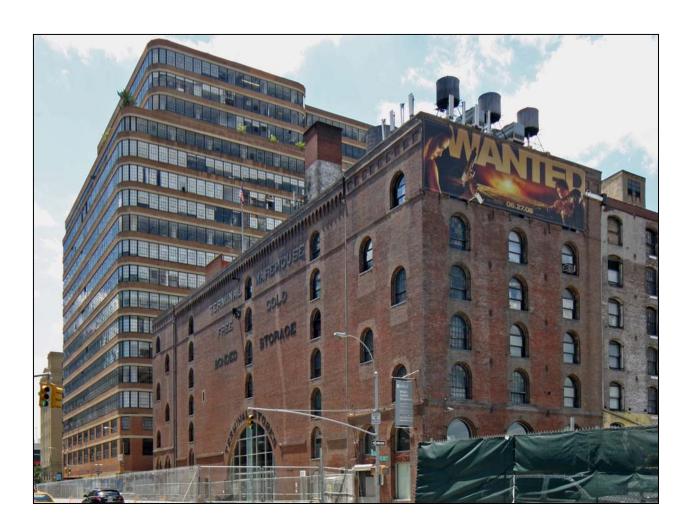
WEST CHELSEA HISTORIC DISTRICT

Designation Report





New York City Landmarks Preservation Commission July 15, 2008



West Chelsea Historic District Designation Report

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West Chelsea Historic District West Chelsea Historic District Borough of Manhattan, NY Landmarks Preservation Commission W 29th St Calendaring: March 18, 2008 Public Hearing: May 13, 2008 Continued Public Hearing: June 3, 2008 Designated: July 15, 2008 Boundary of Historic District W 28th St 548 654 Tax Map Lots in Historic District 651 547 W 27th St 536 514 510 650 West Side Highway / Joe Dimaggio Highway / Twelfth Avenue Eleventh Ave Tenth Ave 513 W 26th St 649 500 626 Existing Historic Districts 501 555 W 25th St West Chelsea Historic District 568 564 Manhattan Queens W 24th St Brooklyn

Landmarks Preservation Commission July 15, 2008, Designation List 404 LP-2302

TESTIMONY AT THE PUBLIC HEARING

On May 13, 2008, the Landmarks Preservation Commission held a public hearing on the proposed designation of the West Chelsea Historic District (Item No. 1). The hearing had been duly advertised in accordance with the provisions of law. Ten witnesses spoke in favor of the designation as proposed, including representatives for Council Speaker and Councilmember for District 3 Christine Quinn, Borough President Scott Stringer, State Senator Thomas Duane, Manhattan Community Board 4, Assemblymember Richard Gottfried, the Historic Districts Council, the Municipal Art Society of New York, the New York Landmarks Conservancy, the Council of Chelsea Block Associations, and Save Chelsea. One of these speakers expressed interest in expanding the boundaries to include additional properties not within the proposed district. The owners and/or representatives of two properties (a total of ten speakers) were opposed to including their properties or portions of their properties in the proposed district. Representatives of two properties (a total of five speakers) took no position on the proposed district. One witness, representing an owner, asked for zoning changes in order to support the proposed district. One owner asked that the hearing be continued. On June 3, 2008, the Landmarks Preservation Commission held a continued public hearing on the West Chelsea Historic District (Item No. 1). The continued hearing had been duly advertised in accordance with the provisions of law. Four witnesses spoke in favor of the designation as proposed, including representatives for the Roebling Chapter of the Society for Industrial Archeology and the Chelsea Waterside Park Association. The owners and/or representatives of two properties (a total of eight speakers) were opposed to including their properties or portions of their properties in the proposed district. Representatives of one of these properties testified against inclusion at the previous public hearing; the continued public hearing was requested by the owner of the second property. Two letters were also presented to the Commission in support of the proposed designation.

WEST CHELSEA HISTORIC DISTRICT BOUNDARIES

The West Chelsea Historic District consists of the property bounded by a line beginning at the intersection of the northern curbline of West 28th Street and the eastern curbline of the West Side Highway (aka Joe DiMaggio Highway, Twelfth Avenue), extending easterly along the northern curbline of West 28th Street to a point formed by its intersection with a line extending northerly from the eastern property line of 548-552 West 28th Street (aka 547-553 West 27th Street), continuing southerly across the roadbed, along said property line, and across the roadbed to the southern curbline of West 27th Street, easterly along said curbline to a point formed by its intersection with a line extending northerly from the eastern property line of 536-542 West 27th Street, southerly along said property line to the southern property line of 534 West 27th Street, easterly along said property line and the southern property lines of 532 through 516 West 27th Street, to the western property line of 510-514 West 27th Street,

northerly along said property line to the southern curbline of West 27th Street, easterly along said curbline to a point formed by its intersection with a line extending northerly from the eastern property line of 510-514 West 27th Street, southerly along said property line to the southern property line of 510-514 West 27th Street, westerly along a portion of said property line to the eastern property line of 513 West 26th Street, southerly along said property line and across the roadbed to the northern curbline of West 26th Street, easterly along said curbline to the western curbline of Tenth Avenue, southerly along said curbline and across the roadbed to the southern curbline of West 25th Street, westerly along said curbline to a point formed by its intersection with a line extending northerly from the eastern property line of 210-218 Eleventh Avenue (aka 564-568 West 25th Street), southerly along said property line to the southern property line of 210-218 Eleventh Avenue (aka 564-568 West 25th Street), westerly along said property line to the eastern curbline of Eleventh Avenue, northerly along said curbline and across the roadbed to the northern curbline of West 25th Street, easterly along said curbline to a point formed by its intersection with the western property line of 551-555 West 25th Street, northerly along said property line to the northern property line of 551-555 West 25th Street, easterly along said property line and the property lines of 549 through 543 West 25th Street to the western property line of 518-534 West 26th Street, northerly along said property line to the southern curbline of West 26th Street, westerly along said curbline and across the roadbed to the western curbline of Eleventh Avenue, southerly along said curbline to a point formed by its intersection with a line extending easterly from the southern property line of 239-243 Eleventh Avenue (aka 600-626 West 26th Street), westerly along said property line to the western property line of 239-243 Eleventh Avenue (aka 600-626 West 26th Street), northerly along said property line to the southern curbline of West 26th Street, westerly along said curbline to the eastern curbline of the West Side Highway (aka Joe DiMaggio Highway, Twelfth Avenue), northerly across the roadbed and along said curbline to the point of the beginning.

SUMMARY

The West Chelsea Historic District, located along the Hudson River waterfront in Manhattan, is a rare surviving example of New York City's rapidly disappearing industrial neighborhoods. During much of the nineteenth and twentieth centuries, the area was home to some of the city's and the country's most prestigious industrial firms. The Otis Elevator Company, the Cornell Iron Works, the John Williams Ornamental Bronze and Iron Works, and the Reynolds Metal Company all had a presence in West Chelsea. The district encompasses all or parts of seven blocks, approximately 30 structures in total dating from 1885 to 1930.

West Chelsea was first developed with a mixture of working-class residences and industrial complexes beginning in the late 1840s, at the moment when Manhattan was becoming the most important center of manufacturing in the United States. Rows of simple tenements were erected in close proximity to large iron works, lumber and coal yards, steam-powered saw mills, and stone dressing operations. Many of the goods produced by the neighborhood's manufacturers were purchased locally by the city's burgeoning construction industry. Few traces of this early period of development survive. The small stable building at 554 West 28th Street, which was erected in 1885 for Latimer E. Jones' New York Lumber Auction Company, is the only reminder within the historic district of the lumber yards that were once a prominent feature of the neighborhood.

West Chelsea experienced a second wave of development around the turn of the twentieth century. By the 1920s, nearly all of the area's original small-scale buildings had been replaced with larger, more substantial industrial structures. Many were built at least in part as speculative ventures. The structure at 548 West 28th Street, for example, was commissioned in 1899 by real estate investor Augustus Meyers and was soon leased to the Berlin Jones Envelope Company. The architect, William Higginson, was a prolific designer of factory buildings—including several located in the DUMBO Historic District. The building possesses many of the features of the American Round Arch style that characterized industrial architecture at the turn of the twentieth century, including a simple brick facade, arched openings, rhythmically placed windows recessed between vertical brick piers, horizontal banding, and a corbelled brick cornice. The Cornell Iron Works building at 555 West 25th Street (1891) and the Conley Foil Company building at 521-537 West 25th Street (1900-01), the latter built on a site formerly occupied by the Cornell Iron Works after the company moved its heavy manufacturing operations out of Manhattan, both employ many of the same architectural elements. The John Williams Ornamental Bronze and Iron Works opened their own modern factory building at 549 West 26th Street in 1900-01, replacing a row of four tenements that dated to 1852. A few years later, from 1901-07, the firm demolished an old foundry building and several other tenements on West 27th Street, erecting a pair of large industrial structures in their place. While the John Williams firm occupied some of the space in their new buildings, several of the floors were leased to other industrial businesses such as the Meyer Sniffen Company, which manufactured metal plumbing supplies.

