

NEW HAVEN RAIL YARD, WORK EQUIPMENT SHOP  
(Wheel & Truck Shops)  
Vicinity of Cedar & Lambertson Streets  
New Haven  
New Haven County  
Connecticut

HAER CT-160-B  
*CT-160-B*

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD  
PHILADELPHIA SUPPORT OFFICE  
National Park Service  
U.S. Department of the Interior  
U.S. Custom House, 3rd Floor  
200 Chestnut Street  
Philadelphia, PA 19106

## HISTORIC AMERICAN ENGINEERING RECORD

### NEW HAVEN RAIL YARD, WORK EQUIPMENT SHOP (Wheel and Truck Shops)

HAER No. CT-160-B

- Location:** Vicinity of Cedar and Lamberton Streets  
New Haven  
New Haven County, Connecticut
- USGS New Haven Quadrangle, UTM Coordinates:  
18.673450.4573100
- Date of Construction:** 1946
- Contractor:** J. W. Bishop Company
- Present Owner:** Connecticut Department of Transportation  
2800 Berlin Turnpike  
Newington, Connecticut 06131
- Present Use:** Vacant; formerly service of work equipment, then wheels and trucks
- Significance:** The Work Equipment Shop recalls the increased investment in the New York, New Haven and Hartford Railroad's facilities in the period immediately following World War II. In addition to this shop, the railroad used some of the money it had earned in wartime service to build large new buildings for the General Stores department and for diesel maintenance. The steel framing of the shop is typical of mid-twentieth century industrial construction.
- Project Information:** The rail yard is being reconfigured to provide for improved operation of commuter and Amtrak Northeast Corridor trains and to provide a storage yard for commuter equipment. The building, unused and in poor condition, will be demolished. This documentation was undertaken pursuant to a Memorandum of Agreement among the Federal Transit Administration, the Federal Railroad Administration, the National Railroad Passenger Corporation, the Connecticut Department of Transportation, the Connecticut State Historic Preservation Office, and the Advisory Council on Historic Preservation.
- Bruce Clouette  
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**NEW HAVEN RAIL YARD, Work Equipment Shop  
(Wheel and Truck Shops)  
HAER No. CT-160-B  
(page 2)**

**Description**

The Work Equipment Shop is a steel-framed building measuring 80' x 456' in plan, with its major axis oriented in an approximately north-south direction. The brick-walled north part of the building, 196' long, consists of an east half which is a single tall story in height, open on the interior to the roof some 36' above floor level, and a flat-roofed two-story west part; it is currently known as the Truck Shop. The south part of the building, currently known as the Wheel Shop, is 260' long and consists of two parallel gable-roofed portions, the equivalent of two stories high, with an exterior covering of corrugated metal above a 4'-high brick wall. The whole building rests upon a poured-concrete slab foundation. In addition to these two parts, built as one episode in 1946, there is a 90' x 116' steel-framed gable-roofed structure appended to the north elevation in 1960; formerly used for storage of metal, the addition has corrugated fiberglass panels on the upper part of the east and west elevations.

The east half of the north part of the building, the current Truck Shop, is essentially an enclosure for a huge traveling crane. Rolled I-beam columns measuring 8" x 21" support a pair of longitudinal beams that serve as the rails for the crane and also as the building's structural frame. Smaller I-beam columns support Warren-type riveted roof trusses built up of angles and T-sections; the trusses are spaced approximately 20' on center. Two sets of rails are set into the concrete floor; the east tracks include a repair pit at the north end of the building. The north wall of this portion has two large openings for the tracks fitted with double doors. The east wall has 30-light steel industrial sash windows with a center pivot section. Paired six-light windows fill the area at the top of the east and west walls, between roof trusses. The roof consists of steel purlins, wood decking, and roll-asphalt covering.

The west half of the north section has much of its first floor open to the east half, where a few machine tools remain in place. In addition, portions of this part are partitioned off for offices and tool storage. The second floor is enclosed from the adjacent shop space and is mostly devoted to a welding shop, with rows of metal-topped tables indicating arc-welding tool place. The west elevation is divided into twenty bays, each with a twenty-light steel window on each story. This portion has a flat built-up roof concealed behind a low parapet.

Major tools remaining in the north part of the building include Cincinnati-Bickford and Carleton radial-arm drills, a shears marked "W.A.B. Co.," and two wheel presses, one made by the W.A.B. Company and the other missing its maker's plate.

A brick wall with a sliding metal-clad door and a larger opening fitted with a roll-up door separates the Truck Shop from the Wheel Shop, which occupies the south portion of the building. The interior is completely open, with a two parallel rows of built-up I-section columns down the center, about 4' apart (this portion of the building was constructed using two parallel portions from the steel frame of an earlier structure). The Warren-type riveted roof

**NEW HAVEN RAIL YARD, Work Equipment Shop  
(Wheel and Truck Shops)  
HAER No. CT-160-B  
(page 3)**

trusses, built up of angles, are spaced about 20' on center; they include diagonal sway braces between the lower chord and the I-beam columns. There are no tracks currently visible in the poured-concrete floor. The roof consists of corrugated metal sheets, with similar material applied to the exterior of the building. There are two large rectangular doorways on the south end elevation. The side elevations consist of twenty-six bays, each with paired nine-light steel windows on each level. On the east elevation, there are four large doors that open onto a series of parallel stub tracks.

