneled concrete with guiderails attached at the approaches. The bridge is a representative example of a common pre-World War II bridge type in New Jersey. It is not technologically or historically distinguished.

INFOR MATION

PHOTO: 155:23-24 (05/92) REVISED BY (DATE): QUAD: Perth Amboy





STRUCTURE # 2053161 UNION OWNER UNKNOWN **MILEPOINT**

NAME & FEATURE CENTRAL AVENUE OVER CONRAIL LEHIGH **FACILITY** CENTRAL AVENUE

INTERSECTED VALLEY LINE

CLARK TOWNSHIP

TYPE THRU GIRDER **DESIGN PARTIALLY ENCASED MATERIAL** Steel

LENGTH 129 ft # **SPANS** 3 WIDTH 30 ft

CONSTRUCTION DT 1934 **ALTERATION DT** SOURCE PLANS

DESIGNER/PATENT LEHIGH VALLEY RR OFF. OF ENGNR **BUILDER**

SETTING / CONTEXT

TOWNSHIP

The bridge is located in an area of post-World War II industrial and commercial development. It carries a busy two-lane road with two sidewalks over two active tracks. The line was built by the Lehigh Valley Railroad in 1888 as part of its Jersey City Extension, which became the main line soon after its completion. The line was four-tracked in the early 1900s, but was returned to double-tracks in the

1950s or 1960s. Conrail took over the Lehigh Valley Railroad in 1976.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

Not Individually Eligible. **CONSULT STATUS** CONSULT DOCUMENTS SHPO Letter 6/30/95

The three-span bridge is composed of one thru-girder span with a concrete tee-beam approach span on each end. The bridge is

supported on stub abutments and 3-column concrete bents with a hammerhead cap under the tee-beams. The encased floorbeams are extended outside the girders by cantilevered sidewalk brackets, with the fascia beam paneled the length of the bridge below metal fence-

like railings. It is not a technologically or historically distinguished bridge.

INFOR MATION

> REVISED BY (DATE): QUAD: Roselle PHOTO: 156:27-28 (05/92)

NJDOT updated data 03-01-2001.





STRUCTURE # 2054160 CO UNION OWNER CITY OR MUNC. MILEPOINT 10.0

NAME & FEATURE FIFTH AVENUE OVER STATEN ISLAND RAPID FACILITY FIFTH AVENUE

INTERSECTED TRANSIT

TOWNSHIP ROSELLE BOROUGH

TYPE THRU GIRDER DESIGN PARTIALLY ENCASED MATERIAL Steel

SPANS 1 LENGTH 74 ft WIDTH 30 ft

CONSTRUCTION DT 1928 ALTERATION DT SOURCE PLAQUE

DESIGNER/PATENT W. MARTIN VAN WAGNER, BORO ENG BUILDER WELDON CONTRACTING CO.

SETTING / The bridge is located in a residential area developed between the 1920s and the 1940s. It carries a two-lane road with two sidewalks over

CONTEXT two abandoned tracks of the Staten Island Rapid Transit line.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible. Staten Island RR Historic District, Eligible, May contribute.

CONSULT DOCUMENTS SHPO Finding 12/07/89 2/27/95, Letter 6/30/95.

SUMMARY The single-span thru-girder bridge sits on concrete abutments. The riveted girder is encased below the deck. The floorbeams are encased, as are the cantilevered sidewalk brackets. Chain-link fencing lines the sidewalks across the bridge, with parts of the original

railing remaining as well. The bridge is a representative example of a common bridge type, and is not technologically or historically

distinguished.

INFOR MATION

PHOTO: 157:25-27 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 2062157 CO UNION OWNER STATE AGENCY MILEPOINT 0.0

NAME & FEATURE HIGH STREET OVER NEW JERSEY TRANSIT FACILITY HIGH STREET

INTERSECTED MORRISTOWN LINE

TOWNSHIP SUMMIT CITY

TYPE RIGID FRAME DESIGN MATERIAL Steel

SPANS 1 LENGTH 65 ft WIDTH 30 ft

CONSTRUCTION DT1937ALTERATION DTSOURCE PLANSDESIGNER/PATENTDL&W RR OFFICE OF ENGINEERBUILDER UNKNOWN

SETTING /
CONTEXT

The bridge is located adjacent to 1920s Colonial Revival apartment complex. The bridge carries a two-lane road with two sidewalks over three electrified tracks of New Jersey Transit's Morristown Line. The Morristown Line was built as the Morris and Essex RR in 1835, and was later leased to the Delaware, Lackawanna and Western RR. The DL & W developed the line into a passenger route, building a more efficient route, the Boonton Line, for freight. NJ Transit now operates the tracks.

1995 SURVEY RECOMMENDATION Eligible

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY

The skewed steel frame bridge appears to be a stringer span on concrete abutments with wingwalls. The rivet-connected steel frames are visible only under the deck, where the exposed beams are haunched as they enter the concrete abutments that encase the rolled steel columns. The structure is significant as an example of an uncommon bridge type. Only one other steel frame bridge has been identified in the state, also from 1937 (0917150). It's unknown if the DL&W RR built any others of this type.