The pace of redevelopment in West Chelsea quickened during the second decade of the twentieth century as new industries moved into the neighborhood. In 1910, the H. Wolff Book Manufacturing Co. opened its new factory at 518 West 26th Street on a parcel of land that had previously been occupied by the Cornell Iron Works. It was the first of several publishing-related firms that would settle in the neighborhood, and in 1914 the *New York Times* proclaimed the area between West 23rd and West 42nd Streets the new center of the city's printing industry. The Wolff building was also one of the first structures within the historic district to take advantage of the emerging technology of reinforced concrete that was revolutionizing the design of industrial

buildings in the early twentieth century. The reinforced concrete internal structure of the building offered substantial improvements in fireproofing, floor load capacities, and vibration dampening. The material also allowed for larger windows that increased light and ventilation in factory buildings, and for fewer columns and overhead beams, thereby increasing available storage space in warehouses. While reinforced concrete would soon surpass all others as the preferred material for industrial building construction, similar advantages were obtained from the older technology of the steel internal frames, as was employed in the construction of the Zinn Building at 210 Eleventh Avenue. Erected in 1910-11, the Zinn Building was originally owned by a firm involved in the manufacture of metal novelties. Much of the space in the building was soon leased to publishers and lithographers, further enhancing the neighborhood's status as a center of the printing trades. The Otis Elevator Company Building at 260 Eleventh Avenue, erected in 1911-12 and designed by the noted architectural firm of Clinton & Russell, was also constructed with a steel frame. The structure originally housed the corporate headquarters of the famed elevator manufacturer, as well as a regional sales office and fabrication facilities for the firm's construction, repair, and research and development departments.

In addition to its manufacturing operations, West Chelsea also became a major center of warehousing and freight handling activity beginning in the late nineteenth century. The Terminal Warehouse Company opened its massive Central Stores complex in 1891 on land recently reclaimed from the Hudson River. Its owners were closely associated with the New York Central and Hudson River Railroad, whose tracks entered directly into the building through the massive round-arch entrance fronting Eleventh Avenue. In subsequent years, the waterfront property immediately surrounding the Central Stores was converted to freight-related uses by railroad companies that had moved to the area after being displaced by the construction of the Gansevoort and Chelsea Piers. The Baltimore & Ohio Railroad (B&O) purchased the land bounded by West 25th and West 26th Streets in 1897, and in 1912-13, improved its operations by erecting a large reinforced concrete warehouse at the northeast corner of the yard. At the time of its opening, it was said to be the largest concrete building in New York City and the first to employ flat plate construction techniques. The R.C. Williams & Co. Building at 259 Tenth Avenue, erected in 1927-28 as a storage warehouse for the wholesale grocery firm, was located so as to take advantage of the elevated freight track, now known as the High Line, which would run directly behind the building upon its opening in 1933. Designed by renowned architect Cass Gilbert, the reinforced concrete building features a more purely functional aesthetic than many of its neighbors. The block immediately between the Central Stores and the B&O freight yard was acquired in 1900 by the Lehigh Valley Railroad and was used as an offline freight yard until it was improved in 1930-31 by the erection of the Starrett-Lehigh Building. This structure endures as one of the great early Modernist designs in the country, whose cantilevered floor slabs, continuous strips of windows, and innovative interior circulation pattern represent a radical new approach to industrial architecture.

The ensemble of buildings within the West Chelsea Historic District reflects important trends in the development of industrial architecture in the United States and in New York City. They convey a well-defined sense of place and a distinct physical presence which sets the neighborhood apart from other parts of Midtown Manhattan. Despite a decline in industry and freight-related activity in West Chelsea during the mid-twentieth century, the historic district still retains nearly all of its historic building stock, and represents a unique and enduring part of New York City's architectural and cultural heritage.

THE HISTORICAL AND ARCHITECTURAL DEVELOPMENT OF THE WEST CHELSEA HISTORIC DISTRICT

Early History and Development¹

The West Chelsea Historic District, located along the Hudson River waterfront between West 25th and 28th Streets in Manhattan, is comprised mostly of landfill that occurred in the midand late-nineteenth century. The original high water mark ran just west of Tenth Avenue and nearly all of the land within the historic district was once under water. The land that did exist in the district was granted by British Governor Edmund Andros to Mary Remmersen in 1680.² The property was then deeded to Egbert Hereman in 1692, and his heirs sold several parcels to Jacob Somerindyck—who had married Egbert's daughter Sarah—between 1722 and 1743. In 1750, Thomas Clarke purchased the land from Somerindyck and established a great rural estate on the property, which he named Chelsea. Clarke's holdings stretched from approximately Eighth Avenue to the Hudson River between West 20th and 28th Streets. Upon Clarke's death in 1776, the estate passed to his wife Mary, who in turn divided the land between her heirs when she passed away in 1802. The property lying south of what is now West 24th Street went to her daughter Charity, wife of Episcopal Bishop Benjamin Moore. This land was later developed by their son, Clement Clarke Moore, as an affluent residential neighborhood, the heart of which comprises the Chelsea Historic District. The property north of West 24th Street, including all of the land that originally existed in the West Chelsea Historic District, was placed in trust for Mary's grandson, Thomas B. Clarke, and his heirs. Thomas B. Clarke apparently ran into financial trouble soon after being named in his grandmother's will. He petitioned the New York State Legislature several times between 1814 and 1817 for the right to disposes of half of the land held in trust in order to support himself and his children. In the ensuing years, Clarke entered into a series of agreements in which he sold or mortgaged a significant portion of the southern half of his property—that portion lying between West 24th and West 26th Streets—in exchange for the forgiveness of debts he had accrued.³ It is unclear if Mary Remmersen, Egbert

¹ Information in this section is based on the following sources: Ancestry.com, 1790 United States Federal Census [database online] (Provo, UT: Generations Network, 2004), New York, Harlem Division, 132; Ancestry.com, 1790 United States Federal Census [database online] (Provo, UT: Generations Network, 2004), New York, Out Ward, 128; Ancestry.com, 1800 Federal Census [database online] (Provo, UT: Generations Network, 2004), New York, Ward 7, 274; Ancestry.com, 1850 United States Federal Census [database online] (Provo, UT: Generations Network, 2004), New York, Ward 16, 404-05; "Davidson, Henry J.," Appletons' Annual Cyclopaedia and Register of Important Events of the Year 1890 (New York: D. Appleton and Company, 1891), 642; Elizabeth Blackmar, Manhattan for Rent, 1785-1850 (Ithaca, NY: Cornell University Press, 1989); J.H. Colton, Topographical Map of the City and County of New-York (New York: J.H. Colton & Co., 1836); Mathew Dripps, Plan of New York City (New York: Mathew Dripps, 1852); Matthew Dripps, Plan of New York City (New York: Mathew Dripps, 1867); Benjamin C. Howard, Reports of Cases Argued and Adjudged in the Supreme Court of the United States, January Term, 1850 (New York: The Banks Law Publishing Co., 1905), 495; "Many Buildings in Chelsea Area," New York Times (January 4, 1914) S5; Minutes of the Common Council, 1784-1831 19 (New York: City of New York, 1917); "New Buildings in Chelsea District," New York Times (September 15, 1912) X14; William Perris, Maps of the City of New York (New York: William Perris, 1852-54); William Perris, Maps of the City of New York (New York: William Perris, (1857-62); Reports of Cases Argued and Determined in the Court of Chancery of the State of New York 1 (New York: Gould, Banks & Co., 1846), 18; I.N. Phelps Stokes, Iconography of Manhattan Island, 1498-1909 6 (New York: Robert H. Dodd, 1928); Towle v. Remsen, 70 NY 303; United States Coast Survey, Map of New-York Bay and Harbor and the Environs (Washington D.C.: United States of America, 1844). ² Stokes, 83. The land had been granted by Dutch Governor Peter Stuyvesant to Paulus Leentersen van der Grift and Allard Anthony in 1663, but this grant was later revoked and the estate came under British royal control after their conquest of New Netherlands. It also appears that Mary Remmersen and her husband Gerrit had been in possession of the property as early as 1678. ³ The children received little or no support from their father and over the course of the ensuing decades they entered into a number of law suits in which they attempted to recover some of the property, many of which they won. The record of these legal

Hereman, or Jacob Somerindyck owned slaves, although census records indicate that several members of the Somerindyck family did in the late-eighteenth century.⁴ The Clarke family owned several slaves during the eighteenth century; Mary Clarke is listed as owning four in 1790 and six in 1800.⁵ It does not appear that her grandson, Thomas B. Clarke, ever owned slaves.

Development in the West Chelsea Historic District began in earnest during the 1830s. The City approved plans for opening Tenth Avenue between West 14th and West 28th Streets in 1830, and all encumbrances were to be removed by April of the following year.⁶ Within months, local property owners began to petition the city for the right to fill in the land west of the avenue.⁷ In May of 1831, Beverly Robinson, a lawyer closely associated with the Clarke family, requested a grant from the City for an underwater parcel between West 24th and West 25th Streets.⁸ The heirs of Thomas B. Clarke received similar grants to fill in the three blocks immediately to the north in 1836 and 1837, and they hired James N. Wells, the primary developer of residential Chelsea, to oversee the work.⁹ The timing on these latter grants proved to be unfortunate, however, as the Panic of 1837 and the ensuing economic depression brought a virtual halt to real estate activity in the city, including the infill projects in West Chelsea.¹⁰ It was not until the 1850s that the blocks within the West Chelsea Historic District were filled to Eleventh Avenue, and it would take several decades more for the infill to reach its current extent at the West Side Highway (aka Joe DiMaggio Highway, Twelfth Avenue).¹¹

Like other waterfront neighborhoods in the city, the area developed during this time with a mixture of residences and industrial complexes. Lumber, coal, and stone yards, as well as saw mills and pottery works, were erected in close proximity to rows of working-class houses. Deeds filed with the New York City Register indicate that some of these houses were built under long-term ground leases, while others were owned outright by their occupants. Most of the

cases provides a fairly detailed account of the early history of the area. See especially *Charles A. Williamson and Catharine, his Wife, Plaintiffs, v. Joseph Berry* in Howard, 495.

