NEW HAVEN RAIL YARD
Vicinity of Union Avenue & Cedar & Lamberton Streets
New Haven
New Haven County
Connecticut

HAER CT-160
CT-160

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
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HISTORIC AMERICAN ENGINEERING RECORD

NEW HAVEN RAIL YARD **HAER No. CT-160**

Location: Vicinity of Union Avenue and Cedar and Lamberton Streets
New Haven
New Haven County, Connecticut

USGS New Haven Quadrangle, UTM Coordinates:
18.673480.4573260 (center point)

Date of Construction: 1870 - 1954

Present Owner: Connecticut Department of Transportation
2800 Berlin Turnpike
Newington, Connecticut 06131

Present Use: Most buildings vacant or used for storage

Significance: The buildings in the New Haven Rail Yard are associated with southern New England's most important rail carrier of the late nineteenth and first half of the twentieth centuries, the New York, New Haven and Hartford Railroad. In addition to a near monopoly on freight in this heavily industrialized region, the railroad operated one of the busiest passenger services in the country. The buildings in the rail yard reflect operational support functions: building and repairing locomotives and freight cars, material storage, crew facilities, train control, and central heating. Although sometimes overshadowed by other shop facilities, the New Haven yard played an important role throughout the railroad's long history.

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. Most of the older buildings in the complex, the majority of which are 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.

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Introduction

The area east and south of New Haven's Union Station is occupied by dozens of service tracks and a number of buildings devoted to particular purposes in support of rail operations. Eight buildings, ranging in age from 1870 to 1954, are included as elements of the documented complex:

> Interlocking Control Building, HAER No. CT-160-A, a two-story brick building, built in 1954, that houses train control and communication facilities.
>
> Work Equipment Shop (Wheel and Truck Shops), HAER No. CT-160-B, a large steel-framed building with brick and corrugated metal walls, built in 1946 to repair work equipment and later used for servicing wheels and trucks.
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> Central Heating Plant and Oil Storage, HAER No. CT-160-C, a brick-walled steel-framed power house, built in 1930, that produced steam for heating the entire complex.
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> Freight Car Shop (Automotive Shop), HAER No. CT-160-D, a one-story brick building built ca. 1888 for the construction of freight cars; later used by the railroad's Maintenance of Way department for servicing motor vehicles.
>
> Machine Shop, HAER No. CT-160-E, a one-story brick building built in 1870 as part of a large shop facility for building and repairing locomotives and rolling stock.
>
> Small Stores Building, HAER No. CT-160-F, a small one-story brick building built ca. 1940, primarily for the storage of acetylene tanks.
>
> Oil Storage Building (Crew Headquarters), HAER No. CT-160-G, a small brick building, built ca. 1870 as a one-story building and enlarged ca. 1910 with a second story, used for the storage of lubricants and later, as a locker facility for train crews.
>
> Locker Building (Amtrak Crew Building), HAER No. CT-160-H, a small one and two-story brick building built ca. 1930 for railroad-personnel facilities.

In addition, the rail yard includes a number of more modern buildings used for the storage and servicing of diesels and Multiple-Unit (MU) electrified commuter cars. These generally have prefabricated steel structural systems with corrugated siding. There is no discernible chronological or functional order to the various buildings. Instead, it appears clear that the New York, New Haven and Hartford Railroad simply added facilities wherever space could be made available. The rail yard has a complicated history of additions and demolitions as the needs of the railroad changed. At one time or another, the rail yard also included three

roundhouses with turntables, two transfer tables, a huge forge building, a water tower, a coal dock, a brass foundry, and a number of other brick shop buildings similar in appearance to those that have survived. The process is ongoing today, as the busy rail yard serves the needs of Amtrak's Northeast Corridor operations, Metro North Railroad's metropolitan New York commuter service, and the Connecticut Department of Transportation's Shore Line East trains.

The portion of the rail yard that is included in this documentation is bounded on the west by Union Avenue, on the south by Cedar Street and Hallock Avenue, and on the east by the yard's loop track. Formerly, the east boundary was the edge of New Haven Harbor, but in the 1950s the area was filled in to create land for the Connecticut Turnpike (Interstate 95) and for industrial development. The now-unused Central Heating Plant is the northernmost building included; the yard continues northward for some distance with additional tracks and service facilities, all of which are of more recent construction.

Historical Background

The history of the site that would become the New Haven Rail Yard begins in 1867, when the New York and New Haven Railroad, one of the predecessors of the New York, New Haven, and Hartford, began purchasing the low-lying land that lay between its mainline tracks and Long Island Sound in order to build its new shop facilities. Shown on early coastal maps as salt marsh, the land probably needed to have substantial amounts of fill brought in to make it useable. In 1868 the railroad reported its plans to the state Railroad Commission:

> Twenty acres of land have been purchased at New Haven, which is now being graded preparatory to erecting shops for the repair of equipment, etc. These shops are greatly needed for the increasing business of the road and will be constructed on a liberal scale of sufficient capacity for the building of new engines and cars.[1]

The company estimated it would use 1,500,000 bricks and 110,000 square feet of roofing to complete the complex, at a cost of about $500,000[2] (Connecticut Railroad Commission 1869: 13-14). The centerpiece of the undertaking was the Spring Street roundhouse, a full 360-degree circular structure that could accommodate 40 or 42 locomotives in its stalls. In addition to the roundhouse, the shops included a blacksmith shop 200' long, with 22 forges; a similarly sized building for lumber storage; a paint shop 180' long; a car shop 200' long; and a machine

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[1]Connecticut Railroad Commission, *Fifteenth Annual Report of the General Railroad Commissioners of the State of Connecticut for 1868* (Hartford: Case, Lockwood & Brainard, 1868), 14-15.

[2]Connecticut Railroad Commission, *Sixteenth Annual Report of the General Railroad Commissioners of the State of Connecticut for 1869* (New Haven: Thomas J. Stafford, State Printer), 13-14.

shop that measured 65' x 260'. A small brass foundry shown on early maps and views was also probably part of the original complex. Other buildings provided storage for lumber, coal, ice, and lubricants. Work began in 1869 and was completed by the middle of 1870.[3]

The buildings in the shop complex were mostly built of brick, one story in height, with skylights ranged along the slopes of the gable roofs. Because they were constructed on made land, the buildings' granite foundations had to be supported by timber piles driven into the fill. The buildings were utilitarian in appearance, the only stylistic flourish being a return of the corbeled cornices across the gable ends. The shops were arranged so that work could be moved easily within and between buildings. Two connecting tracks led from the roundhouse to the machine shop, and another connecting track joined the machine shop to the car shop. A transfer table between the car shop and the machine shop allowed engines or cars to be shifted among the bays of the machine shop, and another transfer table served the car shop and the paint shop. A large brick water tower stood just north of the roundhouse.

The New York and New Haven had been chartered in 1844 and, after a series of mishaps, it ran its first train early in 1849 between New Haven and the New York and Harlem Railroad just north of the metropolis. Even before it opened, the New York and New Haven made its first acquisition: it leased the New Haven and Northampton Railroad, which was then in the process of converting the Farmington Canal to a rail line. The lease gave the New York and New Haven valuable land in New Haven, as well as access to a north-south connecting route. After a financial crisis in the 1850s, the railroad entered a period of prosperity. In 1870 a lease was made giving the New York and New Haven control over the Shore Line Railway, which ran along the coast to New London, and negotiations were underway to merge with the Hartford and New Haven Railroad. The Hartford and New Haven had been chartered in 1832 and, in addition to its namesake cities, provided service to Middletown, Connecticut, and Springfield, Massachusetts. In August 1872, the New York and New Haven and the Hartford and New Haven merged to from the New York, New Haven and Hartford Railroad, commonly called the New Haven. This corporate entity lasted nearly 100 years, until it was absorbed into the Penn Central consolidation in 1969. Within a few years, the former freight business of the New Haven Railroad had passed to Conrail, the long-distance passenger service to Amtrak as part of its Northeast Corridor, and the commuter trains to Metro North Commuter Railroad, a joint undertaking financed by the states of New York and Connecticut.

The first major addition to the railroad's New Haven shop complex occurred around 1888, when a second building for constructing freight cars was added; the earlier car shop continued to be used for woodworking and carpentry. (A series of schematics, showing the buildings in the rail yard at eight different points in time, is included with the graphic material). By 1900,

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[3]Connecticut Railroad Commission, *Seventeenth Annual Report of the General Railroad Commissioners of the State of Connecticut for 1870* (Hartford: Case, Lockwood & Brainard, 1868), 16.

two additional roundhouses had been built at the southern end of the yard, at the corner of Hallock Avenue and Lamberton Street; at the same time, about half of the original Spring Street roundhouse was removed. All three roundhouse sites have been investigated archaeologically, and a photographic record was made of buried remains, such as turntable walls, railroad-related artifacts, and demolition debris.[4]

During the World War I years, a large coal-handling facility, with a dedicated dock extending along the harbor edge, was constructed at the north end of the property, and one of the Lamberton Street roundhouses was demolished. The boiler shop was moved to the former paint shop, and the earlier boiler shop used for storage. Additions were made to the machine shop and the various storage buildings. Around 1930, the railroad built a central plant to provide steam heat to all the various shop buildings, the passenger station (the present building constructed in 1918), the railroad-owned Garde Hotel, and the tracks where passenger cars awaited formation into trains, using part of the land formerly occupied by the coal facility. In the 1930s, the car-building shops were converted for use by the Buildings and Bridges department, and the boiler shop (originally the paint shop) was taken over by the Maintenance of Way department. A small building was built for diesel-engine repairs (the New Haven's first diesel switchers arrived in 1936), and the last above-ground vestiges of the Spring Street and Lamberton Street roundhouses were removed. A locker building was built to provide lockers, washrooms, and toilet facilities for passenger-train crews. Also in this period, a large garage and freight house was built in the southern end of the property for the New England Transportation Company, a subsidiary of the New Haven Railroad that operated a truck-based freight-forwarding service (at its height the company operated 243 trucks covering all of southern New England). The railroad integrated the trucking business with its less-than-carload rail freight operation.