INFOR MATION Bibliography:

Condit, Carl. American Building Art 20th Century. 1961.

Mensch, L.J. "Early Use of Rigid Frame Bridges." Civil Engineering. Vol. 5, No. 10 (October, 1935).

Physical Description: The skewed one-span steel frame bridge has the appearance of being a stringer bridge on concrete abutments. The rolled beam section of the frame is exposed steel. The seven beams are haunched as they enter the concrete abutments that are really the encasement for the rolled section columns of the steel frame. The haunched connections are built up of plates and angles that are rivet-connected to the rolled sections. The knee, which have the great concentration of stress distributions, has riveted stiffeners.

The concrete abutments are flanked by wingwalls at all four corners of the bridge. A high paneled concrete parapet crosses the bridge at both faces and continues above each wingwall for 5'-10'. Pedestrian fencing has been added to the top of the parapet along the sidewalks. The approach guide rails are fixed to the parapets.

Historical and Technological Significance: The steel frame bridge is technologically distinguished as a complete example of a pre-World War II bridge type that is not common in the state of New Jersey. The structure, built in 1937, is the only identified, highway-related example of its type in Union County, and is one of only two documented pre-World War II examples in the state.

The Delaware Lackawanna and Western Railroad built the bridge in 1937, long after their main grade crossing elimination campaign in the City of Summit. They built at least seven girder bridges in Summit in 1905, as they strove to improve their commuter service to New York City. It is not known if other steel frame bridges were built by the DL&W RR. The right-of-way, now used by NJT as its Morristown line, was originally used for both freight and passenger service. When traffic became heavy and profits were suffering, the D L & W built the Boonton cutoff to more efficiently handle freight. This portion of the line remained the commuter line, and is still used mainly for that purpose.

The other steel frame structure identified (0917150) was also built in 1937. It is located on the historically and technologically significant limited-access New Jersey approach to the Lincoln Tunnel. The tunnel and approach were designed for by the Port Authority of New York, Othmar Ammann, Chief Engineer.

Not to be confused with the reinforced concrete rigid frame bridge that was first used in this country in the early 1920s on Westchester County, New York parkways, the steel rigid frame bridge was largely the product of the invention of electric arch welding. Welding permitted the transformation of the individual elements, like posts and beams, into a continuous unit in which the size and shape of each member can be calculated exactly and entirely on the basis of the role it plays in the total action of the frame. As a consequence, the quantity of material in the member for a given load can usually be reduced. A welded joint could theoretically be made as strong as the original solid metal if complete fusion was obtained. This was viewed as an advantage over riveted connections. Rigid steel frames were used in buildings beginning in 1920 at the factory of the Electric Welding Company of America at Brooklyn. The concept of a rigid frame bridge was developed in reinforced concrete in Europe around the turn of the century, but rigid frame bridges were not built in this country until the early 1920s. Examples of steel rigid frame bridges are rare in New Jersey.

Boundary Description and Justification: The bridge is evaluated as individually distinguished. It is not part of a grade crossing elimination campaign or other major improvement campaign. The significant boundary is limited to the structure itself.

PHOTO: 156:3-4 (05/92) REVISED BY (DATE): QUAD: Roselle





STRUCTURE # 3800072 CO UNION OWNER PRIVATE MILEPOINT 1.4

NAME & FEATURE GOETHALS BRIDGE OVER CONRAIL, NJ FACILITY GOETHALS BRIDGE WESTBOUND

INTERSECTED TURNPIKE & RAMPS

TOWNSHIP ELIZABETH CITY

TYPE DECK AND THRU GIRDERS DESIGN MATERIAL Steel

SPANS 14 **LENGTH** 1184 ft **WIDTH** 25.8 ft

CONSTRUCTION DT 1928 ALTERATION DT 1969ca SOURCE NJDOT

DESIGNER/PATENT BUILDER

Union County. It is a branch of the former New York and Long Branch Railroad.

1995 SURVEY RECOMMENDATION Not Eligible HISTORIC BRIDG

HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED) No

CONSULT STATUS Not Individually Eligible.
CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 14-span approach viaduct to the Goethals Bridge is supported on a concrete substructure of columns with arched struts. The original

deck girder bridge was widened ca. 1969 and is now supported on larger deck girders to the outside of the original beams. New floorbeams carry the load to the new girder where piers supported the old beams. A single-span thru-girder carries traffic over the train

The bridge is part of the western approach to the Goethals Bridge over the Newark Bay. The bridge carries westbound traffic off the bridge

over the New Jersey Turnpike and Conrail tracks of the Sound Shore Branch. This line follows the Arthur Kill for less than three miles in

tracks. The structure has not retained its design integrity, and is not historically distinguished.

INFOR MATION

SETTING / CONTEXT

PHOTO: 152:21-31A (04/92) REVISED BY (DATE): QUAD: Elizabeth