⁴ Ancestry.com, 1790 United States Federal Census [database online] (Provo, UT: Generations Network, 2004), New York, Harlem Division, 132.

⁵ Ibid, New York, Out Ward, 128; Ancestry.com, *1800 Federal Census* [database online] (Provo, UT: Generations Network, 2004), New York, Ward 7, 274.

⁶ Minutes of the Common Council, 230.

⁷ According to a series of acts passed by the New York State Legislature in 1730, 1807, and 1826, the City of New York took ownership of the land underwater extending 400 feet beyond the low tide mark. It could in turn grant this land to private property owners—with the owners of adjacent upland lots receiving preemptive rights to any grants made by the city. Another act passed in 1837 extended the city's jurisdiction along the western edge of the Island of Manhattan out to the West Side Highway (aka Joe DiMaggio Highway, Twelfth Avenue), as created by the Commissioner's Plan in 1811.

⁸ Minutes of the Common Council, 686. The grant lies just outside the boundaries of the historic district. Robinson also helped develop the "Chelsea Cottages" at 437-459 West 24th Street (designated New York City Individual Landmarks) on the former Clarke estate.

⁹ Cumming and Pollack v. Williamson and Others, in Reports of Cases Argued and Determined in the Court of Chancery of the State of New York, 18.

¹⁰ Towle v. Remsen, 70 NY 303.

¹¹ Colton; United State Coast Survey; Dripps (1852), 9; Perris (1852-54), 89, 92; Perris (1857-62), 87, 90; Dripps (1867), 9.

¹² Blackmar notes that by the second quarter of the nineteenth century, Manhattan's elite were already moving to residential neighborhoods that were spatially segregated from commerce and industry. The city's working class, on the other hand, continued to occupy mixed-use neighborhoods into the twentieth century.

¹³ The plot of land at 510 West 27th Street, for example, was leased in 1846 by John Norris, listed in the deed as a laborer, from Charles and Catherine Williamson for 21 years at \$50 per year. The terms of the lease stipulated that Norris was to construct a dwelling house within a year and that the building was to be at least two stories tall; industrial uses, including iron works and foundries, were explicitly forbidden. Norris' neighbor, Bartholomew Doyle, at 514 West 27th Street purchased his plot of land outright the same year for \$900.

residential structures in the area were designed from the beginning to house multiple families.¹⁴ Historic maps from the period also show that many of the tenements erected in West Chelsea had smaller buildings at the rear of the lot.¹⁵

There was a steady turnover of industrial and residential tenants in West Chelsea throughout the second half of the nineteenth century. The property at 518-534 West 26th Street is a prime example. In 1844, the land was purchased by the contractors Thomas Cumming and James Pollock, who apparently improved the property and in turn sold it to John H. Mott and Isaac Ayres of the firm Mott & Ayres (also called the Chelsea Iron Works). Their business apparently ran into financial difficulties only a few years later and in 1856 the property was sold at auction to Uriah Hendricks, himself an established manufacturer of metal goods. It is unclear if Hendricks, whose Soho Copper Works had moved to New Jersey in 1813, ever occupied the property. Reports from the period indicate it may have instead been occupied for a time by the Novelty Iron Works, the city's largest iron manufacturer whose main operations occupied five acres at the foot of East 12th Street. By the late 1860s, however, the Cornell Iron Works had moved into the space and would occupy the property into the early twentieth century.

While the tenants in West Chelsea were continually changing during the second half of the nineteenth century, the buildings themselves remained relatively static after the initial wave of construction in the 1850s and early 1860s. The greatest area of development during this period was the land west of Eleventh Avenue. In 1858 and 1859, the City of New York issued a series of water grants for the two blocks between West 25th and West 27th Streets. Both were filled in by the 1870s; the southern block was occupied by the lumber yards of Isaac E. Smith and Ichabod T. Williams, while the northern block had been leased to the Cornell Iron Works. The third waterfront block, bounded by West 27th and West 28th Streets, was partially filled in during this period and also served as a lumber yard—but it was not officially granted by the city until 1888 and was not fully developed until after that.

West Chelsea experienced a second major wave of development beginning around the turn of the century and lasting into the 1920s. ¹⁷ During this period, nearly all of the area's original small-scale buildings were replaced with larger, more substantial industrial and commercial structures. The John Williams ornamental bronze and iron works, for example, replaced its old two- and three-story foundry buildings on West 27th Street, which had stood since the 1850s, with a group of three large six-story factory buildings in 1901-07. This activity also displaced the area's remaining residential tenants. The last surviving tenements within the boundaries of the historic district were torn down in the mid-1920s for the construction of an annex for the H. Wolff Book Manufacturing Co. at 508 West 26th Street and for the R.C. Williams & Co. Building at 259 Tenth Avenue. ¹⁸ Of the buildings within the West Chelsea Historic District, the Terminal Warehouse Company's massive Central Stores complex at 601 West 27th Street (1890-91) and the Cornell Iron Works building at 555 West 25th Street (1891), as well as the two small-scale buildings at 262 Eleventh Avenue (1890) and 554 West 28th Street (1885), predate the twentieth century. The

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¹⁴ Census records from 1850 indicate that the buildings at 510 and 514 West 27th Street each contained three separate households. Ancestry.com, *1850 United States Federal Census* [database online] (Provo, UT: Generations Network, 2004), New York, Ward 16, 404-05.

¹⁵ Perris (1857-62).

¹⁶ "Davidson, Henry J.," 642.

¹⁷ See "New Buildings in Chelsea District," X14; "Many Buildings in Chelsea Area," S5. A comparison of historic maps from 1899 and 1916 is also striking.

¹⁸ As of the time of publication of this designation report, a few of the old tenement buildings were extant outside of the boundaries of the historic district, but most are in a substantially altered state.

remainder of the West Chelsea Historic District is characterized by mid-sized manufacturing buildings and large-scale terminal warehouse structures erected after 1900.

Manufacturing in Manhattan¹⁹

During the colonial period, British America was only incidentally involved in manufacturing operations. It exported many of the raw materials used in England's increasingly industrialized economy and was a voracious consumer of that country's finished goods, but few manufactured commodities were actually produced in the colonies. American independence and the conflict between the United States and Britain in the early decades of the nineteenth century, however, made imported manufactured goods less profitable or desirable and gave substantial incentive to the development of domestic industrial operations.²⁰ In New York City, this early phase of industrialization is most clearly evidenced by the large ship yards that lined the East River. Manhattan's shoreline was developed with boat builders as far north as Corlear's Hook, while Wallabout Bay in Brooklyn supplied the federal navy with many of its best ships. By 1815, the East River waterfront had become the country's largest, and one of the most innovative, centers of shipbuilding.²¹ Related industries soon flourished alongside the ship yards. James Allaire, for example, established a foundry on Cherry Street in 1816. The firm was the first of the city's large metal works and produced many of the steam engines and boilers used by the nearby yards. Other trades also began to reorganize their modes of production during this time, moving away from handicrafts towards a system of mass-production.²² Perhaps most typical were the smaller clothing and shoe manufacturers, which by 1835 had created a large market for ready-made goods manufactured by wage-earning immigrant journeymen and by women working from their own homes.²³

The Panic of 1837 and the subsequent economic depression may have temporarily slowed the industrialization of Manhattan, but the city had largely recovered by the mid 1840s, due in large part to a rapid increase in both domestic and foreign trade.²⁴ The first transatlantic steamships began regular operation during the recovery years at the end of the 1830s, while the introduction of the grand clipper ships in the early 1840s helped the city capture much of the traffic with China (and eventually California after the discovery of gold there in 1848). The Erie Canal continued to facilitate the city's commerce with the country's interior and the opening of the New York and Erie Railroad and the Hudson River Railroad in the early 1850s further enhanced New York's preeminence in trade. In addition to stimulating its commercial economy, New York's emergence as the nation's most important transportation hub also helped fuel the city's increasing industrialization—both indirectly by facilitating the exchange of raw materials

¹⁹ Information in this section is based on the following sources: Edwin F. Burrows and Mike Wallace, *Gotham: A History of New* York City to 1898 (New York: Oxford University Press, 1999); Paul Johnson, A History of the American People (New York: Harper Perennial, 1998), 363; Landmarks Preservation Commission (LPC), Greenwich Village Historic District Extension Report (LP-2184) (New York: City of New York, 2006), prepared by Jay Shockley; Charles Lockwood, Manhattan Moves Uptown (Boston: Houghton Mifflin, 1976), 257-58; Patricia Evelyn Malon, The Growth of Manufacturing in Manhattan, 1860-1900 (PhD Dissertation, Columbia University, 1981); "Manhattan Great Industrial Centre," New York Times (December 31, 1914) 5. ²⁰ Early tariffs also helped to protect the country's nascent manufacturing sector, while the immigration of laborers skilled in industrial techniques introduced new technologies. Perhaps most importantly, the American domestic market for manufactured

goods was booming and local industries had little trouble finding ready purchasers for their products. Johnson, 363. ²¹ Burrows and Wallace, 442.