Major changes to the rail yard occurred in the years immediately following World War II. A large new shop for servicing work equipment was built in 1946, with another large shop for the repair of diesels completed the following year. Many of the smaller buildings then in use for storage were taken down, and in their place was built a large concrete-block warehouse for the General Stores department. The railroad developed an innovative centralized track control system for a twenty-mile portion of the Shore Line Route in 1954 and installed the console, relays, and other equipment in a brick building south of the station, in the northwest corner of the yard. In 1960, the former Work Equipment Shop was converted to shops for the overhaul of wheels and trucks. Reflecting the growing use of motor vehicles for repair of the railroad's right-of-way, the Maintenance of Way Shop, originally built in 1888 for freight car

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[4]Bruce Clouette, *Report on Archaeological Monitoring, Church Street Extension, State Project 992-526: Archaeological Remains of the Spring Street Roundhouse* (Storrs, CT: Public Archaeology Survey Team, Inc., 2002); *Report on Archaeological Monitoring: New Haven Rail Yard Improvements, New Haven, Connecticut, State Project No. 301-0039* (Storrs, CT: Public Archaeology Survey Team, Inc., 2003).

construction, became known as the Automotive Shop. After the demise of the New Haven Railroad, construction in the rail yard continued, mostly to provide storage and servicing facilities for the commuter equipment operated by quasi-public agencies.

Significance

Historical Importance

The historical significance of the rail yard buildings derives from the importance of the New Haven Railroad in the history of southern New England and from the role played by these buildings in supporting the operation of the railroad. From the time of the merger of its two predecessors in 1872, the New Haven enjoyed a steady march of consolidation so that by 1900, only one other major rail line remained in southern New England, the much smaller Central Vermont route that connected New London, Connecticut, with Vermont and Canada. Through purchase, stock swaps, and long-term leases, the New Haven had taken over the New York and New England, the Norwich and Worcester, the Providence and Worcester, the Housatonic, the Central New England, the Old Colony, and a host of smaller railroads, some 175 companies in all. The New Haven's empire embraced not only all of Connecticut and Rhode Island, but also Cape Cod and southern Massachusetts, including the leading cities of Boston, Worcester, and Springfield, and much of Westchester County, New York. The railroad operated steamship lines between New York City and coastal New England communities, as well as a fleet of tugboats and car-floats in New York Harbor. Although it had only 2,256 route miles, the new Haven ran through one of the most populous and heavily industrialized parts of the country, generating significant revenues from both passenger and freight operations. With a near monopoly on Boston-to-New York travel (a circuitous New York Central route was possible), the New Haven operated a large number of coach and special-fare passenger trains along its Shore Line and inland "Air Line" routes. It also carried a substantial portion of the suburban commuter traffic to and from New York City, a circumstance that led the railroad to electrify its four-track New York to New Haven main line in the early 1900s. The New Haven trailed only the much-large Pennsylvania Railroad and New York Central systems in the total number of passengers carried; in 1924, it was estimated than one in ten American rail passengers were carried by the New Haven.

Although probably no other major American railroad relied so much on passenger revenue, the freight operations of the New Haven were also substantial and were of vital importance in sustaining the region's industrialization. The metalworking industries of central Connecticut, the brass mills of the Naugatuck Valley, and the textile mills of Rhode Island and eastern Connecticut all relied on the New Haven Railroad to bring in raw materials and ship out finished goods. Although New England industry was first established at waterpower sites along its fast-moving rivers and streams, by the second half of the nineteenth century coal-fired

steam engines had become a more important source of industrial power, with even the textile mills supplementing water power with steam. Much coal was brought in by barge and schooner, but from there most was carried on New Haven rails to its final destination. Rail transportation proved especially important in wartime; during both world wars, the region's machine shops, textile mills, and other factories worked overtime, and freight traffic on the New Haven soared. For most of the southern New England soldiers who served in these wars, their participation began and ended at a New Haven Railroad train station.

The importance of the buildings in the New Haven Rail Yard waxed and waned as the railroad opened and closed comparable facilities, but from the beginning to the railroad's final years as an independent company, the New Haven yard was always in use for some important functions in support of the railroad's operations. Each new acquisition brought additional shop complexes into the system, starting with the Hartford shops that had formerly served the Hartford and New Haven Railroad prior to the merger of 1872. Other shop facilities could be found at Norwich, Connecticut, and Norwood, Roxbury, and South Boston, Massachusetts. But for many years the New Haven shops were the company's largest facility for repairing steam engines and building freight cars.

Until the late 1880s, the railroad principally relied on motive power built in its own shops, of which the New Haven complex was the largest. Typically, these were 4-4-0 "American"-type locomotives with drivers in the range of 63" to 69"; although Swanberg[5] does not give a definitive count, it appears that the New Haven's home-built steam-engine roster probably numbered at least three dozen units in the late nineteenth century. Even after the railroad began purchasing steam locomotives from builders such as Baldwin and the Rhode Island Locomotive Works, the company's shops remained an important source of power. In the years 1897 to 1904, for example, forty-four high-speed 4-4-0s were constructed in the railroad's own shops, using some parts from earlier locomotives that had become obsolete. Numbered 1550 to 1514, 1575 to 1599, and 1610 to 1623, the locomotives were intended for service on the railroad's extensive network of secondary branch lines. Unlike earlier 4-4-0s, which typically weighed about 70,000 lbs., this set of engines (Classes C-3a, C-3b, and C-15) weighed 107,000 and 122,000 lbs. and provided much greater tractive effort. By replacing many of the earlier engines inherited from predecessor railroads, these medium 4-4-0s helped standardize the railroad's motive power. The group averaged 30 years of service, with the last 16 remaining on the roster until 1935.

Passenger cars were generally supplied by companies specializing in their construction, but freight cars in the second half of the nineteenth century were often built by the railroads themselves, and the New Haven was no exception. Freight-car construction combined woodworking and carpentry processes with the machining of critical metal parts. Both sets of

[5]J. W. Swanberg, *New Haven Power, 1838-1968* (Medina, OH: Alvin F. Staufer, 1988).

skills were abundant in New Haven, which had thriving carriage-building and machine-shop industries. It is likely that a large part of the New Haven's early rolling stock was built in the rail yard shop complex.

Although it was a large railroad by New England standards, the New Haven was frequently in a precarious financial position. Originally owned by local Connecticut businessmen, it soon passed into the hands of financiers (including J.P. Morgan for many years) whose decisions were as often made in the context of extending their control over the economy as rationally running a railroad. As a consequence, investment in both buildings and rolling stock occurred in fits and starts, depending upon the perceived financial health of the railroad. For example, it is difficult to understand why the railroad spent some $425,000 on the two Lamberton Street roundhouses ca. 1897, only to have them superceded by a massive repair-shop and freight-handling complex built in the Cedar Hill section of New Haven in the early 1900s. In another instance, the coal facilities that had been built about 1915 at the north end of the yard gave way in 1930 to the Central Heating Plant. The New Haven Railroad operated in a state of bankruptcy from 1935 to 1947 and from 1961 until its incorporation into the Penn Central merger in 1969.

Shortly after 1900, the New Haven Railroad opened up two large new shop complexes, one at either end of the line, that, in combination with the new facilities at Cedar Hill, effectively relegated the New Haven Rail Yard complex to a secondary role. The Van Nest shops in New York City specialized in the repair and servicing of electrically powered equipment, while the Readville shops outside Boston became the major steam-locomotive facility. Nevertheless, the railroad found important uses for what in that period became known as the Lamberton Street shops (to distinguish them from the other New Haven shops at Cedar Hill). In the 1920s, the railroad, in an effort to reduce expenses providing branch-line passenger service, acquired some three dozen gasoline engine-powered self-propelled rail cars. Seating 35 to 50 passengers each, the gas cars operated with a two-person crew, unlike a regular train which, no matter how short, required at least a five-person crew. The remnant of the Spring Street roundhouse was used to store and service the gas-car fleet.

