

Merritt Parkway, Saugatuck River Bridge
Spanning the Saugatuck River at the 21.19 mile mark
on the Merritt Parkway
Westport
Fairfield County
Connecticut

HAER No. CT-99

HAER
CONN,
1-WESPO,
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
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HISTORIC AMERICAN ENGINEERING RECORD

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Location: Spanning the Saugatuck River at the 21.19 mile mark on the Merritt Parkway in Westport, Fairfield County, Connecticut

UTM: 18.636950.4557970
Quad: Westport, Connecticut

Construction Date: November 1938

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 Merritt Parkway to cross the Saugatuck River

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.

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

Originating in Danbury, the Saugatuck River is the largest natural feature that the Merritt spans. Hence, the Saugatuck River Bridge was the largest and most costly structure on the parkway. Leslie Sumner, the Connecticut Highway Department's engineer of bridges and structures, called it, "the most important and difficult job on the parkway."⁶

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

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 Leslie G. Sumner, "Bridges on the Merritt Parkway," Engineering News-Record 119 (23 September 1937): 505.

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#180-55). While the Saugatuck River Bridge is located within this section of the Merritt, the bridge contract went to the Mariani Construction Company of New Haven, CT (ConnDot project #180-89).⁷ The bridge cost \$171,039 and was under construction from December 10, 1937, to November 11, 1938.⁸ The paving work for this region of the Merritt extended from the Newtown Turnpike to Easton Road/Route 136, in Westport. This contract was awarded to the A. I. Savin Company of East Hartford, CT (ConnDot project# 180-100).

In 1990, the Saugatuck River Bridge required extensive rehabilitation. The deck was replaced and widened from 66'-6" to 70'-4". The balustrade and brackets were eliminated and replaced by a concrete parapet with curbs and a steel railing. All spalling concrete was removed and patched on the piers and fascia struts. Sections of the top and bottom lacing bars were replaced and the metal arches were painted (ConnDot project #89-91).⁹

BRIDGE DESCRIPTION

The Saugatuck River Bridge comprises a 130'-long, steel-arch bridge and two 57'-long concrete approaches. The main span is composed of three arches that are attached with 6"-diameter pins to cast-steel shoes at the foundation. Rising 30' over the river, each arch is composed of two built up I-sections, 42" deep, laced together top and bottom.

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

⁸ Saugatuck River Bridge, DOT #728; Bridge Maintenance File, Engineering Department, Connecticut Department of Transportation, Newington, CT.

⁹ Saugatuck River Bridge, DOT #728; Bridge Maintenance File.

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Spandrel columns, spaced 10' on center along each arch, are built up from four angles and a plate to form a 2' deep I-section. At each column each arch is braced, perpendicularly and diagonally, to the adjacent arch with a 42" deep truss built up from double angle chords and lacing bar webs. Columns in similar positions on the three arches support a 24" deep wide-flange beam which, in turn, supports the concrete deck for the 60' clear roadway of the Merritt Parkway. Adjacent columns on adjacent arches are cross-braced with angles. Adjacent columns on the same arch are connected at the top by a strut with an arched bottom chord.

This arched opening is repeated in concrete between all adjacent reinforced-concrete piers on the approaches. The three rows of battered piers step up the river bank, spaced 20' on center. Their pedestals are supported on steel piles and connected at ground level by a grid of 3' wide by 4' deep grade beams. The pedestals of the first row support the arch pins.

The handrail across the bridge span and the approaches comprises a concrete parapet with a single steel railing. The original handrail was composed of two steel pipe rails connected by twisted bar balusters.

BIBLIOGRAPHY

Adams, Robert. "Saugatuck History." Manuscript, Westport Public Library Vertical File, 1968.

Dort, Wakefield. Westport in Connecticut's History. Bridgeport: Warner Bros. Co., 1935.

Haggeman, Julie. "Founding of West Parish of Fairfield." Manuscript, Westport Public Library Vertical File.

Sumner, Leslie G. "Bridges on the Merritt Parkway." Engineering News-Record 119 (23 September 1937): 501-506.

Westporter-Herald. 1938-1939.

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- . "Westport, Connecticut, a preliminary directive plan." Prepared by the Section of City Planning, Department of Architecture, School of the Fine Arts, Yale University, 1947.
- . 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.