²² One of the more prominent examples was the shop of Duncan Phyfe, where a hundred semiskilled laborers were employed in an early version of an assembly line producing furniture that was sold throughout the country and even internationally. Ibid, 344.

²⁴ The port's traffic in 1849 was triple its level in 1836. Ibid, 653.

and finished goods necessary for manufacturing, and directly by creating substantial demand for industrial products relating to the shipping and railroad industries. Large iron works, for example, sprung up along the East and Hudson River waterfronts in close proximity to the ship yards that were the foundries' most important customers. By the 1850s, New York City had become the nation's largest center of manufacturing activity and was in fact one of the fastest-growing industrial areas in the entire world.²⁵ To celebrate its industrial ascendancy, the city threw itself a congratulatory party in 1853 when it hosted the country's first World's Fair, which was appropriately titled the "Exhibition of the Industry of All Nations."

New York City remained the country's leading manufacturing center throughout the second half of the nineteenth century. While domestic and international trade continued to play a part in the success of the city's manufacturing operations, it was the explosion of the city's own population during this period that proved to be the most important factor in maintaining Manhattan's industrial preeminence. These new arrivals provided the raw power necessary for the city's manufacturers at a time when the industrial sector still relied primarily on manual rather than mechanical labor.²⁷ In addition to providing the power for Manhattan's industrial operations, the growth of the city's population also created a huge local market that ensured a steady demand for manufactured goods. The construction industry, which by the 1850s was producing over 2,000 buildings annually as the city's boundaries expanded northward, was a particularly important customer for New York's manufacturing businesses.²⁸ Local builders consumed a substantial portion of the goods produced by the city's iron works, including items such as gas fixtures, water pipes, stoves and heating apparatus, stair railings, and structural elements; some of the larger foundries produced entire cast-iron building facades, most of which were manufactured for local consumption (one of the greatest surviving concentration of castiron building facades in the world is located within the SoHo-Cast Iron Historic District).²⁹ The city was also home to a large number of saw mills, stone dressing operations, lumber yards, and other related manufacturers, all of which catered to New York's construction industry.

These heavy manufacturing operations were initially located in a narrow band along the shores of downtown Manhattan. As the city's population moved northward, previously undeveloped waterfront areas such as West Chelsea were turned over to industrial use. Rudimentary housing for the city's laboring classes often sprung up adjacent to, or even within, these manufacturing neighborhoods. Lighter industry, most notably garment making and publishing, typically occupied the upper floors of store-and-loft buildings within the interior of Manhattan Island, particularly in the area now known as Tribeca, and later moving northward into neighborhoods such as SoHo, NoHo, and eventually Ladies' Mile. While the city as a whole was the largest industrial center in the country, individual manufacturing businesses were generally small in scale—most had fewer than fifty workers. Gigantic operations such as the Cornell Iron Works in West Chelsea, which at one point employed 1,200 people, were the exception rather than the rule.

At the turn of the twentieth century, Manhattan's industries were producing ten percent of the nation's manufactured goods.³⁰ Ready-made clothing accounted for nearly a third of this

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²⁵ Approximately 7% of people nationwide employed in manufacturing operations were working in Manhattan. Ibid, 659, 662.

²⁶ Fueled by both rural in-migration and foreign immigration, the number of residents in New York City rose from approximately 300,000 in 1840 to over 800,000 in 1860. Ibid, 736. For a full discussion of the factors involved in New York City's industrial growth, see Malon, 10-76; and Burrows and Wallace, 663-64.

²⁷ In 1860, only 18 percent of New York City's manufacturers were powered by steam. Burrow and Wallace, 663.

²⁸ Lockwood, 257-58.

²⁹ Malon, 229.

³⁰ Ibid, 379.

output, while iron manufacturing and publishing also remained important to the city's industrial economy.³¹ Rising real estate values, however, lead to a significant reorganization of the city's manufacturing operations during this period; the heavy industries along Manhattan's waterfront were particularly affected. Between 1894 and 1910, New York's Department of Docks undertook a major reconstruction of a large section of Manhattan's western shoreline, erecting the massive Gansevoort and Chelsea Piers between West 11th and West 23rd Streets. The area soon became the busiest section of the city's port and many of the existing manufacturing businesses were dislocated as warehouses and other shipping-related activities moved into the neighborhood.³² Similar displacements occurred in other industrial areas along Manhattan's waterfront. In West Chelsea, for example, the Cornell Iron Works moved its heavy production shops out of the city in 1900 and sold a block-long parcel of shoreline property to the Lehigh Valley Railroad for use as a freight yard. Many of those manufacturers that remained in Manhattan used the heightened real estate market as an opportunity to increase profits, erecting new, much larger structures that housed not only their own operations but also had enough space to rent out to other industrial tenants.³³ Developers also saw opportunities in creating speculative manufacturing space.

While many of the largest manufacturers and much of its heavy industry had already moved to the other boroughs or outside of the city, Manhattan retained a substantial concentration of manufacturing operations into the second half of the twentieth century. In 1914, during the height of West Chelsea's second wave of industrial development, the New York Times published an article proclaiming Manhattan a "great industrial centre [sic]" and noting that the island was home to 24,866 factories employing over half a million people.³⁴ The majority of these were concentrated in the center of the island, in the area stretching from river to river between Washington Square and 59th Street. By mid century, however, many of the city's manufacturers were beginning to relocate outside of Manhattan. Some of the formerly industrial neighborhoods were completely redeveloped. The East River waterfront was transformed by a series of Urban Renewal projects during the post-war period, while others, including West Chelsea, adapted their existing building stock to new uses such as warehousing and storage functions.

Manufacturing in West Chelsea³⁵

Much of the land within the West Chelsea Historic District was initially developed during the late 1840s and 1850s, at the exact moment when Manhattan was growing into the country's largest manufacturing center. The availability of cheap, unencumbered land recently reclaimed from the Hudson River lured many industrial tenants to the area from their previous locations in Lower Manhattan. The presence of convenient transportation connections also helped spur the neighborhood's industrial development. The Hudson River waterfront was in its ascendancy

³¹ Ibid.

³² LPC.

³³ Within the West Chelsea Historic District, the Zinn brothers, the H. Wolff Book Manufacturing Company, the Jno. Williams, Inc. ornamental bronze and iron works, and Harris H. Uris, all leased out manufacturing space to other industrial tenants. 34 "Manhattan Great Industrial Centre," 5.

³⁵ Information in this section is based on the following sources: Harry James Carman, *The Street Surface Railway Franchises of* New York City (New York: Columbia University Press, 1919) 33-38; Documents of the Senate of the State of New York 3, no. 77 (Albany, NY: State of New York, 1851) 20; Matthew Dripps, Plan of New York City (New York: Mathew Dripps, 1867); "Envelopes," The Edison Monthly 14, no. 12 (December 1922) 243; "Joseph Colwell Obituary," The New York Times (May 20, 1882) 4: Patricia Evelyn Malon, The Growth of Manufacturing in Manhattan, 1860-1900 (PhD Dissertation, Columbia University, 1981); "New Centre for Printing Trade," New York Times (November 8, 1914) XX2; William Perris, (1857-62); "Otis Elevator Building," The American Architect 102 (September 1912) 104-05; J.C. Robertson, ed., The Mechanics' Magazine, Museum, Register, Journal, and Gazette, 8 (July 6-Dec. 28, 1850).

during the mid-nineteenth century, as commerce was increasingly shifting from the shallow East River to the deeper shores along the western edge of the island. Railroads were also changing the character of Manhattan's western waterfront. In 1846 the New York State Legislature granted a charter to the Hudson River Railroad Company to open a line between New York City and Albany. The following year the City of New York passed an ordinance allowing the railroad to run tracks at grade along Manhattan's west side, and by 1851 the entire run had been completed. The blocks comprising the West Chelsea Historic District lay immediately adjacent to these tracks and just south of the large freight yards that were established at West 30th Street, making the suitability of the area for manufacturing obvious.