The Lamberton Street shops also played a key role in another important episode in the New Haven Railroad's history in the 1920s. Ever teetering on the brink of financial ruin, the railroad was unable to purchase new freight cars after World War I to replace its wooden boxcar fleet, which had become deteriorated to the point that other railroads considered the New Haven's cars substandard. Instead, the New Haven decided to rebuild more than 12,000 36-foot boxcars in its own shops, with most of the work performed at Lamberton Street from 1926 to 1929. The boxcars were brought into the remaining Lamberton Street roundhouse, where they were jacked up and placed on stands after their antiquated trucks were removed. Then, they were stripped down to their steel underframes and rebuilt with new running gear and bodies. Not all cars were rebuilt in the same way. Some had steel ends, others steel-braced

wooden ends, and a few were rebuilt with end doors. Depending on the type of truck used, the cars had a capacity of 30 or 40 tons.

The Lamberton Street rebuilding program added another twenty years of life or more to these cars. Although the New Haven received 3,000 modern all-steel boxcars in the early 1940s, it was primarily the fleet of rebuilt wooden boxcars that enabled the New Haven to perform its vital functions during World War II, a period in which the railroad ran day and night transporting Connecticut industry's war-related production.

In addition to the boxcars, the railroad built from scratch hundreds of steel gondolas and hoppers in the Lamberton Street shops in the1920s. By keeping the work in-house, rather than buying cars from Pullman, Pressed Steel, or other freight-car manufacturers, the railroad was undoubtedly able to achieve significant cost savings.

As a result of freight operations during World War II, the railroad was able to undertake substantial investments in engines, rolling stock, and physical plant that resulted in a transformation of the New Haven Rail Yard. The dieselization of motive power that had begun in the 1930s continued after the war with the delivery of twenty-seven new passenger diesels, forty-five freight diesels, and twenty-nine dual-purpose road switchers. At the same time, the railroad acquired more than two hundred new stainless steel-sided passenger cars. War-time purchases of steel boxcars were supplemented with another 2,500 units in the late 1940s. The post-war acquisition program also included seven new work cranes for the Maintenance of Way department.

In the New Haven yard, a 456'-long building was erected to store and service the railroad's work equipment in 1947, followed quickly by a huge shop for servicing diesel engines and a large warehouse building for the General Stores department. Steam locomotives were phased out by 1953, replaced by diesel engines, including another seventy-five ordered in the early 1950s. As the center of diesel-engine servicing and repair, the Lamberton Street shops regained their position as the railroad's most important shop facility. In the second half of the decade, the railroad acquired another 110 diesels and actually began planning for the discontinuance of its electrified main line; the Van Nest and Readville shop complexes were both closed in a cost-cutting frenzy.

The decision to not invest further in electric motive power was shown to be unwise when, in the early 1960s, court-appointed bankruptcy trustees determined that running diesels under wires that could provide cheaper electric traction was a costly inefficiency. When it turned out that the New Haven's own electric freight motors could not be taken off the scrap line and rehabilitated, the trustees purchased twelve surplus 3,300-hp electric freight engines from the Norfolk and Western Railroad. Starting in August 1963, the units were reconditioned and repainted at the Lamberton Street Shops, enabling the railroad to resume electrically powered

freight service between the Cedar Hill yard and Bay Ridge, New York. The Lamberton Street shops' last major project resulted in a group of highly successful locomotives that lasted well into the Penn Central and Conrail eras.

Architectural Significance

The buildings in the New Haven Rail Yard are fairly typical of industrial architecture in general, progressing from brick masonry to steel-skeleton construction over the eight-decade period in which it evolved. One aspect of exceptional interest is the use of roof trusses to create uninterrupted interior space for shop operations. In addition to early twentieth-century riveted roof trusses, the buildings in the yard include ones with pinned trusses and composite cast and wrought-iron trusses.

With one exception, it is not known who designed the various buildings in the rail yard. The Central Heating Plant was designed by Gibbs and Hills, Inc., a well-known early twentieth-century engineering firm specializing in railroad projects.

A Note on Sources

Writing and researching the history of the New Haven Railroad is made difficult by the dispersal of historical records when it was incorporated into the Penn Central system in 1969. The University of Connecticut, Dodd Research Center, has the bulk of the surviving records, but its holdings are far from complete. For example, the archive has a card index referencing the contract to build the steam plant in 1930, but the contract itself has not survived. Although the railroad prepared reports to both stockholders and state regulatory bodies, these rarely are in sufficient detail to allow the firm dating of particular components; instead, they typically record large sums spent for "buildings" at various locations. As a result, the date of most buildings must be deduced from track plans prepared by the railroad, insurance maps from the Sanborn Map and Publishing Company, and other graphic evidence.

Much critical information is in private hands, particularly that held by the New Haven Historical and Technical Association; fortunately, that organization has published the Mechanical Department's 1939 survey of the New Haven Rail Yard and 1954 aerial photographs of the site. Private collectors have also made possible the publication of numerous photographic histories of the railroad, volumes that often contain views showing the rail yard buildings.

Although it ostensibly is focused on motive power, Swanberg's *New Haven Power* provides a great deal of information about the railroad in general and these shops in particular. Another major source of information is *Along the Line*, the railroad's employee magazine; partial runs are available at the University of Connecticut, the Connecticut State Library in Hartford, and

the New Haven Colony Historical Society in New Haven. Among government records, the photographs, measured drawings, and text descriptions prepared by the Valuation Division of the Interstate Commerce Commission (ICC) in the World War I period are invaluable. The railroad's own copies of these materials are scattered among private collectors, and the location of the State of Connecticut's copy has not been identified, so only the ICC copy in the National Archives (College Park, Maryland) is available.

