Merritt Parkway, Long Ridge Road/Route 104 Bridge Spanning Long Ridge Road/Route 104 at the 9.53 mile mark on the Merritt Parkway at exit 34 Stamford Fairfield County Connecticut HAER No. CT-76

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record National Park Service 10.3. Pepartment of the Interior P.O. Bux 3712? Nachington, D.C. 20040 7277

HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway, Long Ridge Road/Route 104 Bridge

HAER No. CT-76

Location:

Spanning Long Ridge Road/Route 104 at the 9.53 mile mark on the Merritt

Parkway in Stamford, Fairfield County, Connecticut at exit 34

UTM: 18.620385.4550960 Quad: Stamford, Connecticut

Construction Date:

August 1936

Engineer:

Connecticut Highway Department

Architect:

George L. Dunkelberger, of the Connecticut Highway Department, acted as head

architect for all Merritt Parkway bridges.

Contractor:

Paul Bacco Construction Company

Stamford, Connecticut

Present Owner:

Connecticut Department of Transportation

Wethersfield, Connecticut

Present Use:

Used by traffic on the Merritt Parkway to cross Long Ridge Road/Route 104

Significance:

The bridges of the Merritt Parkway were predominately inspired by the Art Deco and Art Moderne architectural styles of the 1930s. Experimental forming techniques were employed to create the ornamental characteristics of the bridges. This, combined with the philosophy of incorporating architecture into bridge

design and the individuality of each structure, makes them distinctive.

Historians:

Todd Thibodeau, HABS/HAER Historian

Corinne Smith, HAER Engineer

August 1992

For more detailed information on the Merritt Parkway, refer to the Merritt Parkway History Report, HAER No. CT-63.

LOCAL HISTORY

In 1640, agents of the New Haven Colony bought land on the banks of the Rippowam River where it meets the Long Island Sound. The following year, twenty-nine families from Wethersfield purchased these lands and moved there under the leadership of the Reverend Adam Davenport. The small settlement took the name Stamford even though it was still under the jurisdiction of the New Haven Colony. Stamford would continue to grow, and at one point included parts of Greenwich, Bedford, Pound Ridge, New Canaan, and Darien. In 1685, Stamford received its town patent from the Connecticut General Assembly. By 1700 its population had grown to 585; over the next century this number increased dramatically to 4,465.

"Stamford began as a typical rural New England village and remained an agrarian community throughout the seventeenth and eighteenth centuries." The region maintained around 4,000 residents until the arrival of the railroad in 1848. The introduction of the train meant that Stamford was less then two hours from New York City. The railroad also caused a boom in manufacturing. By 1850 the population increased to 5,000, and thirty years later this number more than doubled to 11,000.

Stamford's proximity to New York, combined with inexpensive land, and the availability of cheap foreign-born labor enabled many local companies to prosper and expand. The Stamford Manufacturing Company, the St. John Woodworking Company, the Stamford Woolen Mills, and the Yale & Towne Manufacturing Company, employed thousands of workers by the early 1890s.³

¹D. Hamilton Hurd, <u>History of Fairfield County</u>, <u>Connecticut</u>, (Philadelphia: J. W. Lewis Co., 1881), 692.

²Wayne Russell, "That Special Blend-Stamford's Melting Pot," <u>Stamford Past and Present</u>, <u>1641-</u>1976, (Stamford: Stamford Bicentennial Committee, 1976), 67.

³Russell, 67.

Merritt Parkway, Long Ridge Road/Route 104 Bridge HAER No. CT-76 (page 3)

With this expansion of manufacturing came increased traffic on the main artery through town, the Boston Post Road. By the end of World War I, local residents were clamoring for a solution to the vehicular congestion. Unlike other communities along the Merritt that suffered through many conflicts, most residents in Stamford worked together to have the roadway completed as soon as possible.⁴