Like Manhattan in general, iron and brass works were amongst the most visible and perhaps the most important industries in West Chelsea during the second half of the nineteenth century. The earliest recorded metal factories erected in the area were those of the Chelsea Iron Works and the Minnesota Iron and Brass Foundry, which together employed nearly 400 people in 1850.³⁷ In 1856, the property of the Chelsea Iron Works was acquired by Uriah Hendricks, who in turn sold the complex to the Cornell Brothers. By the 1860s, the J.B. & J.M. Cornell Iron Works had established itself as one of the city's major producers of cast-iron architectural elements.³⁸ In the ensuing decades, the firm became one of the city's largest manufacturing operations, employing over 1,200 people and occupying all or parts of several blocks within the West Chelsea Historic District. The building that still stands at 555 West 25th Street was erected for the Cornell Iron Works in 1891, at the height of the company's prosperity. It originally housed a pattern shop and iron foundry, as well as a stable on the first floor. Another significant early metal works was that of the Colwell family, which first began acquiring property in the area at the beginning of the 1850s. Like the rival Cornell firm, the Colwell Iron Works expanded rapidly during the midnineteenth century and eventually came to own an extensive complex of buildings and storage yards on the east side of Eleventh Avenue between West 26th and West 28th Streets.³⁹

Metal works continued to play a vital role in West Chelsea well into the twentieth century and the historic district retains a number of structures originally erected for these firms. The John Williams Ornamental Brass and Iron Works moved into the neighborhood in 1888, occupying the foundry buildings once owned by the Colwell family. The firm expanded significantly at the turn of the century and commissioned three new factory structures to house their growing operation, located at 549 West 26th Street and 536 and 544 West 27th Street. In addition to manufacturing architectural elements such as door and windows grilles, stair railings, and elevator enclosures, the company also produced fine arts castings such as the statue of *Alma Mater* for Columbia University and the bronze doors for the Boston Public Library, both designed by renowned sculptor Daniel Chester French. Harris H. Uris also established a foundry in the district in the first decade of the twentieth century, located at 525 West 26th Street. He eventually acquired several adjacent lots and commissioned the industrial buildings still standing at 513, 515, and 521 West 26th Street. While initially focused on producing architectural metal

³⁶ The ordinance specified that the tracks would run along Twelfth Avenue from Spuyten Duyvil creek to West 60th Street, then along Eleventh Avenue to West 30th Street, and then along Tenth Avenue and West Street to Canal Street. Carman, 33-38.

³⁷ Mott & Ayers were the original proprietors of the Chelsea Iron Works, while V.G. Audubon and John Stafford owned the Minnesota iron and Brass Foundry. These operations produced such goods as water and gas pipes, architectural ornament, and various types of machinery. The Chelsea Iron Works also manufactured entire iron steam boats used by the Panama Railroad Company to ferry prospectors during the California gold rush, as well as machinery for transatlantic steamships plying the waters between New York and England. Robertson, ed.

³⁸ Malon, 117, 229.

³⁹ This operation was primarily engaged in the manufacture of equipment for sugar refineries, although they also produced other goods including a number of iron lighthouses commissioned by the United States Coast Guard. "Joseph Colwell Obituary," 4.

work for clients such as the newly-established Interborough Rapid Transit Company, Uris later moved into the real estate development business and with his sons, Percy and Harold, helped to establish Midtown Manhattan as a commercial center to rival the city's downtown financial district. The Conley Foil Company, which was closely associated with the American Tobacco Company and supplied that trust with much of the foil used to package its products, moved into a new complex at 521-537 and 539-541 West 25th Street in 1901. The structure was later acquired by the Reynolds Metals Company and served as the firm's executive and sales offices; goods such as tinfoil and bottle caps continued to be manufactured by other tenants within the building.

In addition to its iron and brass works, West Chelsea also contained a substantial number of businesses relating to the production of lumber and building materials. Historic maps from the 1850s and 1860s indicate that several large lumber, stone, and coal yards were once located within the boundaries of the historic district. All of the operations would, however, disappear by the turn of the twentieth century as West Chelsea began a period of substantial redevelopment. With the price of real estate rising in the area, the low-performing open lumber yards were replaced with large industrial structures and the freight yards of the national railroad companies. The only remnant of the lumber and building materials industry that survives in the West Chelsea Historic District is the small stable building at 554 West 28th Street, which was erected in 1885 for Latimer E. Jones' short-lived New York Lumber Auction Company.

The wave of new development that occurred in West Chelsea at the beginning of the twentieth century brought a new set of manufacturers to the neighborhood. By 1914, the New York Times was proclaiming the area between West 23rd and West 42nd Streets, from Seventh Avenue to the Hudson River, to be the new center for the city's printing industry.⁴¹ The newspaper specifically attributed the neighborhood's rise in publishing prominence to the transit facilities offered by Pennsylvania Station and the nearby United States General Post Office (now known as the James A. Farley Building, a designated New York City Landmark). 42 The first building to be erected specifically for the printing industry within the boundaries of the historic district was the new headquarters of the H. Wolff Book Manufacturing Co. at 518 West 26th Street, which was completed in 1910. The firm grew rapidly in the following years and added two stories to their factory building in the early 1920s. Shortly thereafter, the company commissioned a substantial annex, which was erected on the adjacent property at 508 West 26th Street in 1926-27. The company further expanded in the 1940s and 1950s, and came to control a significant amount of the manufacturing space within the boundaries of the West Chelsea Historic District. The firm took out leases in the former Cornell Iron Works building at 555 West 25th Street in 1943, in the Terminal Warehouse Company's Central Stores at 261 Eleventh

⁴⁰ Records show that in 1851 the New York State Legislature authorized Thomas Dugard and George Colyer to erect a steam-powered saw mill on the waterfront between West 27th and West 28th Streets. By 1859, both the New York Steam Saw Mills and the New York Steam Stone Dressing Company were in operation within the West Chelsea Historic District. The reclamation of blocks west of Eleventh Avenue began around 1860—water grants were officially issued in 1858 and 1859—and much of this newly-created land was also put to use as lumber yards. The block bounded by West 25th and West 26th Streets was split between Ichabold T. Williams and Thomas E. Smith, both of whom already operated yards on adjacent lots, while the former site of the New York Steam Saw Mills two blocks to the north was enlarged and connected to a spur line of the Hudson River Railroad that ran down Eleventh Avenue from the freight depot at West 30th Street. By the 1870s, Joseph A. Dunbar had taken over Dugard and Colyer's lumber yards on the east side of Eleventh Avenue between West 27th and West 28th Streets; it later was acquired by Thomas E. and John D. Crimmins, whose Crimmins Contracting Company was well established in the New York City building industry. Perris (1857-62); Dripps (1867); *Documents of the Senate of the State of New York*, 20.

⁴² The article also noted that the larger printing companies tended to locate east of Eighth Avenue, closer to the business corridors of Broadway and Fifth Avenue, while the smaller firms, including those that eventually settled in West Chelsea, opted for the lower rents west of Ninth Avenue. Ibid.

Avenue in 1952, and in the R.C. William & Co. warehouse at 259 Tenth Avenue in 1954 (which the company later purchased outright in 1957). Much of this space was in turn leased to other allied businesses—portions of the annex building, for example, were occupied by the firms of Grosset & Donlop, George H. Doran, the Van Reese Press, and Greenwhich Lithographers. While not specifically erected for the printing trades, the Zinn Building at 210 Eleventh Avenue also became a hotbed for the publishing industry. It was erected in 1910-11 for the Zinn brothers, who were involved in the manufacture of metal novelties such as safety razors. Within a few years of its construction, a significant portion of the structure was leased to lithographers and printing companies such as A.N. Gitterman Corporation. When the Zinn family sold the building in the 1930s, it was acquired by a group of printing and paper jobbers.

While the area's metal works, and later its publishing businesses, were the most prominent industrial operations in West Chelsea, several other important manufacturers once called the neighborhood home. The Berlin Jones Envelope Company, the oldest envelope manufacturer in the country, was located in the historic district for over 60 years—first in the structure at 548 West 28th Street and later in the Starrett-Lehigh Building at 601 Eleventh Avenue. By the 1920s, the firm was turning 150 tons of raw Massachusetts paper a month into envelopes of every size and description. Local access to rail and water-borne transportation allowed the company to send its products throughout the nation. Across the street from Berlin Jones, the Otis Elevator Company erected a new headquarters building at 260 Eleventh Avenue in 1910-11. In addition to executive and sales offices, the structure housed heavy manufacturing facilities for the company's construction, repair, and research and development departments. Otis remained in West Chelsea for over six decades, during which time the company installed elevators in many of the city's most famous skyscrapers and introduced numerous innovations in both elevator and escalator technology.

Warehousing in Manhattan⁴⁵

Warehouses have been an integral part of Manhattan's landscape since the founding of New Amsterdam in the seventeenth century—one of the first permanent buildings erected on Manhattan Island was the stone storehouse of the Dutch West India Company. The rise of New York as the country's most important port in the early nineteenth century created an obvious need for expanded storage facilities in Manhattan. At this time, most of the city's commercial activity occurred along the East River waterfront and an identifiable warehouse district sprang up along South Street. Local conditions helped give Manhattan's early nineteenth-century storage buildings a distinctive architectural form. The city had prohibited the construction of any building on the piers and wharves in 1801, forcing merchants to instead erect their warehouses on the inland streets. Since many of these structures were constructed on lots formerly occupied by row houses—or were in fact residences converted for commercial use—the East River countinghouses were typically residential in scale, standing three to five stories tall and occupying frontages of only 20 to 30 feet. These buildings were also built in a similar style to

⁴³ "Envelopes," 243.

^{44 &}quot;Otis Elevator Building," 104-05.

⁴⁵ Information in this section is based on the following sources: Thomas R. Flagg, *New York Harbor Railroads in Color* (Scotch Plains, NJ: Morning Sun Books, 2000); Landmarks Preservation Commission (LPC), *Tribeca North Historic District Designation Report* (LP-1714) (New York: City of New York, 1992), prepared by Betsy Bradley; LPC, *Tribeca South Historic District Extension Designation Report* (LP-2122) (New York: City of New York, 2002), prepared by Donald G. Presa; Charles Lockwood, *Manhattan Moves Uptown* (Boston: Houghton Mifflin, 1976), 98-100; Walter C. Reid, "The Development of the Household Goods Storage Business," *The Transfer and Storage Directory* (New York: Transfer and Storage Publishing Corporation, 1916); "The Warehousing System," *New York Times* (February 7, 1870) 8.

their residential counterparts, with simple brick facades punctured by plain rectangular window openings. The buildings of the Schermerhorn Block in the South Street Historic District (designated New York City Individual Landmarks) are rare surviving examples of the type.