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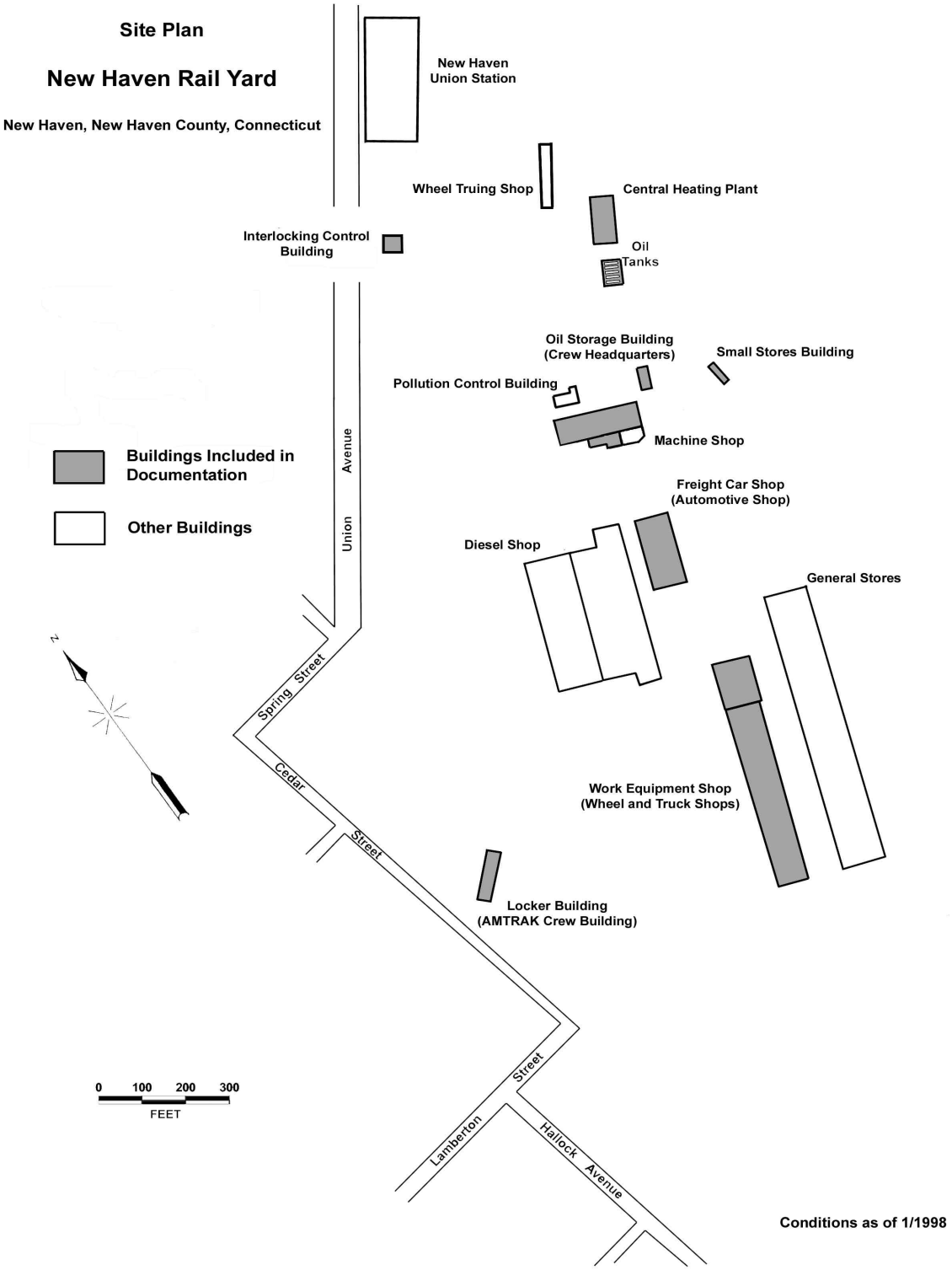
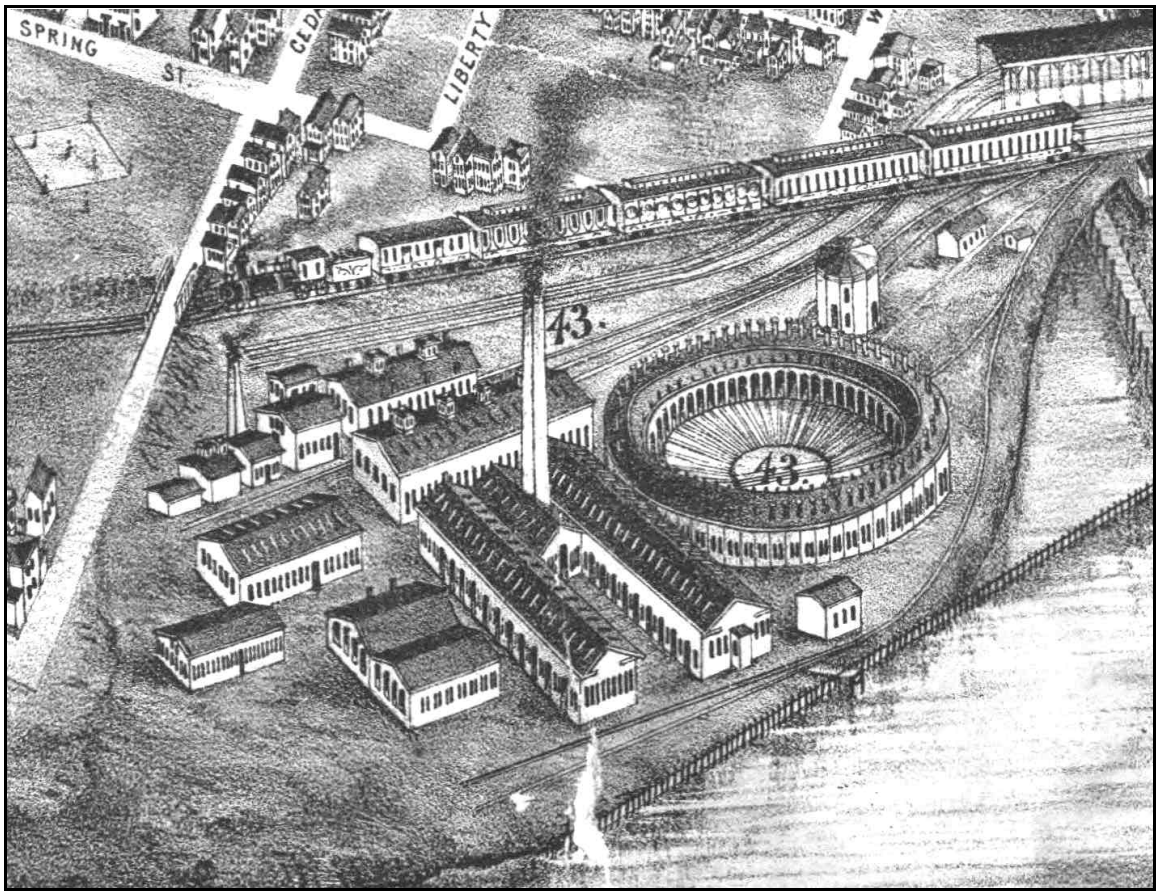
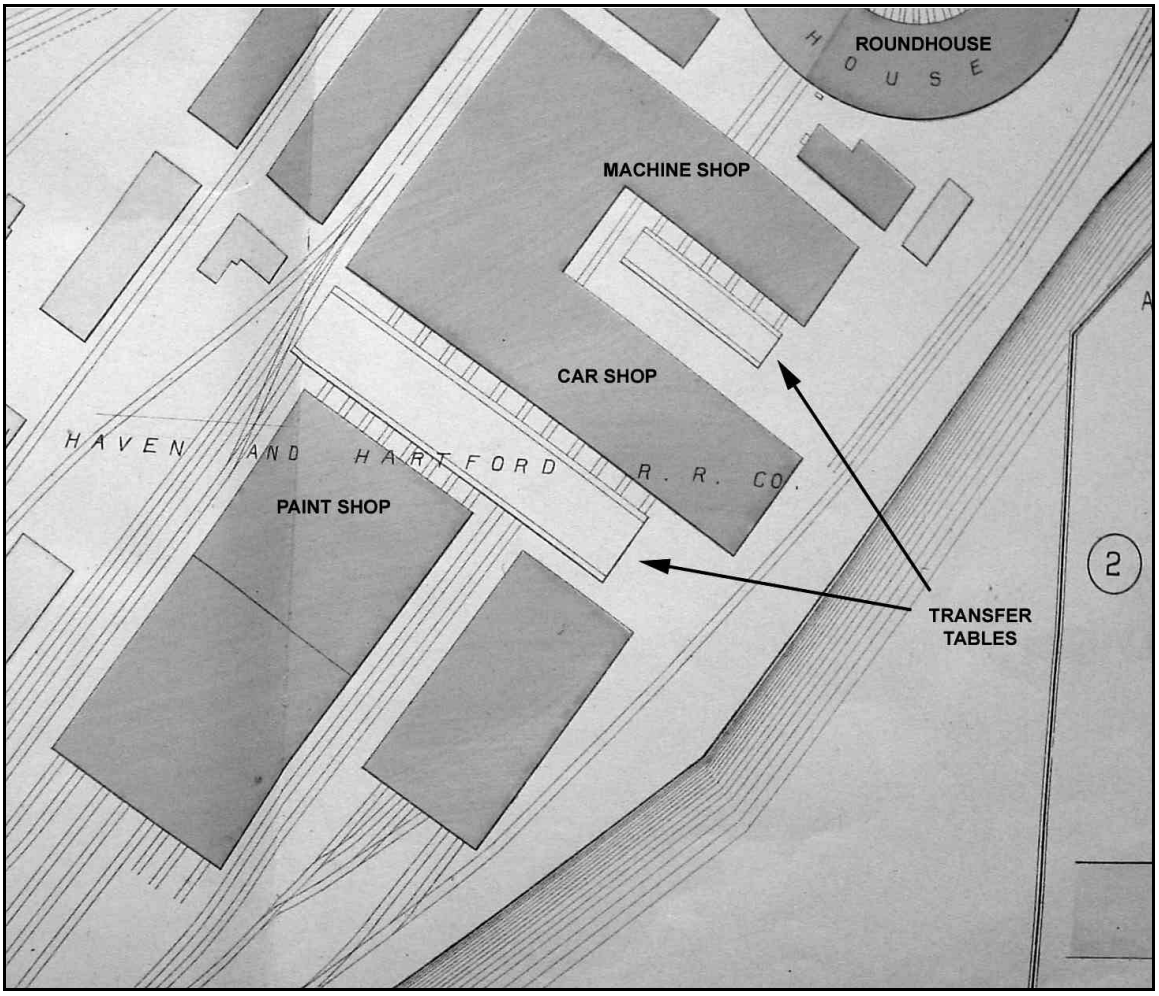
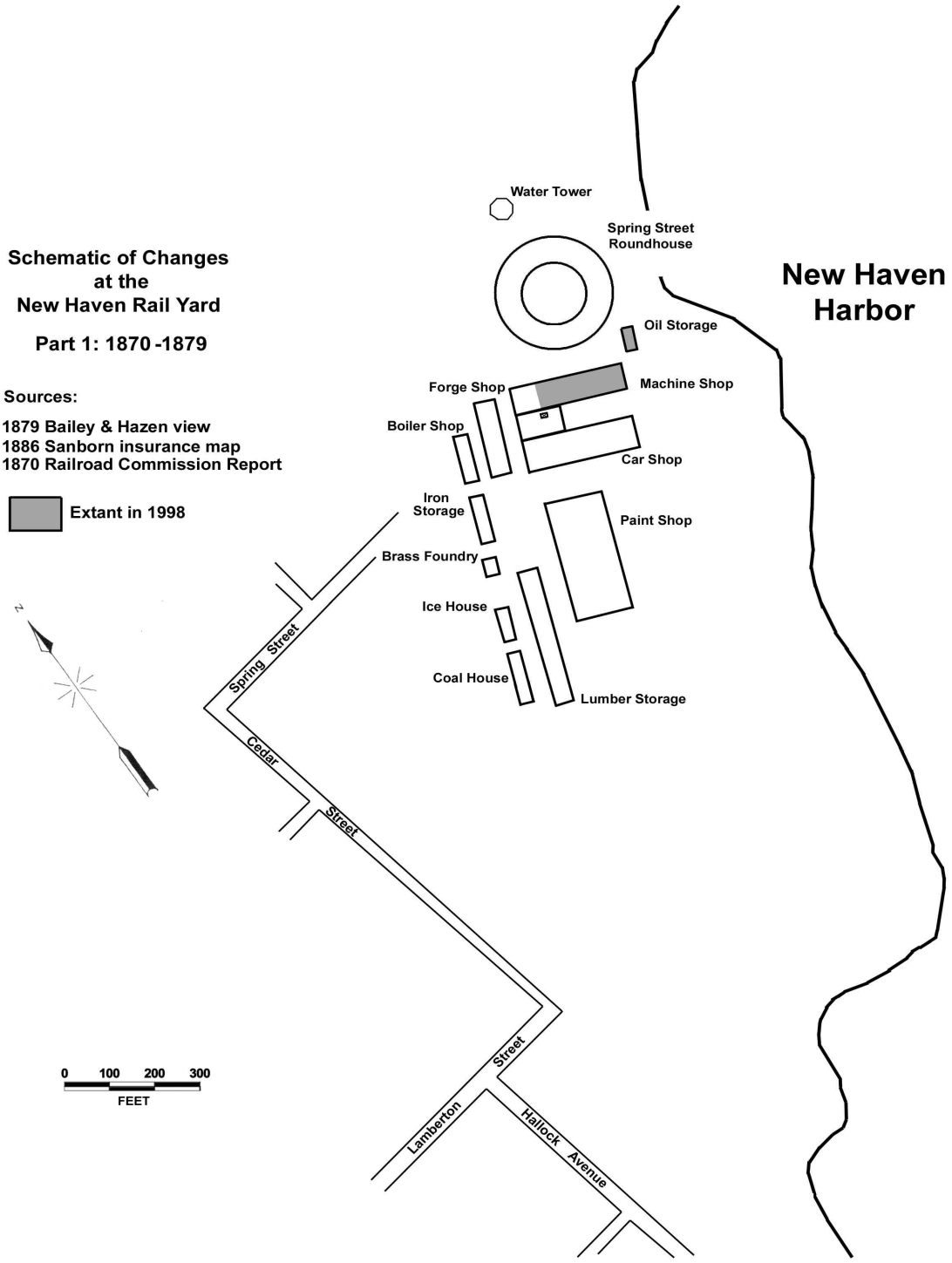

