

NEW YORK STATE BARGE CANAL, FAIRPORT LIFT BRIDGE
(Erie Canal, Fairport Lift Bridge)
Main Street
Fairport
Monroe County
New York

HAER NY-456
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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

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NEW YORK STATE BARGE CANAL, FAIRPORT LIFT BRIDGE Erie Canal, Fairport Lift Bridge

HAER No. NY-456

Location: Main Street, Fairport, Monroe County, New York

The Fairport Lift Bridge is located at latitude: 43.101632, longitude: -77.441954. The point represents the center of the bridge and was obtained in 2009. There is no restriction on its release to the public.

Significance: The Fairport Lift Bridge, located on the Erie Canal, is a component of the nationally significant New York State Barge Canal. It is one of sixteen such bridges constructed between Fairport and Lockport.

Description: The sixteen vertical-lift bridges on the Erie Canal are Warren pony trusses raised by an electrically-driven system of cables, counterweights, and sheaves. As described in the New York State Barge Canal National Register nomination, “the moveable truss is supported by vertical lifting frames at either end. When the bridge is ‘down’ the lifting frames retract into the pits” located behind the bridge abutments. “The bridge is raised by cables that run from fixed anchor points at the top of the pits, down around sheaves at the bottom of the lifting frame, back up to sheaves at the top of the pit, and down to cast concrete counterweights. When the counterweights sink into the pits...the cables pull the lifting frames upward by the sheaves at their lower corners.” Each bridge has a control tower, with the motors and gearing generally located in the pit nearest to the tower.¹

The Fairport Lift Bridge carries Main Street across the Erie Canal at a 32-degree skew and on a 4 percent grade.² The truss sits on concrete abutments and is 171' long overall and 37' wide between curbs. The bridge weighs 685,909 pounds and can be raised from its lower clearance of 6' to 15.75' in 45 seconds by a pair of 27-horsepower AC motors. The machinery pits are covered with cross-hatch plate covers. Riveted-steel stairways at either end of the east side of the bridge provide pedestrian access even when the bridge is raised. The pedestrian walkway is lined with a decorative steel balustrade.

As noted in the 1914 *Annual Report*, to accommodate the difference in grade, “integral with the truss is a girder connection and cantilevered approach to West Avenue at right angles to the main structure.”³ This cantilevered section was later removed, and West Avenue rerouted.

¹ Duncan Hay, “New York State Barge Canal,” National Register of Historic Places Registration Form, 2014, Section 7, Pages 21-22.

² Description of current conditions is based on a site visit made by the HAER recording team in summer 2009, and Michele McFee, *A Long Haul: The Story of the New York State Barge Canal* (Fleischmanns, NY: Purple Mountain Press, 1998), 123.

³ *Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1913, Vol. 1* (Albany: J.B. Lyon Company, 1914), 301.

The control tower is located on the south bridge approach. It is a two-story frame building clad in horizontal board siding with an irregular, five-sided roof covered with asphalt shingles. There are vinyl casement windows. It appears to be in good condition.

History: Fairport Lift Bridge was built under Contract 63, awarded to H.S. Kerbaugh Inc. of Philadelphia, Pennsylvania, on June 13, 1910. This contract covered 12.22 miles of the canal from Wayne County to Kings Bend. The lift bridge was completed in 1913 and operated with two 27-horsepower electric motors run with current from a municipal plant.⁴

In 1957 the Fairport Chamber of Commerce proposed removing the bridge because when it is in the raised position, it blocks two streets. Public outcry defeated the proposal.⁵

Sources:

Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1913, Vol. 1. Albany: J.B. Lyon Company, 1914.

Hay, Duncan. "New York State Barge Canal." National Register of Historic Places Registration Form, 2014.

McFee, Michele. *A Long Haul: The Story of the New York State Barge Canal.* Fleischmanns, NY: Purple Mountain Press, 1998.

Series B1762, New York State Archives, Albany, New York. "Western Division, Erie Canal, Section 9, Sta. 1866 to Sta. 1901," approved December 29, 1922, 71.

Historians: Laura S. Black and Jami Babb, summer 2009

Project Information: The Historic American Engineering Record (HAER) is a long-range program that documents and interprets historically significant engineering sites and structures throughout the United States. HAER is part of Heritage Documentation Programs (Richard O'Connor, Manager), a division of the National Park Service, United States Department of the Interior. The New York State Barge Canal Survey was undertaken in summer 2009 in cooperation with the Erie Canalway National Heritage Corridor (ERIE), Beth Sciumeca, Executive Director. Justine Christianson, HAER Historian, and Duncan Hay, ERIE, served as project leaders. The staff of the New York State Canal Corporation provided access to the sites. Craig Williams of the New York State Museum provided research materials and assistance. The HAER field team consisted of Jami Babb and Laura Black.

⁴ *Annual Report, 1913*, 301.

⁵ McFee, 123.

Appendix: Images of Current Conditions



Image 1: Elevation of Fairport Lift Bridge with control tower at left. Field photograph taken by HAER recording team, summer 2009.



Image 2: Control tower and pedestrian access stairs. Field photograph taken by HAER recording team, summer 2009.



Image 3: Looking south. Field photograph taken by HAER recording team, summer 2009.