

WASHBURN & MOEN MANUFACTURING COMPANY,
QUINSIGAMOND IRON & WIRE WORKS, WIRE ROPE BUILDING
(Washburn & Moen Manufacturing Company, South Works, Wire
Rope Building)
760 Millbury Street
Worcester
Worcester County
Massachusetts

HAER MA-134-A
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
NORTHEAST REGIONAL 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

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Location: 760 Millbury Street
Worcester
Worcester County, Massachusetts

UTM Coordinates: 19.269161.4679696
USGS Quadrangle: Worcester South, Massachusetts

Date of Construction: 1886 - 1910

Engineer: Unknown
Architect: Unknown

Present Owner: Rome Building Products, Inc. (Sam Jay Realty Trust)

Present Use: Vacant

Significance: This building is significant as one of three remaining buildings of the Washburn & Moen Manufacturing Company's Quinsigamond Iron & Wire Works, or South Works, complex. From 1886, or slightly earlier, to the mid 1930s, it housed the manufacture of wire rope. The building's brick exterior construction with segmental arch windows, arched loading doors and corbelled brick cornices and its internal post and beam structural system are typical of late nineteenth century mill buildings.

Project Information: This documentation was undertaken as a mitigation measure in compliance with the 1994 Memorandum of Agreement between the Massachusetts State Historic Preservation Office and the Federal Highway Administration in connection with the construction of the Route 146/ Massachusetts Turnpike Interchange Project. This documentation was prepared between 1995 and 2000 by:

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Wire Rope Building

The Wire Rope Building is a composite of several brick-walled industrial structures, the earliest of which was constructed between 1886 and 1892 parallel to the Providence & Worcester Railroad mainline. The irregular shape of the present Wire Rope Building was dictated by its site, which is bounded by the Blackstone River to the south, the Providence & Worcester Railroad to the west, a railroad spur line and Millbury Street to the northeast and Millbury Street to the southeast. By 1910, additions and modifications to the original structure, which may have included partial demolition and re-construction, had resulted in the existing configuration of the building – roughly that of a two-story ten bay wide central block flanked on two sides by long one-story wings. As additions were made to the building, original exterior walls became interior walls. This is particularly evident where the 1905-1910 addition adjoins the south wall of the two-story central block. Each of the two building “wings” has a basement while the two-story central block does not.

The various sections of the Wire Rope Building present a stylistically harmonious exterior. The buildings are of various similar shades of red brick laid in a common bond pattern and the segmental arch window openings have granite sills. The walls sit on a granite base or water table typical of industrial structures of their period and terminate in corbelled denticulated brick cornices. In some sections of the wall facing the railroad tracks there are brick-faced stone foundations as well. The *ca.* 1905 – 1910 addition along Millbury Street has an exposed concrete water table in-lieu of granite on the earlier sections. The older sections of the building have flat roofs, while the addition has a wood-frame, saw-tooth roof with seven roof lights. Many windows have been replaced, though some original twelve-over-twelve double-hung sash remain. Basement windows in the remaining portion of the *ca.* 1886-1892 structure are fitted with four-over-four wood sash.

There are four loading dock openings in the two story central block of the Wire Rope Building’s long west façade, facing the Providence and Worcester Railroad. Three of the openings are round arched, one has a segmental arch and all have wood doors. These openings were served by a rail spur and siding off the mainline, one for on- and off-loading into the building and the second as a siding. Above and to the north of the loading dock openings are five arched vent holes and ten twelve-over-twelve wood sash windows. Of the four loading docks on the east side of the building, adjacent to the spur track, three have brick arched openings that have been filled in with brick or concrete block. The fourth, capped by an iron beam, retains its multi-light wood door.

There is a pedestrian entrance, recessed into a round-arched opening in the brick wall on the south side of the central block that retains its original paired wood doors. There is a second

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pedestrian entrance topped by a segmental arch is set into the narrow, cut-away corner of the central block of the Wire Rope Building facing Millbury Street at Hurley Square. Concrete steps with a pipe railing lead up to the replacement aluminum door in a wood frame.

As the Wire Rope Building grew, some exterior walls became internal partitions. This is particularly evident where the one story south "wing" abuts the two-story center section. The former exterior north wall of the one-story structure now acts as an interior dividing wall. Its granite foundation and string course are intact, but the brick above is much altered. Two loading doors, with rectangular openings spanned by steel beams, have been cut into this wall while other openings in it have been bricked in.

The interior of the Wire Rope Building is primarily heavy timber post-and-beam construction with I-beam columns in some of the later sections. The building has a complex interior layout resulting from the building's expansion and evolution over the years. The basements of the north and south additions are not connected. Stairs and steel-frame hydraulic lifts with wood sides connect these basement areas with the first floor. The first floor is composed of a series of continuous linked spaces, demarcated by brick walls (some of which were exterior walls prior to the construction of additions) and wood or iron-frame partitions. Most of the floors in the first floor are laid diagonally and in areas of heavy wear this flooring has been covered by steel plates. In other select areas, including sections of the second floor, the floor is concrete covered with vinyl tile. The second floor of the central block, accessible only by stairs, is subdivided into several large spaces, except for its northeast corner that was remodeled into offices during the 1960s.