Site Plan
New Haven Rail Yard
New Haven, New Haven County, Connecticut
New Haven Union Station
Wheel Truing Shop
Central Heating Plant
Interlocking Control Building
Oil Tanks
Oil Storage Building (Crew Headquarters)
Small Stores Building
Pollution Control Building
Machine Shop
Buildings Included in Documentation
Other Buildings
Union Avenue
Freight Car Shop (Automotive Shop)
Diesel Shop
General Stores
N
Spring Street
Cedar Street
Work Equipment Shop (Wheel and Truck Shops)
Locker Building (AMTRAK Crew Building)
0 100 200 300
FEET
Lamberton Street
Hallock Avenue
Conditions as of 1/1998

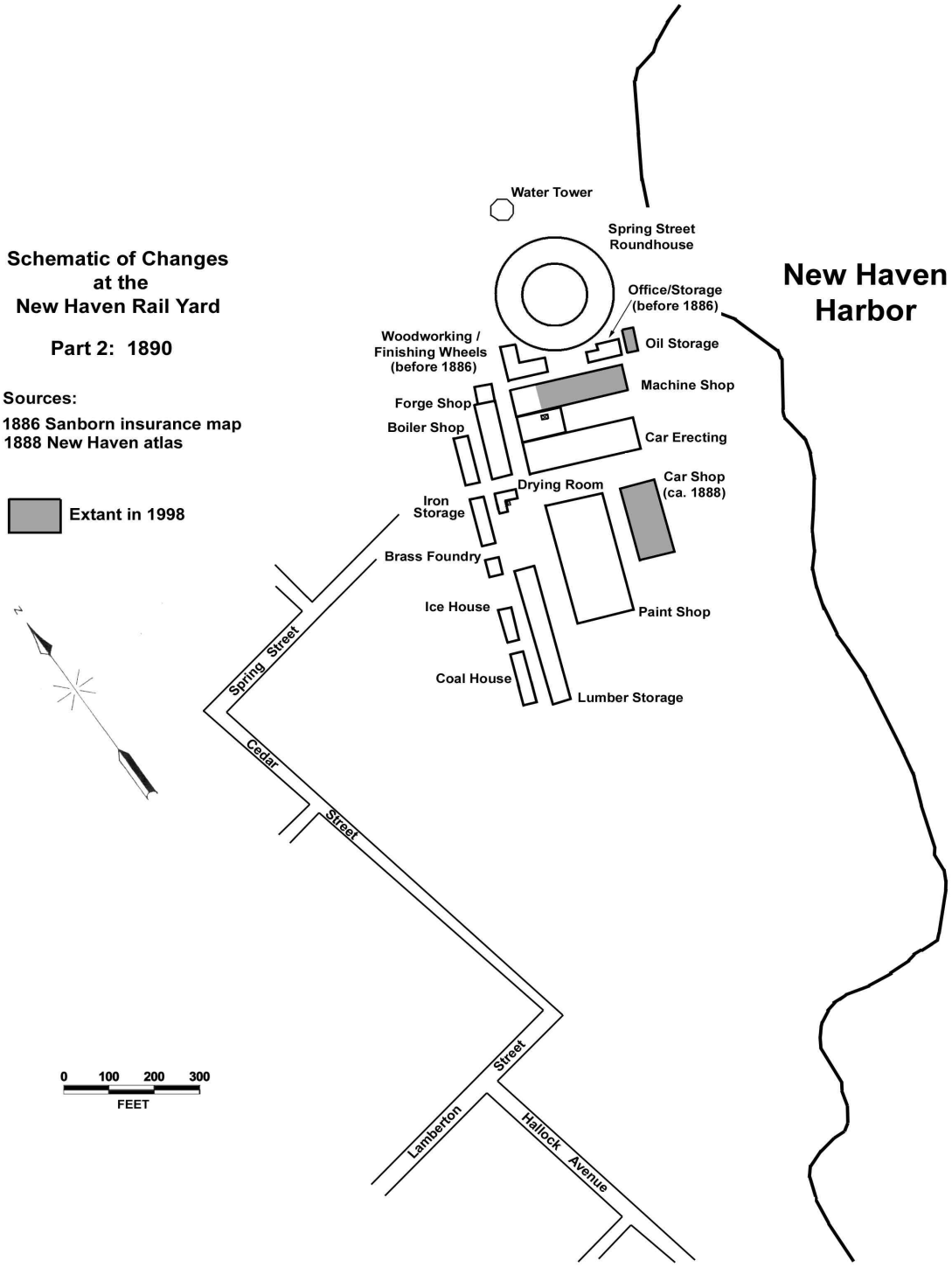
The shop complex a few years after its completion (Bailey and Hazen 1879). Only the machine shop, the right arm of the U-shaped structure with the boiler and engine house, and the small building for oil storage, at the lower right, survive. The other arm of the U-shaped structure is the first car shop, for building freight cars, and the building with four cupolas is the forge or blacksmith shop; behind it is the boiler shop. The smaller chimney is for the brass foundry. The platform for an earlier New Haven passenger station is visible at the upper right (the present Union Station was built in 1918). The view is looking northwest.