Major tools remaining in the south part of the building include Ingersoll-Rand, Consolidated Machine Tool, and Niles wheel lathes and Farrell and Consolidated Machine Tool axle lathes.

### **Historical Background**

The shop was built in 1946 for the maintenance of the New York, New Haven and Hartford Railroad's cranes, snow plows, flangers, and other work equipment. It provided a much larger facility than the shop it replaced, which was the 1888 Freight Car Shop, occupied by the Maintenance of Way department since about 1930. The contract, worth \$221,800, called for the J. W. Bishop Company of Boston, Massachusetts, to complete the building within 140 days of signing, which took place on September 14, 1945. The north, brick-walled part was built new, but the south part of the building was constructed by moving an early twentieth-century Multiple-Unit Car (MU) storage building from Stamford, Connecticut, to New Haven. The MU building had been 40' wide by 520' long, so it had to be doubled up to achieve the 80' width needed for the new shop.

The J. W. Bishop Company, which also had offices in Providence, Worcester, and New York, built or remodeled many of the New Haven Railroad's buildings in this period.

The building continued in use for the maintenance of work equipment until 1959-1960, when the railroad invested some \$400,000 for new machines, a new overhead crane, and material conveyors to make it into an up-to-date shop for servicing wheels and trucks. By this time, the New Haven Railroad had closed other major shops such as those at Van Nest in New York City and Readville, outside Boston, so the New Haven shop complex once again became the railroad's principal service facility. The open addition at the north end was added at this time and was originally used for car-jacking, that is, raising up cars so that the trucks could be removed from underneath them.

**NEW HAVEN RAIL YARD, Work Equipment Shop  
(Wheel and Truck Shops)  
HAER No. CT-160-B  
(page 4)**

**Significance**

The Work Equipment Shop reflects the railroad's ongoing investment in its New Haven shop facilities. In the postwar period, the New Haven Railroad had a sizable fleet that potentially would have required the services of the Work Equipment Shop. The roster of February 1, 1953<sup>1</sup>, for example, listed over 700 pieces of rolling stock assigned to work service, including

- 54 cranes and derricks
- 10 snow plows
- 35 snow flangers
- 5 ice melters
- 25 air dump cars
- 6 Jordan spreaders
- 4 pile drivers
- 16 ice cars
- 69 oil, water, and tank cars
- 79 hoppers and gondolas
- 49 crew cars
- 155 flat cars
- 190 box cars

Some of this equipment was specific to the New Haven's need to maintain the electrified New Haven to New York route, which was equipped with overhead catenary. "Wire trains" consisting of crew cars, box cars for tools and materials, and special flatcars with folding scaffolding allowed work on the catenary.

The New Haven Railroad carried a tremendous amount of freight during World War II, and so it was in a good financial position to afford the purchase of new engines and rolling stock and the construction of new buildings. The railroad ordered more than 200 stainless-steel-sided streamlined cars to upgrade its passenger service, and the purchase of more than a hundred diesel engines allowed the railroad to eliminate steam locomotives within a few years. The postwar acquisition program also included seven new work cranes. In addition to the Work Equipment Shop, contracted for just a few weeks after the cessation of hostilities, the railroad in the late 1940s built a new nine-story office building, a large warehouse for the General Stores department, and a huge shop to service diesel engines, all in New Haven.

The Work Equipment Shop, both in the re-used part and in the part built new in 1946, reflects the dominance of steel-framed construction for twentieth-century industrial buildings. Steel

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<sup>1</sup>David R. Sweetland and Stephen Horseley, *NH Color Guide to Freight and Passenger Equipment* (Edison, NJ: Morning Sun Books, Inc., 1995), 87.

**NEW HAVEN RAIL YARD, Work Equipment Shop  
(Wheel and Truck Shops)  
HAER No. CT-160-B  
(page 5)**

skeletons could be erected relatively quickly, and their nonbearing curtain walls allowed for large windows to illuminate the interior. As demonstrated by the re-use of the Stamford MU building, the structural system could also be dismantled and re-used elsewhere as circumstances changed. All of the New Haven's postwar shop buildings followed the pattern set down in the east half of the new part of the Work Equipment Shop: steel-framed structure, open floor plan, poured concrete floor, and a high-capacity overhead bridge crane that ran the length of the building. This arrangement was also employed in steel fabrication plants, brass mills, and other industrial settings that manufactured or serviced large objects or required heavy machinery.

### **Bibliography**

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