While the storehouses of the seventeenth and eighteenth centuries and the countinghouses of the early nineteenth century can all be considered early examples of the warehouse building type, it was not until the 1840s that a separate and identifiable warehouse industry emerged in New York City. As the Port of New York continued to grow during the mid-nineteenth century and increasing amounts of tradable goods passed through the city, a network of public warehouses became necessary to stabilize production and consumption, since most local businesses did not posses extensive storage facilities of their own. 46 In 1839 and 1842, the New York Chamber of Commerce petitioned the federal government for a comprehensive warehousing system to regularize the handling of foreign cargo.⁴⁷ After several years of studying the issue, the United States Congress passed an "Act to Establish a Warehousing System" in 1846. This act, along with its extension in 1854, created the American system of bonded warehouses and effectively gave birth to a formal warehousing industry in this country.⁴⁹ The focus of this act was to allow merchants to store their imported goods in a certified warehouse without paying tariffs while they negotiated the sale of those goods. Once a purchaser was found, the merchant could withdraw the goods from the warehouse upon payment of all appropriate customs duties. Under the original act, all bonded warehouses were to be owned by the federal government; its extension in 1854, however, allowed privately-owned bonded warehouses.

The passage of the Warehousing Act coincided with the emergence of the Hudson River waterfront as a viable rival to the once-dominant East River commercial district. The large transatlantic steamships coming into popular use during the mid-nineteenth century favored the deeper waters of Manhattan's west side, while the Hudson River Railroad provided a valuable direct link to upstate New York and thence to the interior of the country. ⁵⁰ While the East River waterfront continued to be a vital commercial district well into the second half of the nineteenth century and many of the earlier countinghouses remained in active use, Manhattan's west side with its opulent new store-and-loft buildings—was clearly becoming the focus of the city's growing freight and storage industry.⁵¹ The westward and northward migration of commerce and its attendant warehousing facilities along Manhattan Island continued during the years following the Civil War. In 1867, Cornelius Vanderbilt acquired St. John's Park, which had previously been a private residential enclave, and erected a massive warehouse and freight terminal that he soon connected to the New York Central and Hudson River Railroad's West Side Line. The opening of St. John's Terminal spurred the redevelopment of the surrounding neighborhood and the city's commercial district soon extended north beyond Canal Street. The building itself was exemplary both in its scale and its combination of functions—it served both as a passenger and freight terminal for the Hudson River Railroad and contained substantial warehousing space in

⁴⁶ LPC, Tribeca North, 14-15.

⁴⁷ The New York Chamber of Commerce had earlier opposed a similar proposal sent to congress by the Philadelphia Chamber of Commerce in 1827.

⁴⁸ The study included extensive research of the English system of warehousing, particularly that in Liverpool.

⁴⁹ "The Warehousing System," 8.

⁵⁰ The Hudson River Railroad was chartered in 1846, opened its West Side Line as far south as Canal Street by 1847, extended the line to south to Chambers Street in 1849, and opened a bridge over Spuyten Duyvil creek in 1853.

⁵¹ City government further aided this commercial migration when it decided to widen Dey and Courtlandt Streets between Broadway and Greenwich Streets in 1851, and by 1855 approximately 200 new commercial structures had been erected in the neighborhood. Lockwood, 98-100; LPC, *Tribeca South*, 6.

the upper floors. It was in many ways the prototype for other terminal warehouses erected in city, including those in the West Chelsea Historic District.

The warehousing industry expanded into new markets during the latter years of the nineteenth century. The storage of furniture and other domestic goods became a profitable business in the years following the Civil War as wealthy private individuals and families began making use of the city's warehouses for the first time.⁵² One of the early pioneers was John H. Morrell, who maintained facilities in a row of converted residences on Fourth Avenue at East 32nd Street.⁵³ A widely-publicized fire at his complex in 1881 induced the industry to improve their buildings, and many of the warehouses erected in the following years were designed with greatly improved fireproofing techniques. Among the more influential of this newer generation of warehouse buildings was the Manhattan Storage & Warehouse Company's warehouse at Lexington Avenue and East 42nd Street, erected in 1882-85. Architect J.E. Ware incorporated a number of advancements in fire protection into the building's design, most significantly by dividing the massive structure into 10 independent compartments. Ware gave his structure the appearance of a medieval castle, with massive round corner towers, a deeply projecting corbelled brick cornice, and large expanses of uninterrupted masonry wall. The building imparted an undeniable sense of security—an important characteristic for a company whose primary business centered on the safe keeping of people's valuable property. The architectural style of the building likely helped inform the design of later New York City warehouses.⁵⁴ Innovations like those of the Manhattan Storage & Warehouse Company were soon adopted by other firms. Less than half a decade later, the Terminal Warehouse Company commissioned its own storage facility on a block-long parcel of newly-created land along the Hudson River in West Chelsea.

New York City remained the leading port in the United States, and in fact became one of the most important in the world, at the turn of the twentieth century. Many of the goods that eventually passed through the harbor were kept in general storage facilities such as those owned by the Manhattan Storage & Warehouse Company and the Terminal Warehouse Company. A number of the larger railroad companies also maintained their own private warehouses and freight vards on Manhattan Island. The New York Central and Hudson River Railroad, in addition to its St. John's Terminal in Lower Manhattan, also owned extensive parcels of land at West 30th and West 60th Streets. Other companies were not so fortunate as to have a direct rail link into Manhattan and therefore established piers and freight yards along the Hudson River waterfront. These companies used a complex system of ferries, lighters, and carfloats along what came to be termed New York's industrial "water belt" to move their goods to the tracks that terminated at the New Jersey shore.⁵⁵ As the harbor became more crowded, the railroads increasingly came into conflict with other types of port traffic. The city made several attempts to rationalize its waterfront during this period—most notably in the construction of the Gansevoort and Chelsea Piers in 1894-1910, which turned over much of Manhattan's lower Hudson River waterfront to the exclusive use of large transatlantic steamships. The railroads were subsequently

⁵² Reid, 15-20.

⁵³ He is credited with introducing the itemized receipt and establishing professional techniques for packing stored items.

⁵⁴ Architecture critic Mariana Griswold Van Rensselaer praised the inventiveness of the building and the "truthful, rational, strictly architectural way in which [Ware] achieved his design." She also noted, "Everywhere we see evidence of original and happy inspiration. And it *is* original and happy, because entirely based on practical necessities, which are turned (not forced) into artistic opportunities." Mariana Griswold Van Rensselaer, "Recent Architecture in America—III" *Century Magazine* (August 28, 1884): 514-15 (quoted in Robert A.M. Stern, Thomas Mellins, and David Fishman, *New York 1880: Architecture and Urbanism in the Gilded Age* (New York: The Monacelli Press, Inc., 1999), 492). For more information on the development of industrial architectural styles see essay section *Industrial Architecture in West Chelsea*.

⁵⁵ For a description of these operations, see Flagg.

displaced northward. The Baltimore & Ohio (B&O), Lehigh Valley, and Erie Railroads all acquired large plots of land in the area between West 25th and West 30th Streets, just out of the way of the Chelsea Piers and surrounding the massive complex of the Terminal Warehouse Company. Both the B&O and the Lehigh Valley eventually erected large terminal warehouse complexes of their own, cementing West Chelsea's status as a major warehousing center.

Warehousing in West Chelsea⁵⁶

While West Chelsea developed as an industrial district beginning in the late 1840s, it was not until 1891 that the first large-scale, purpose-built warehouse in the historic district was opened. The Terminal Warehouse Company's Central Stores was a monumental complex that occupied the entire block between West 27th and West 28th Streets from Eleventh Avenue to the Hudson River. The design of the structure shows the influence of the Manhattan Storage & Warehouse Company's building; like its predecessor, it was divided into semi-independent, fireproof compartments. It also employed many of the same architectural motifs that characterized the earlier building, including massive corner towers, corbelled brick cornice, and large expanses of uninterrupted masonry. The founder of the Terminal Warehouse Company, William Wickes Rossiter, was closely associated with the New York Central and Hudson River Railroad (his brother was treasurer) and a spur of that firm's west side line ran down Eleventh Avenue and entered the warehouse complex through the massive round arch in the building's eastern facade. Tracks eventually extended across Twelfth Avenue to transfer bridges erected on the Hudson River waterfront by the Erie and Lehigh Valley Railroads. The warehouse complex served both large businesses and private individuals. Several of the stores were wholly occupied by prominent firms such as department store magnates Gimble Brothers and John Wannamaker, and grocer Francis H. Leggett. Others were used as general storage for household items according to an ad from 1895, the Central Stores were particularly suited for the safekeeping of furniture, while cold storage facilities were also available in order to preserve furs and rugs.⁵⁷ Four of the compartments were certified as United States bonded warehouses, where importers could keep their wares without paying customs duties until a purchaser was found.