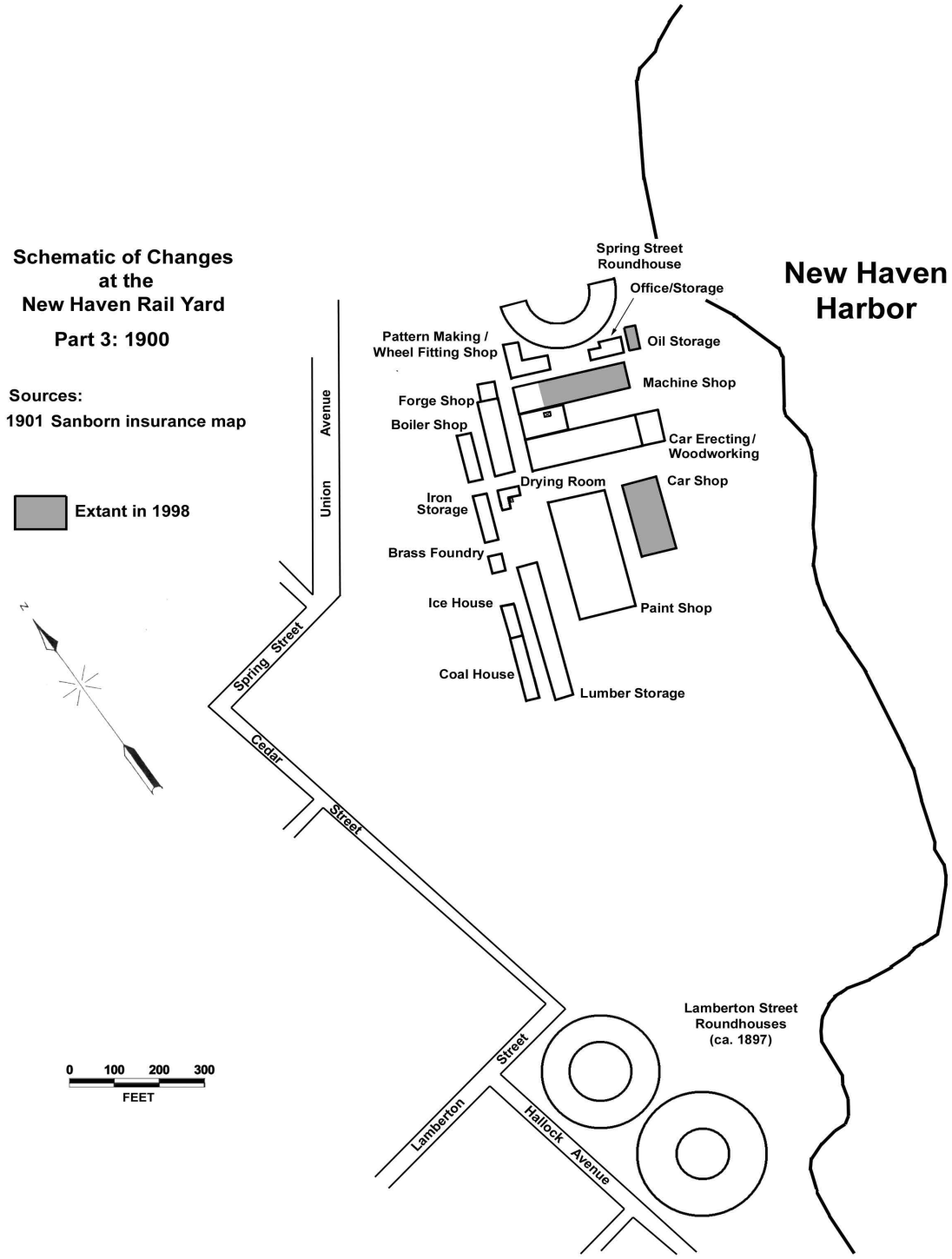


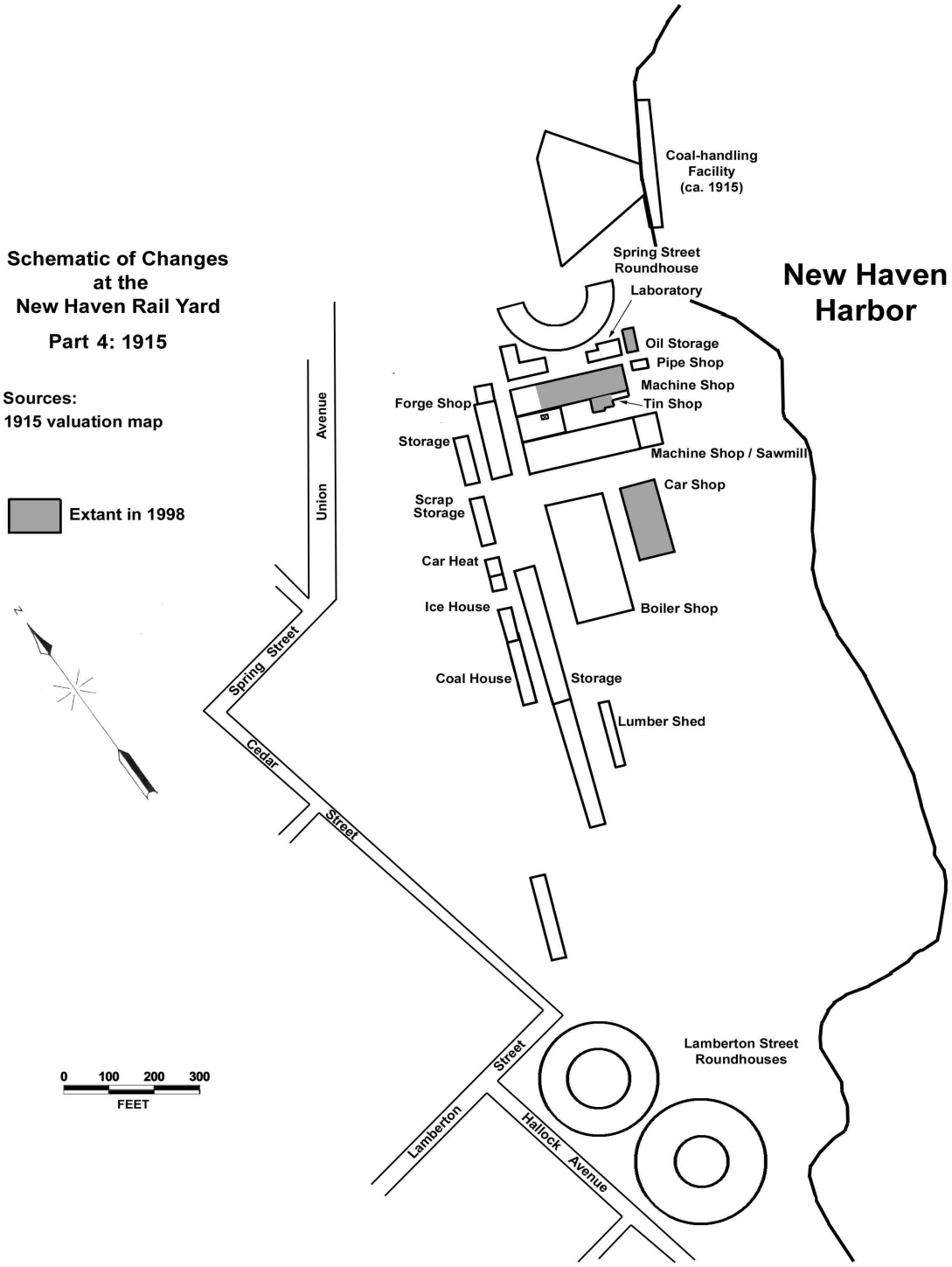
Detail of 1888 Hopkins atlas map, showing two tracks between the machine shop and the roundhouse to the north, a transfer table that allowed movement between the bays of the machine shop, and a second transfer table for the car shop and paint shop to the south (building labels added).