Specialty products manufactured by Washburn & Moen in the Wire Rope Building included wire rope and cable for suspension bridges, yacht rigging, and cable railways. Although there is no equipment remaining in the Wire Rope Building to indicate exactly how wire rope and cable was manufactured, historical descriptions and the building's layout provide a broad outline of the manufacturing process. The straight, unobstructed portion of the building parallel to the Providence and Worcester Railroad mainline functioned essentially as a ropewalk. Here multiple strands of wire were twisted into rope or cable by being drawn through a cylinder around which rotated several bobbins, or coils, of wire. The raw wire was brought to the Wire Rope Building from Washburn & Moen's wire mills in the core manufacturing area to the south and stored in the building until needed. The finished wire rope or cable was then coiled and stored elsewhere in the building for shipment.

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The Wire Rope Building was last used for manufacturing in 1958. More recently the first floor of the building housed Rome Building Products, Inc. while the upper floor of the central block was occupied by a retail outlet. The building is now vacant.

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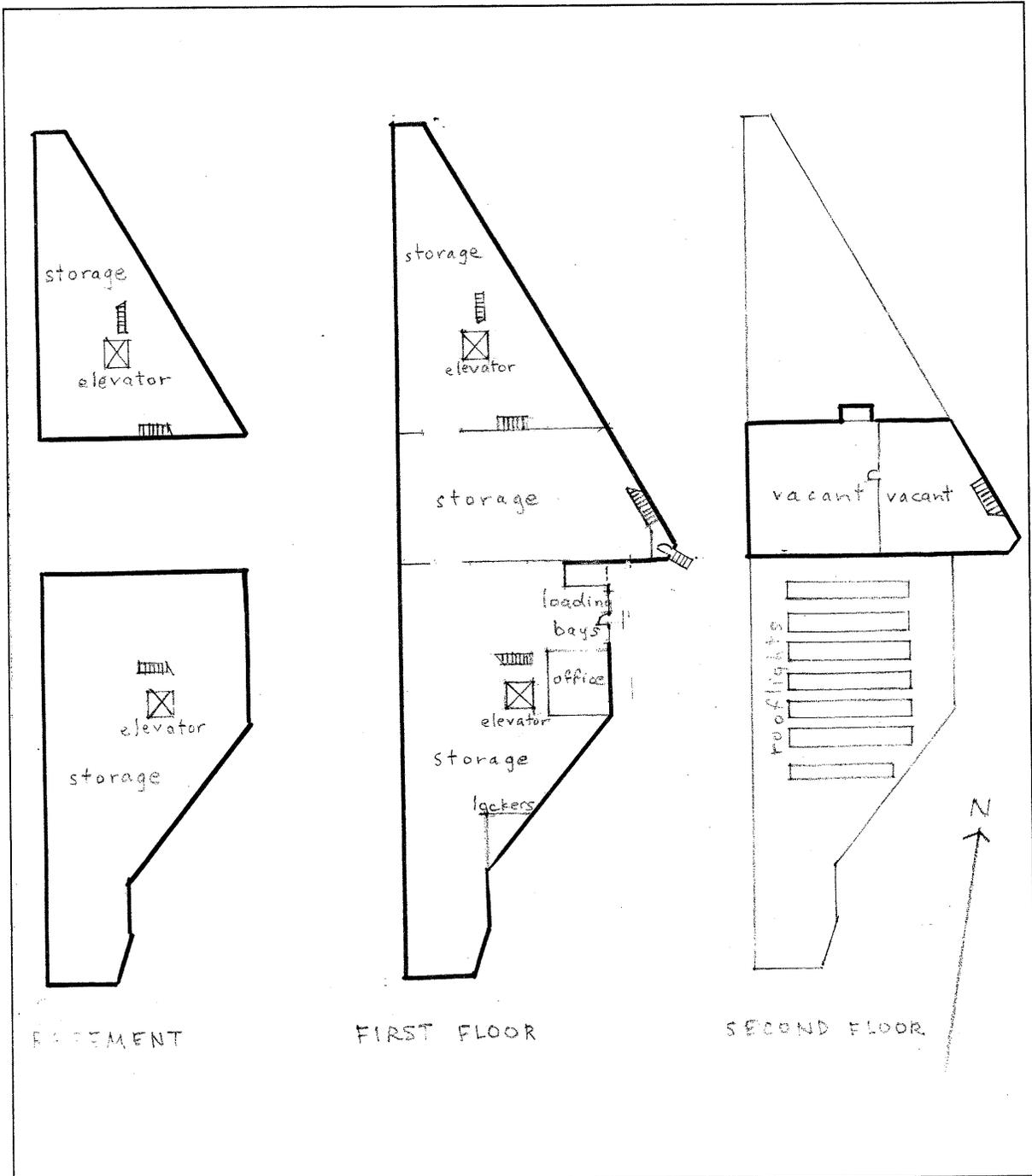
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Schematic Plan of Basement, First Floor, and Second Floor, 1998