

NEW YORK STATE BARGE CANAL, LOCK E28B
(Erie Canal, Lock E28B)
Clinton Street
Newark
Wayne County
New York

HAER NY-445
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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, LOCK E28B (Erie Canal, Lock E28B)

HAER No. NY-445

Location: Clinton Street, Newark, Wayne County, New York

Lock E28B is located at latitude: 43.0466121, longitude: -77.0842482. The point represents the lockhouse and was obtained in 2009. There is no restriction on its release to the public.

Significance: Lock E28B, located on the Erie Canal, is a component of the nationally significant New York State Barge Canal. It is also significant for its powerhouse, which is one of only seven on the system that retains the original operating equipment.

Description: Lock E28B is located 4 miles west of Lock E28A.¹ The lock site is accessed by an asphalt road that leads to a small gravel parking area. The Lock E28B site includes the lock and associated structures, powerhouse, lockhouse, and garage. Enlarged Erie Canal Lock 59 (also called the Upper Lockville Lock) is south of Lock E28B on the opposite side of Clinton Street.

Lock E28B has a 12' lift with to the west normal pool elevations of 418' below and 430' above. The concrete chamber walls are severely spalling, and there is encroaching vegetation. Some sections have cast-iron quarter-round coping. Portions of the wall were being replaced at the time of the fieldwork. There are double-leaf, steel miter lock gates at each end of the chamber operated by spars and gear trains powered by DC electro-mechanical gate machinery. The flow of water through the culverts in the chamber walls is controlled by valves also operated by DC electro-mechanical machinery. Control stand shelters are located on the south side of the chamber at the upstream and downstream corners. These shelters are single-story frame structures with horizontal fiber-cement siding. They have gable-front asphalt roofs, sliding windows, and pane-and-panel doors. Concrete-filled cast-iron bollards on concrete pads line either side of the chamber, and there is pipe railing surrounding the public access side of the lock. Historic light fixtures illuminate the chamber. The lock and control stand shelters are in good condition. A steel lattice cable bridge spans the center of the lock and is overall in good condition. Concrete stairs with pipe railings are located at the downstream end of the lock and are in poor condition due to severe spalling and breakage.

The powerhouse, located at the southwest corner of the lock chamber is a single-story concrete building on a concrete foundation. The hipped roof is covered with asphalt shingles and has a brick chimney. The building has nine-over-nine-light wood windows on the bottom floor, while the bays under the eaves have been filled in. A modern wood door with a four-light transom provides access to the powerhouse. The original water turbines, DC generators, governors, electrical control panels, and crane are extant. The powerhouse is in good condition.

¹ Description of current conditions is based on a site visit made by the HAER recording team in summer 2009.

The lockhouse is a single-story concrete building on a concrete foundation located on a terrace to the south of the powerhouse. The hipped roof is covered with asphalt shingles, and there is a concrete chimney. The lockhouse has six-over-six-light wood windows with steel mesh coverings. The entrances are wood pane-and-panel doors. The lockhouse is in good condition.

Located on a terrace to the south of the lockhouse is the garage, a modern single-story frame structure on a concrete slab foundation. The building is clad in vertical board siding. The offset side-gable roof is covered with asphalt shingles. There are wood hinged double doors and awning windows. The non-contributing garage is in good condition.

The guide walls are all in fair condition. The northwest and northeast guide walls are scored concrete, with the areas nearest the lock gate exhibiting heavy spalling and breaking. Concrete-filled cast-iron bollards on concrete pads are located away from the walls, which are illuminated by historic light fixtures. The southeast guide wall has some sections of newer concrete while others (such as that nearest the lock gate) exhibit severe spalling and breakage with some encroaching vegetation. Metal ladders have been inlaid in the concrete, and concrete-filled cast-iron bollards on concrete pads are set back from the wall's edge. Finally, the southwest guide wall is also a mixture of old and newer concrete. Concrete-filled cast-iron bollards line the wall.

South of Lock E28B is the remnants of Lock 59 from the Enlarged Erie Canal. This was a double chamber lock that had cut stone walls, although some concrete sections were added later. A storage shed is located next to this lock. The single-story frame building clad in shiplap siding sits on a concrete foundation. It has a gable-front roof covered with wood shakes. Fenestration consists of a six-light wood window and one window bay that has been closed in with wood planks. A pane-and-panel wood door with the original glazing covered with plywood provides access to the structure. The shed is in good condition.

History: Lock E28B was built as part of Contract 76, which covered the canal from a point near the West Shore Railroad crossing at East Newark to a point about ½ mile east of Port Gibson for a total distance of 5.77 miles. This was let to T.A. Gillespie Company of New York on December 23, 1910, with C.D. Murray, State Assistant Engineer, overseeing it. The contractor started work in February 1911 and by 1915 had finished the lower approach and the lock.²

Construction of the power plant was completed by MacArthur Brothers Co. & Lord Electric Co. as part of Contract 94, a large contract that included the electrical equipment and machinery for locks E26, E27, E28A, E28B, E29, E30, E32, E33, E34, E35, and guard locks. The contract was awarded in February 1913. By 1915, the *Annual Report* stated the tile roof had been placed on the powerhouse, and the traveling crane and capstan controller cabinets installed and tested. In

² *Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1911, Vol. 1* (Albany: J.B. Lyon Company, 1912), 178-79; and *Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1912, Vol. 1* (Albany: J.B. Lyon Company, 1913), 232.

addition, the gate machinery, turbine governors, pumps, turbines, and gate, valve, and capstan controller cabinets and panels had been assembled and installed.³

Later work and repairs at the site included unwatering the lock for an overhaul in 1943 and repairing the turbines that same year. The lock was again overhauled in 1957.⁴

Sources:

Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1911, Vol. 1. Albany: J.B. Lyon Company, 1912.

Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1912, Vol. 1. Albany: J.B. Lyon Company, 1913.

Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1915, Vol. 1. Albany: J.B. Lyon Company, 1916.

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

Series B1762, New York State Archives, Albany, New York. "Western Division, Erie Canal, Section 8, Sta. 6805 to Sta. 6840," approved December 29, 1922, 35.

State of New York, Department of Public Works. *Annual Report of the Superintendent for the Year 1943.* Albany: Williams Press, Inc., 1944.

_____. *Annual Report 1957.* Albany: s.n., 1958.

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.

³ *Annual Report of the State Engineer and Surveyor of the State of New York for the Fiscal Year ended in September 30, 1915, Vol. 1* (Albany: J.B. Lyon Company, 1916), 297.

⁴ State of New York, Department of Public Works, *Annual Report of the Superintendent for the Year 1943* (Albany: Williams Press, Inc., 1944), 46, 51; State of New York, Department of Public Works, *Annual Report 1957* (Albany: s.n., 1958), 81.

Appendix: Image of Current Conditions



Image: Overview of lock with the powerhouse on the chamber wall, followed by the lockhouse, and the garage on the highest terrace. Field photograph taken by HAER recording team, summer 2009.