Merritt Parkway, Clinton Avenue/North Clinton Avenue Bridge
Spanning the Merritt Parkway at the 21.41 mile mark
Westport
Fairfield County
Connecticut

HAER No. CT-100

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
U.S. Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

Merritt Parkway,
Clinton Avenue/ North Clinton Avenue Bridge

HAER No. CT-100

Location:	Spanning the Merritt Parkway at the 21.41 mile mark in Westport, Fairfield County, Connecticut UTM: 18.637270.4557970 Quad: Westport, Connecticut
Construction Date:	November 1940
Engineer:	Connecticut Highway Department
Architect:	George L. Dunkelberger, of the Connecticut Highway Department, acted as head architect for all Merritt Parkway bridges.
Contractor:	Mariani Construction Company New Haven, Connecticut
Present Owner:	Connecticut Department of Transportation Wethersfield, Connecticut
Present Use:	Used by traffic on the Clinton Avenue/North Clinton Avenue to cross the Merritt Parkway
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 1648, five settlers migrated west from the town of Fairfield and established homesteads along the Saugatuck River. Residents of Fairfield referred to this region as Green's Farms, because of John Green who settled there. The church referred to this region as the West Parish of Fairfield.[1]

For the next century this rural community grew slowly. By the late 1700s the town was known as Saugatuck. In 1806, schooners started making weekly runs between Saugatuck and New York City. The town developed into a shipping center, with two shipyards. This was due in large part to the Saugatuck River which was navigable farther inland than any other stream in Fairfield County.[2]

In 1824, the parish of Saugatuck presented a petition of civic independence to Fairfield's town leaders. In 1835, the Connecticut legislature created the town of Westport from parts of Fairfield, Norwalk, and Weston.[3]

The arrival of the New York, New Haven, and Hartford Railroad in 1849, further bolstered the economy. "The building of the railroad ushered in a new era. The wharves along the Saugatuck disappeared as did the vessels that had for many years docked beside them. When the new railroad station for Westport was built, several factories opened in the vicinity."[4] Westport remains a manufacturing center to the present day.

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[1]Julie Haggeman, "Founding of West Parish of Fairfield." (Manuscript, Westport Public Library Vertical File), 1.

[2]Robert Adams, "Saugatuck History," (Manuscript, Westport Public Library Vertical File, 1968).

[3]Haggeman, 3.

[4]"Westport, Connecticut, a preliminary directive plan," prepared by the Section of City Planning, Department of Architecture, School of the Fine Arts, Yale University, 1947.

The completion of the Merritt Parkway enabled Westport to also become a bedroom community for New York City. Residents actively encouraged construction of the parkway in their town, especially when it appeared that the Merritt might follow a more northerly route through the communities of Wilton and Weston. Conflict did arise as the roadway was being constructed. Local business leaders were concerned that there would not be enough exits to give motorists access to Westport's commercial district. These fears were alleviated when the second section of the parkway to open, ended at Weston Road/Route 57, depositing all traffic onto Main Street. Civic leaders were then distressed by the congestion this generated in the business district. The problem was solved when the next link of the parkway opened to the Huntington Turnpike.[5]

BRIDGE CONSTRUCTION HISTORY

Clinton Avenue traverses the few blocks from Main Street to Ford Road. The Merritt Parkway was not originally designed to have a bridge at Clinton Avenue. Plans show a parallel road being built to Weston Road. Local residents became upset and demanded that Clinton Avenue have a bridge.[6]

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[5]"Westport Wants Entrance at Cross Highway, But Fairfield Opposed," Westporter-Herald, 18 November 1938, p. 1.

"The Newest Plan is For Traffic Leaving Parkway to Use Wilton Road; Those Entering Go Thru Narrow Main Street," Westporter-Herald, 9 December 1938, p. 1.

"Chamber of Commerce to Petition for Routing of Parkway Traffic Via Compo Road," Westporter-Herald, 10 January 1939, p. 1.

"Westport Chamber of Commerce Wants Traffic From Merritt Diverted Somewhere Besides Main Street," Westporter-Herald, 13 January 1939, p. 1.