BRIDGE CONSTRUCTION HISTORY

Historically, Long Ridge Road/Route 104 was the primary link between the agricultural community of Long Ridge and the market at Stamford. The Osborn-Barnes Construction Company of Danbury, CT, received the contract to grade the Merritt Parkway from Guinea Road, in Stamford, to Ponus Ridge Road, in New Canaan (ConnDot project #180-31). While the Long Ridge Road/Route 104 Bridge is located within this section of the Merritt, the grade separation and bridge contract went to the Paul Bacco Construction Company of Stamford, CT (ConnDot project #180-25). The bridge cost \$34,681 and was under construction from March 3, 1936 to the fall of that year. The paving work for this region of the Merritt extended from Taconic Road to Wire Mill Road, in Stamford. This contract was awarded to the New Haven Construction Company of New Haven, CT (ConnDot project #180-92). The Long Ridge Road/Route 104 Bridge has received little maintenance since it

⁴"Merritt Parkway Opens," <u>Stamford Advocate</u>, 3 July 1938, p. 1.

⁵Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

Merritt Parkway, Long Ridge Road/Route 104
Bridge

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was built. In 1973, the interchange's on and off ramps were modified, seven years later the ramps were widened and extended.⁶

BRIDGE DESCRIPTION

The Long Ridge Road Bridge is a single-span, reinforced-concrete, barrel-type rigid-frame bridge spanning 52'. Parallel wing walls form the approach for the overpass. The Merritt Parkway travels over the bridge at a skew of 40-55'-45" with a clear roadway of 60'.

The rigid-frame design allows the engineer to decrease the structural material at the center of the span, thus forming an arched opening. (See the Merritt Parkway History Report, HAER No. CT-63, for a more detailed description of the rigid-frame.) The intrados of the span rises almost 39" from the springline to the crown, while the extrados remains horizontal from the knee to the crown. The frame thickness at the crown is 18". The outside of the knee is notched, and the inside of the knee is a corner with an obtuse angle. The frame leg thickness increases from 2'-5" at the base to 4'-3" at the knee. The exposed face of the legs remains vertical, and the hidden face slopes away from the roadway.

The Art Deco detailing of the bridge is nearly identical to that on the South Avenue Bridge in New Canaan. The stepped pylons feature precast panels resembling fountains. Each panel consists of four cast pieces that were placed in the pylon formwork. The quarter sunbursts on each side of the pylons consist of three cast pieces. The handrail is a series of rotated square posts, closely set, without a horizontal railing.

⁶Long Ridge Road/Route 104 Bridge, DOT #104; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

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An historic photograph shows the precast a darker color than the bridge concrete. Presently, the ornament is not distinctly different from the bridge in color, but its surface is smoother.

BIBLIOGRAPHY

- Hurd, D. Hamilton. <u>History of Fairfield County. Connecticut</u>. Philadelphia: J. W. Lewis Co., 1881.
- Russell, Wayne. "That Special Blend--Stamford's Melting Pot." Stamford Past and Present, 1641-1976. Stamford: Stamford Bicentennial Committee, 1976.
- Stamford Bicentennial Committee. <u>Stamford Past and Present</u>, 1641-1976. Stamford: Stamford Bicentennial Committee, 1976.

Stamford Advocate. 1937-1939.

- Department of Transportation: Wethersfield, CT. This includes construction drawings, copies of which are in the HAER field records.
- ------. Bridge Maintenance File. Engineering Department, Connecticut Department of Transportation: Newington, CT.

PROJECT INFORMATION

This recording project was undertaken by the Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) Division of the National Park Service, Robert J. Kapsch, Chief. The Merritt Parkway recording project was sponsored and funded by the Connecticut Department of Transportation (ConnDot) and the Federal Highway Administration.

The fieldwork, measured drawings, historical reports and photographs were prepared under the general direction of Eric N. DeLony, HAER Chief, and Sara Amy Leach, HABS Historian.

The recording team consisted of Jacqueline A. Salame (Columbia University), architect and field supervisor; Mary Elizabeth Clark (Pratt Institute) and B. Devon Perkins (Yale University), architectural technicians; Joanne McAllister-Hewlings (US/ICOMOS-Great Britain, University of Sheffield), landscape architect; Corinne Smith (Cornell University), engineer; Gabrielle M. Esperdy (City University of New York) and Todd Thibodeau (Arizona State University), historians; and Jet Lowe, HAER photographer.