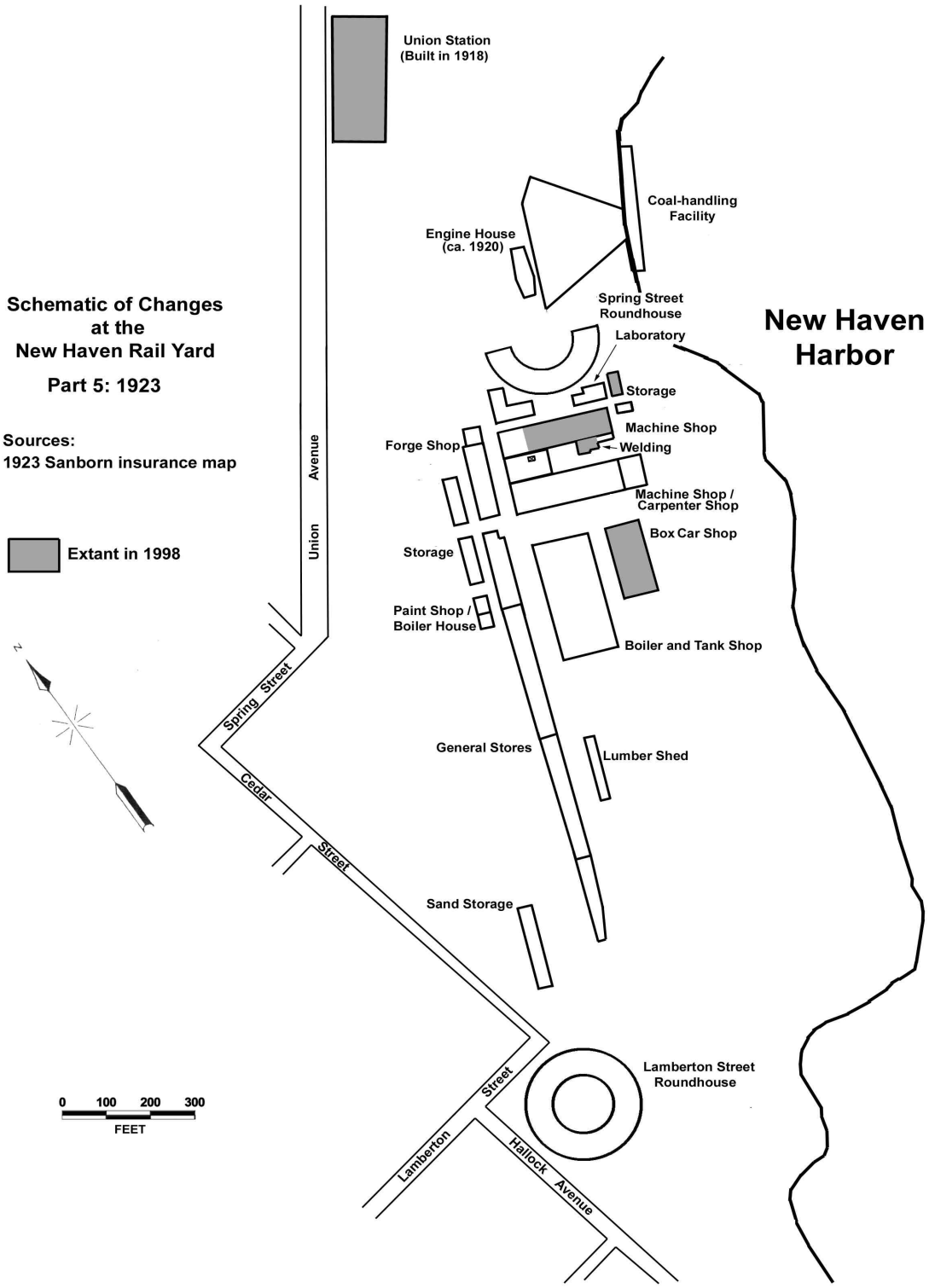


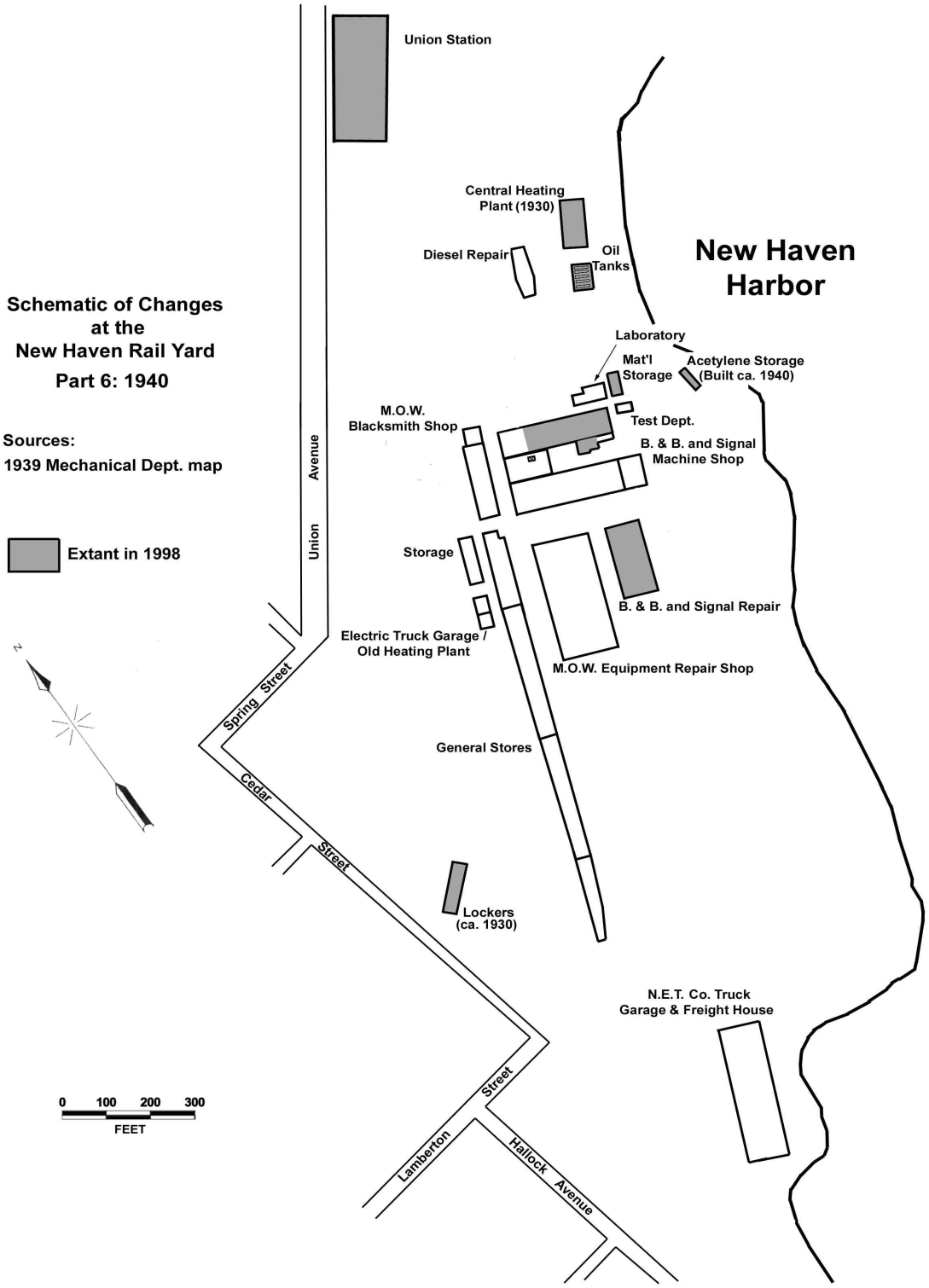

Schematic of Changes
at the
New Haven Rail Yard
Part 1: 1870 -1879
Sources:
1879 Bailey & Hazen view
1886 Sanborn insurance map
1870 Railroad Commission Report
Extant in 1998
Water Tower
Spring Street
Roundhouse
New Haven
Harbor
Oil Storage
Forge Shop
Machine Shop
Boiler Shop
Car Shop
Iron
Storage
Paint Shop
Brass Foundry
Ice House
Coal House
Lumber Storage
Spring Street
Cedar
Street
Lamberton
Street
Hallock Avenue
N
0 100 200 300
FEET

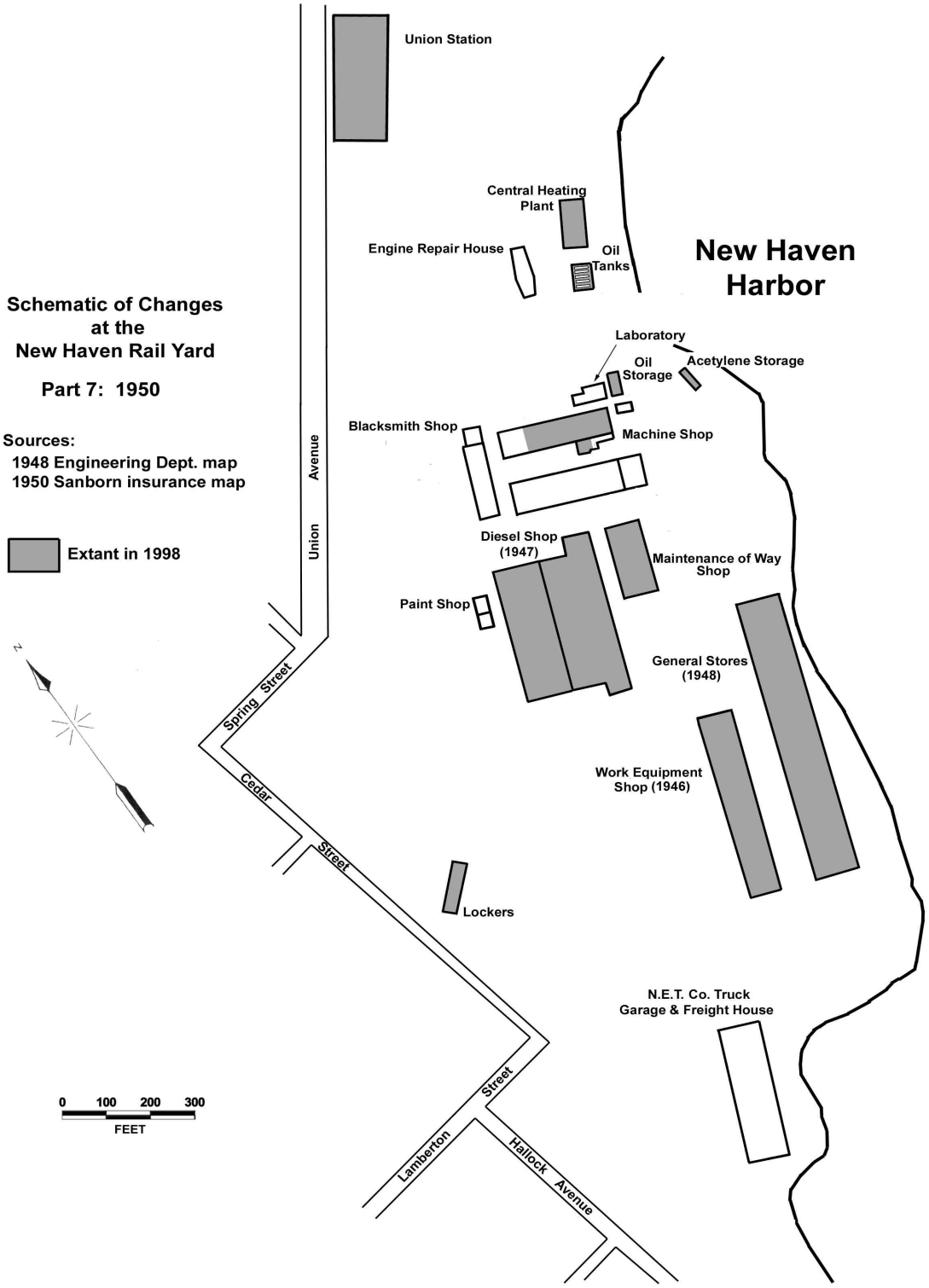

Schematic of Changes at the New Haven Rail Yard
Part 2: 1890
Sources:
1886 Sanborn insurance map
1888 New Haven atlas
Extant in 1998
New Haven Harbor
Water Tower
Spring Street Roundhouse
Office/Storage (before 1886)
Oil Storage
Woodworking / Finishing Wheels (before 1886)
Machine Shop
Forge Shop
Boiler Shop
Car Erecting
Drying Room
Car Shop (ca. 1888)
Iron Storage
Brass Foundry
Ice House
Paint Shop
Coal House
Lumber Storage
Spring Street
Cedar Street
Lamberton Street
Hallock Avenue
N
0 100 200 300
FEET