"Cox Promises to Examine Ramp Issue." Westporter-Herald, 24 January 1939, p. 1.

[6]"Cox Suggests That a Parallel Road be Built Between Clinton Avenue and Weston Road," Westporter-Herald, 2 December 1938, p. 15.

"Clinton Avenue Residents Opposed to Parallel Road, Want Bridge Over Merritt Parkway as Soon as Possible," Westporter-Herald, 13 December 1938, p. 1.

The Osborn-Barnes Construction Company of Danbury, CT, received the contract to grade the Merritt Parkway from the Newtown Turnpike to North Avenue, in Westport (ConnDot project #180-55). While the Clinton Avenue Bridge is located within this section of the Merritt, the bridge contract went to the Mariani Construction Company of New Haven, CT (ConnDot project #180-71).[7] The bridge cost $57,123 and was under construction from April 28, 1939, to January 3, 1940.[8] The paving work for this region of the Merritt extended from the Newtown Turnpike to Easton Road/Route 136, in Westport. This contract was assigned to the A. 1. Savin Company of East Hartford, CT (ConnDot project# 180-100).

In 1988, all loose and spalling concrete was removed from the Clinton Avenue/North Clinton Avenue Bridge, then it was patched, sealed, and painted (ConnDot project #173-107). Precast panels near the top of each pylon were covered over during rehabilitation (see HAER photograph No. CT-100-1).[9]

BRIDGE DESCRIPTION

The Clinton Avenue Bridge is a single-span deck bridge comprising four steel rigid frames that span 89'-6". Parallel wing walls form the approach for the underpass. The Merritt Parkway travels under the bridge at a skew of 31°-40'-45".

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[7]Contract Card File, Map File and Engineering Records Department, Connecticut Department of Transportation, Wethersfield, CT.

[8]Clinton Avenue/North Clinton Avenue Bridge, DOT #729; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

[9]Clinton Avenue/North Clinton Avenue Bridge, DOT # 729; Bridge Maintenance File.

Spaced 11'-6" on center, the frames support a 9-1/2" thick reinforced-concrete slab. 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 4'-9-1/2" from the springline to the crown, while the extrados rises a few inches from the knee to the crown. The frame thickness at the crown is 27". The inside face of each leg remains vertical for a height of 16' above the footing, while the outside face slopes to thicken the leg from 3'-6" at the bottom to 6'-9" at the knee. A triangular heel placed at the base of each leg increases the bearing area. The legs of the frame, encased in concrete pilasters at the abutments, bear on a rectangular, reinforced-concrete footing and are attached to it with a combination of anchor bolts and swedge bolts.

The steel frames are I-sections built up from 6" equal leg angles covered with plates for flanges and 1/2" thick plates for webs. All flange and web pieces are connected with 7/8" diameter rivets. Web stiffeners on each side of the web are equally spaced across the span. Channel sections serve as cross braces for adjacent frames. Originally the steel frames were painted tan; now they are drab green.

The pylons of the Clinton Avenue Bridge resemble fortress towers, with their polygonal shape and protruding drain spouts in each face. Two of these drains are "just false,"[10] but the center one was designed as a working drain. The pylons are faced with precast panels with stony creek granite aggregate. At the top of each face is a 1/2"-thick precast panel with a geometric panel of diamonds cast with red vitreous "reflectolite" aggregate. The exposed faces of the frame legs are faced with the granite-

[10]George L. Dunkelberger, "Highway Architecture," Connecticut Society of Civil Engineers Annual 12 (1942): 112.

based precast panels also. The bridge has been covered with a cream-colored coating that hides the red details and the granite texture.

The wrought iron railing across the bridge span is composed of 8'-8" long panels between square posts. Eacb panel comprises three sections. The end sections feature an X-shaped pattern and the middle section resembles the Connecticut coat of arms. All elements of the railing are stock ornaments and bars available througb catalogs. The railing is painted white, but rust is badly decomposing some parts of it.

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———. Contract Card File. Map File and Engineering Records Department, Connecticut 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.