The waterfront property immediately to the south of the Central Stores was soon converted to freight-related uses by railroad companies that had moved into the area after being displaced by the construction of the Gansevoort and Chelsea Piers. In 1897, the B&O purchased the land bounded by West 25th and West 26th Streets, while the Lehigh Valley Railroad acquired the block to the north in 1900. Both companies would eventually erect large terminal structures of their own. In 1912-13, the B&O commissioned a large reinforced concrete warehouse that occupied the northeast corner of their property.⁵⁸ The structure was designed to allow railcars to

⁵⁶ Information in this section is based on the following sources: Moses King, *King's Views of New York* (New York: Moses King, ca. 1905), 546; New York County, Office of the Register, Deed Liber 206, p. 358. The distinction between buildings devoted to active manufacturing and passive warehousing operations was not always clear in West Chelsea. Both uses required similar structures, especially open floor plates that could accommodate either heavy machinery or large amounts of stored good, and the continuing turnover of industrial tenants in the area meant that many of the buildings in the historic district served as both factories and warehouses at various points in their history. R.C. Williams & Co. had several large machines for roasting, grinding, and packing coffee in their warehouse building, while the Berlin Jones Envelope Company maintained their manufacturing operations in the Starrett-Lehigh Building for several decades. Conversely, by the middle of the twentieth century, a number of factory buildings were converted to warehouses. The H. Wolff Book Manufacturing Co., for example, took over the former Cornell Iron Works property at 555 West 25th Street in 1943 for use as a storage facility, and it was subsequently used as a warehouse by the Noma Electric Company.

⁵⁷ King. 546.

⁵⁸ A second building was proposed for the southeast corner of the property, but was never built.

come alongside and even into the building for loading and unloading. Up to fifteen cars could be accommodated at a time on its internal tracks. The Lehigh Valley Railroad undertook its own terminal warehouse project in 1930-31 when they contracted with the Starrett Investing Corporation to erect an enormous block-long structure. Like the Terminal Warehouse Company's Central Stores and the B&O's terminal structure before it, the Starrett-Lehigh Building was innovative in terms of both function and design. The interior circulation of goods was particularly notable: a series of elevators and electric transfer trucks allowed entire cargoes, from either railcars or automobile trucks, to be moved directly to any of the building's floors—a scheme that came to be known as a "vertical street."

While the most prominent warehouses in the historic district are the massive terminal structures that stand to the west of Eleventh Avenue along the Hudson River waterfront, a number of the smaller structures to the east of the avenue were also erected at least in part for use as storage facilities. The building at 510 West 27th Street, which was constructed as a speculative venture by John J. Radley & Co. in 1909-10, appears to have been used exclusively as a warehouse and distribution center. The structure's first recorded tenant was the F.W. Devoe & C.T. Raynolds Company, whose lease stipulated that the building be occupied only as "storage and warehouse for paints, varnishes, brushes, artist's materials" and related product.⁵⁹ In 1915-16, the Terminal Warehouse Company erected an annex to their massive Central Stores complex at 270 Eleventh Avenue. Perhaps most notable of the smaller warehouse structures is the R.C. Williams & Co. Building at 259 Tenth Avenue. Designed by Cass Gilbert and constructed in 1927-28, it was situated so as to take advantage of the proposed elevated freight line that was to run immediately adjacent to the rear of the warehouse. In 1933, the first carload of freight to utilize the High Line was consigned to R.C. Williams & Co. From its West Chelsea location, the grocery firm was able to ship its goods throughout the country and abroad.

Industrial Architecture in West Chelsea⁶⁰

For the larger part of the nineteenth century, the vast majority of industrial buildings (by some accounts, more than 90 percent) were not designed by architects, but rather by shop managers, builders, or other personnel with specific knowledge of an enterprise's space

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⁵⁹ New York County, Office of the Register, Deed Liber 206, p. 358.

⁶⁰ Information in this section is based on the following sources: "Aesthetic Consideration in Factory Designs," *The American* Architect 99 (June 14, 1911) 243; Amy E. Slaton, Reinforced Concrete and the Modernization of American Building, 1900-1930 (Baltimore: Johns Hopkins University Press, 2001); "An Expression on the Design of Factory and Warehouse Buildings," The American Architect 99 (June 14, 1911) 237; Betsy Hunter Bradley, The Works: The Industrial Architecture of the United States (New York: Oxford University Press, 1999), 8-9, 218-19; Christina Lee Wallace, The Evolution of Reinforced Concrete Technology (1848-1918), unpublished Master's thesis, Columbia University School of Architecture (1987); Howard Chapman, "Design of Industrial Buildings," The American Architect 107 (February 24, 1915) 113-115; J.P.H. Perry, "The Exteriors of Industrial Buildings," Architectural Forum (September 1929) 313-327; Landmarks Preservation Commission (LPC), American Bank Note Company Printing Plant (LP-2298) (New York: City of New York, 2008) prepared by Betsey Bradley & Jennifer Most; LPC, DUMBO Historic District (LP-2279) (New York: New York City, 2007) prepared by Andrew S. Dolkart, et al.; LPC, Starrett-Lehigh Building (LP-1295) (New York: New York City, 1986) prepared by Jay Shockley; LPC, Thomson Meter Company Building (LP-2139) (New York: City of New York, 2004) prepared by Jay Shockley; "New West Side Industrial Building," New York Times (December 6, 1931), Section 11-12, 2; O.W. Cooley, "A Veteran Firm's New Home," The Edison Monthly 20 (September 1928) 196-199: Robert A. M. Stern, Thomas Mellins, David Fishman, eds., New York 1880: Architecture and Urbanism in the Gilded Age (New York: Monacelli Press, 1999) 474; "Some Recent Warehouses," Architectural Record 23 (May 1908), 373-386; Russell Sturgis, "The Warehouse and the Factory in Architecture," The Architectural Record XV (January 1904) 2-4, 14-17; "The Modern American Style," American Architect & Building News 99 (June 14, 1911) 227; William H. Jordy, American Buildings and Their Architects: The Impact of European Modernism in the Mid-Twentieth Century (Garden City, New York: Anchor Books, 1970) 138.

requirements, machinery, and stock.⁶¹ The prevailing philosophy surrounding the design of early industrial buildings was that common sense and good judgment were more important to the success of a factory design than following rules ascribed to a particular architectural style. While early industrial buildings often utilized applied classical ornament or classical organization, such as tripartite organization into base, shaft and capital, as long as a design provided for sufficient light and ventilation, other embellishments were generally considered of secondary importance.

By the turn of the twentieth century, architects had begun to demonstrate an interest in industrial architecture, writing about and critiquing factory and warehouse buildings in architectural periodicals. A large part of the June 14, 1911 issue of *The American Architect* was devoted to the subject. In the article "An Expression on the Design of Factory and Warehouse Buildings," the author poses the question of whether manufacturing buildings, in addition to being economical, could not at the same time achieve expressiveness by way of "happy proportion, harmony and rhythm without resorting to ornamentation." The American industrial aesthetic would keep evolving as new materials, including steel, terra cotta, and later, concrete. began to appear in factory construction, and as architectural professionals continued to debate and discuss new ways to improve utilitarian design.

The warehouse and factory buildings that compose the West Chelsea Historic District reflect typical industrial building design in the United States in the late nineteenth and early twentieth centuries. All of the buildings constructed in the district near the turn of the century feature brick facades. The earliest building in the district, a stable building constructed in 1885 at 554 West 28th Street, features a red-brick facade and only simplified classical ornament. The Terminal Warehouse Company's Central Stores at 261 Eleventh Avenue, a complex of semiindependent warehouses erected in 1890-91 and designed to appear as one monolithic structure, similarly feature a red-brick facade and only minimal ornamentation. Russell Sturgis, one of the first architecture critics to academically study industrial design, praised the Terminal Warehouse Company's building for being "unpretending," noting its more prominent architectural elements, including the enormous semi-circular entrance along Eleventh Avenue, as being of "obvious necessity":

... There is a far away, unpretending, unsophisticated look about the building... The long front on West 26th Street is one of those walls which could not be altogether spoiled except by the most wanton 'uglification' [sic], by the senseless addition of misunderstood ornament... As for the avenue front, it was praticable [sic] to leave that so very solid, to pierce it so little with windows, that two most attractive things were possible. One of these is the enormous doorway, the huge, semi-circular arch with short imposts. The fitness of it, the obvious necessity of having an entrance to the central—street-like passage way—so ample that the largest loaded truck can enter it readily, is not the only reason for this great arched doorway. The other attractive feature is the "staggered" arrangement of the windows in the projecting masses at the two ends of this facade. They are not staircases, though the disposition of the windows makes one thing of that

the Cornell Iron Works in 1891, and 239 Eleventh Avenue, built for the Baltimore & Ohio Railroad in 1912-13 were designed by engineers.