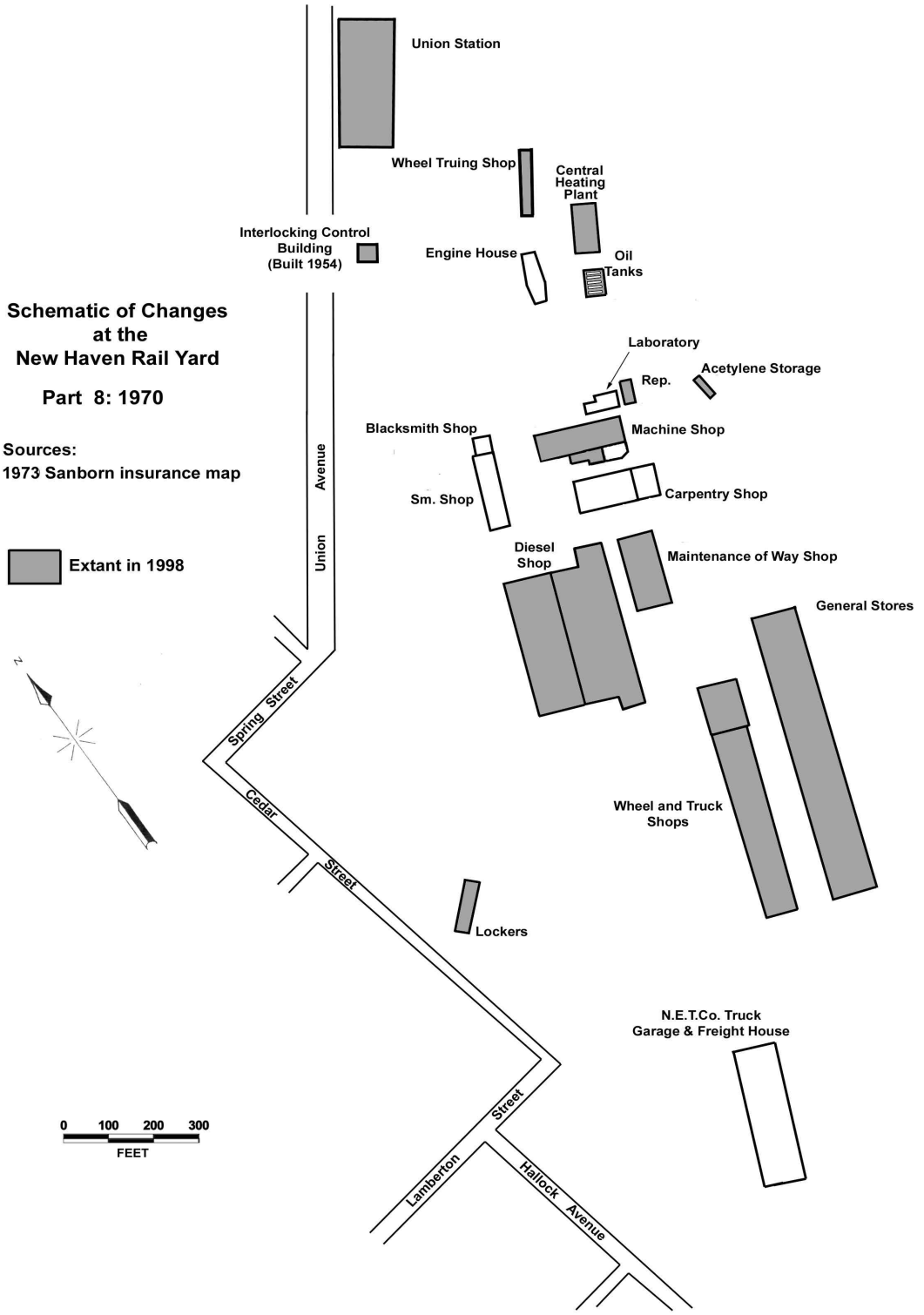

Schematic of Changes
at the
New Haven Rail Yard
Part 3: 1900
Sources:
1901 Sanborn insurance map
Extant in 1998
New Haven
Harbor
Spring Street
Roundhouse
Office/Storage
Oil Storage
Pattern Making /
Wheel Fitting Shop
Machine Shop
Forge Shop
Boiler Shop
Car Erecting/
Woodworking
Drying Room
Car Shop
Iron
Storage
Brass Foundry
Paint Shop
Ice House
Coal House
Lumber Storage
Union Avenue
Spring Street
Cedar Street
Lamberton Street
Roundhouses
(ca. 1897)
Lamberton Street
Hallock Avenue
0 100 200 300
FEET


Schematic of Changes
at the
New Haven Rail Yard
Part 4: 1915
Sources:
1915 valuation map
Extant in 1998
N
0 100 200 300
FEET
New Haven
Harbor
Coal-handling
Facility
(ca. 1915)
Spring Street
Roundhouse
Laboratory
Oil Storage
Pipe Shop
Machine Shop
Tin Shop
Forge Shop
Storage
Machine Shop / Sawmill
Car Shop
Scrap
Storage
Car Heat
Ice House
Boiler Shop
Coal House
Storage
Lumber Shed
Union Avenue
Spring Street
Cedar Street
Lamberton Street
Roundhouses
Lamberton Street
Hallock Avenue


Schematic of Changes
at the
New Haven Rail Yard
Part 5: 1923
Sources:
1923 Sanborn insurance map
Extant in 1998
Union Station
(Built in 1918)
Union Avenue
Coal-handling
Facility
Engine House
(ca. 1920)
Spring Street
Roundhouse
Laboratory
Storage
Machine Shop
Welding
Forge Shop
Machine Shop /
Carpenter Shop
Box Car Shop
Storage
Paint Shop /
Boiler House
Boiler and Tank Shop
General Stores
Lumber Shed
Sand Storage
Spring Street
Cedar
Street
Lamberton Street
Roundhouse
Lamberton
Street
Hallock Avenue
New Haven
Harbor
0 100 200 300
FEET


Schematic of Changes
at the
New Haven Rail Yard
Part 6: 1940
Sources:
1939 Mechanical Dept. map
Extant in 1998
Union Station
Central Heating
Plant (1930)
Diesel Repair
Oil
Tanks
New Haven
Harbor
Laboratory
Mat'l
Storage
Acetylene Storage
(Built ca. 1940)
M.O.W.
Blacksmith Shop
Test Dept.
B. & B. and Signal
Machine Shop
Storage
B. & B. and Signal Repair
Electric Truck Garage /
Old Heating Plant
M.O.W. Equipment Repair Shop
General Stores
Union Avenue
Spring Street
Cedar Street
Lockers
(ca. 1930)
N.E.T. Co. Truck
Garage & Freight House
Lamberton Street
Hallock Avenue
0 100 200 300
FEET


Schematic of Changes
at the
New Haven Rail Yard
Part 7: 1950
Sources:
1948 Engineering Dept. map
1950 Sanborn insurance map
Extant in 1998
Union Station
Central Heating Plant
Engine Repair House
Oil Tanks
New Haven Harbor
Laboratory
Oil Storage
Acetylene Storage
Blacksmith Shop
Machine Shop
Diesel Shop (1947)
Maintenance of Way Shop
Paint Shop
General Stores (1948)
Work Equipment Shop (1946)
Lockers
N.E.T. Co. Truck Garage & Freight House
Union Avenue
Spring Street
Cedar Street
Lamberton Street
Hallock Avenue
0 100 200 300
FEET


Union Station
Wheel Truing Shop
Central Heating Plant
Interlocking Control Building (Built 1954)
Engine House
Oil Tanks
Schematic of Changes at the New Haven Rail Yard
Part 8: 1970
Sources:
1973 Sanborn insurance map
Extant in 1998
Laboratory
Rep.
Acetylene Storage
Blacksmith Shop
Machine Shop
Sm. Shop
Carpentry Shop
Diesel Shop
Maintenance of Way Shop
General Stores
Union Avenue
Spring Street
Cedar Street
Wheel and Truck Shops
Lockers
N.E.T.Co. Truck Garage & Freight House
Lamberton Street
Hallock Avenue
0 100 200 300
FEET

ADDENDUM TO:
NEW HAVEN RAIL YARD
Vicinity of Union Avenue & Cedar & Lamberton Streets
New Haven
New Haven County
Connecticut

HAER CT-160
CT-160

FIELD RECORDS

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