⁶¹ "Aesthetic Consideration in Factory Designs," 243; In the West Chelsea Historic District, both 555 West 25th Street, built for

possibility, they are arranged in that way, apparently, for effect alone; but the effect has been secured."62

One of the more common expressions of industrial architecture in the United States in the nineteenth and early twentieth centuries was the American Round Arch style, an interpretation of the Rundbogenstil style developed in Germany during the 1830s and 1840s. The style is largely characterized by round- or segmental-arched openings, pilasters and horizontal bands forming grids, elaborate brick corbelling, and molded surrounds. By the late nineteenth century, the articulation of monumental arcades had become traditional among warehouses and factory buildings in New York City. The building at 555 West 25th Street, built for the Cornell Iron Works in 1891, is the oldest building in the district constructed in the American Round Arch style and features double-height, rounded archways at the ground floor that enabled the efficient flow of materials into and out of the building. Both the West 27th and West 28th Street facades of the American Round Arch style building at 548 West 28th Street, designed by William Higginson in 1899-1900, feature four-story piers capped by segmental arches containing large expanses of industrial sash. Other fine examples of the American Round Arch style in the district are the related buildings at 536 West 27th Street (1906-07) and 544 West 27th Street (1901-02), constructed to the designs of Charles H. Caldwell, whose numerous segmental-arched openings are accented by voussoirs of alternating brick and limestone.

By the late nineteenth century, new materials, notably steel and terra cotta, were beginning to appear in factory construction. The steel skeleton frame had been in use in office buildings since the construction of the Tower Building on Broadway in Manhattan in 1888, and typically featured brick curtain walls. In the West Chelsea district, steel-frame construction makes an appearance at both the Terminal Warehouse Company's Central Stores and at 555 West 25th Street. The most notable examples of the steel frame in the district, however, are the Gothic-revival Zinn Building at 210 Eleventh Avenue and the Italian Renaissance-revival Otis Elevator Company Building at 260 Eleventh Avenue. Both buildings are among the tallest and most ornamented structures in the district—the 11-story Zinn Building featuring multi-story arched piers and terra-cotta gargoyles and pinnacles, and the seven-story Otis Elevator Company Building featuring a massive overhanging cornice and limestone details. Though both buildings housed manufacturing enterprises, their high degree of ornamentation as compared to neighboring buildings can apparently be attributed to the Otis building's use as corporate headquarters for the company and the Zinn Building's intended purpose, at least in part, as rental units. Adaptations of Gothic details were particularly popular in British and American industrial buildings in the early twentieth century. Architects made comparisons, for example, between buttresses and exterior piers or crenellated tower-like elements and a sense of security and strength, interpreting such associations as an honest and appropriate expression for industrial buildings. 63 The roofline crenellations of the American Round Arch building at 521-537 West 25th Street, constructed for the Conley Foil Company in 1900-01, is another reference to Gothic ornamentation in the district.

A major change in factory construction occurred in the first years of the twentieth century, when reinforced concrete began to be used for the exterior and interior structures of

⁶² Sturgis, 16-17.

⁶³ Bradley, 218-219.

industrial buildings.⁶⁴ The earliest experiments with reinforcing concrete with iron bars occurred in Europe in the 1840s and 1850s. By the 1880s, concrete was being used in the United States for piers, walls, footings, and paving, but the material continued to remain largely a novelty. In 1884 Ernest L. Ransome, an English immigrant, received a patent for a twisted square metal reinforcing bar that provided a strong, inexpensive, and effective method for building in concrete. By 1900, dozens of patents had been issued for a variety of different reinforcing systems. In 1902, Ransome sold the patent rights for the twisted bar to two young engineers in his office, Henry C. Turner and DeForrest Dixon.⁶⁵ Turner and Dixon established the Turner Construction Company, which was responsible for the superstructure of the B&O's freight terminal building at 239 Eleventh Avenue, constructed in 1912-13.

By the first years of the twentieth century, as a result of further advances in reinforced concrete technology, the material's use in factory construction increased rapidly. Reinforced concrete offered factory owners several advantages over other materials. Reinforced-concrete buildings were easy to maintain; the material was extremely strong, with its increased floor loads permitting the efficient use of heavy machinery; the materials needed to erect a concrete building (cement, sand and aggregate) were easy to acquire, while steel and other finished products frequently were in short supply; it was possible to erect a concrete factory with large expanses of windows, thus increasing light and ventilation; the buildings were vibration resistant; the buildings were vermin proof; the buildings were fire resistant; and it was easy to build relatively tall structures. Among the buildings in the West Chelsea district built using concrete, several had concrete skeletons but continued to use brick curtain walls, including 511 West 25th Street (1915-17) and the building constructed for the H. Wolff Book Manufacturing Co. at 518 West 26th Street (1909-10).

The Turner system of reinforced concrete construction, patented by Claude Allen Porter (C.A.P.) Turner in 1908, utilized concrete slabs supported by specially reinforced concrete columns, called mushroom columns due to the shape of their flared column capitals. The Turner system, used in the West Chelsea district at 508 West 26th Street (1926-27), constructed as an annex to the Wolff building at 518 West 26th Street, and the R.C. Williams & Co. Building at 259 Tenth Avenue (1927-28), further eliminated the need for deep overhead beams, allowing for more storage space in a warehouse structure and for more window area in factories. The difference between methods of reinforced concrete construction is particularly noticeable in the exterior expression of the two Wolff buildings, with the newer annex featuring considerably more glazed surface area that comes nearly to the outer surface of the facade. The two Wolff buildings also reflect an evolution in the American industrial aesthetic, as the older building's minimally applied classical ornament, most evident in the rustication of its piers, is eliminated in the newer structure, which nearly forgoes applied ornament altogether. A similar comparison can be made between the B&O Freight Terminal, which features stylized classical ornamentation including rusticated concrete, engaged pilasters, and triangular roofline pediments, and the almost entirely unadorned R.C. Williams & Co. Building. A 1928 review of the latter building notes:

⁶⁴ Concrete has a long history extending back to the ancient Romans, but it was only in the early twentieth century that reinforced concrete as a building material became popular, especially for industrial building. The discussion of reinforced concrete is based on Amy E. Slaton, *Reinforced Concrete and the Modernization of American Building, 1900-1930* (Baltimore: Johns Hopkins University Press, 2001) and Christina Lee Wallace, *The Evolution of Reinforced Concrete Technology (1848-1918)*, unpublished Master's thesis, Columbia University School of Architecture (1987)

⁶⁵ Information in this paragraph taken from LPC, *DUMBO Historic District (LP-2279)* (New York: New York City, 2007) prepared by Andrew S. Dolkart, et al. ⁶⁶ Ibid.

Simplicity is the keynote of the building, and yet its solidity and symmetry of line bear witness to the skill of the architect, Mr. Cass Gilbert. No frills would be appropriate here, for the business of dispensing coffee and sugar, flour, cheese and pineapples is an intensely practical one. Everything for use, is the principle embodied in this building...⁶⁷

In a few short decades, American industrial buildings had progressed from objects of strict utility, to, as noted in a 1929 article for *The Architectural Forum*, "in the great majority of cases... 'things of beauty.'".68 Modern factory design would be exemplified in one of the latest buildings constructed in the West Chelsea district, the Starrett-Lehigh Building, a warehouse and freight terminal constructed in 1930-31. Considered to be in the forefront of "modern" architecture in New York City at the beginning of the 1930s, the building combined the practical functionalism of American industrial architecture with the influence of the horizontal aesthetic of European modernism of the 1920s. Through its sheer size, energetic design, use of continuous horizontal windows and "curved" (actually polygonal) corners, and in its "modernity" in the midst of the older industrial buildings of the district, the Starrett-Lehigh Building also exhibits tendencies towards Expressionism (spectacular or dramatic effects).⁶⁹ Upon its completion the building received favorable critical notice for its architectural design, engineering and functional aspects. The *New York Times* in 1931 described it as:⁷⁰

...in Modern style, with an unusual amount of the usual wall space taken up by windows... An innovation in construction of the exterior walls of the building features setback supporting columns that permit running bands of glass instead of conventional windows, giving increased light and an unconventional exterior appearance.⁷¹

Large ground floor openings, a functional necessity in both manufacturing and warehouse buildings enabling both the import of raw materials and the export of finished products, are a common architectural element across nearly all of the buildings in the West Chelsea district. Articulation of these ground floor openings range from the three round-arch, double-height entranceways of 555 West 25th Street, to the myriad, side-by-side rectangular loading docks that articulate the north elevation of the B&O Freight Terminal. In order to maximize light and ventilation in factory buildings, large window openings are also common to the majority of the manufacturing buildings in the district, found on both the early steel frame and later reinforced concrete buildings. Almost all of the buildings originally used fireproof metal windows with both fixed and moveable panels. Although many windows have been replaced, some original metal windows are still extant in the district, including the upper stories of the daylight factory at 515 West 26th Street (1911), several windows on all elevations of the Zinn Building and the Terminal Warehouse Company's Central Stores, and the majority of the canted-arched windows of the mezzanine-level of the B&O Freight Terminal. The R.C. Williams & Co. Building, the Wolff

⁶⁷ "A Veteran Firm's New Home," 197.

⁶⁸ Perry, 327.

⁶⁹ Jordy, 138.

⁷⁰ Information in this paragraph taken from LPC, *Starrett-Lehigh Building (LP-1295)* (New York: New York City, 1986) prepared by Jay Shockley.
⁷¹ "New West Side Industrial Building," 2.

Bindery Annex at 508 West 26th Street, and the Starrett-Lehigh Building are particularly remarkable for having retained nearly all of their original windows.

The extraordinary industrial character of the West Chelsea is embodied not only in the buildings of the district, but also in the area's streetscapes. Among the more prominent visual features of the neighborhood is the High Line. Completed in 1934, the elevated railroad runs mid-block, overhead, and directly adjacent to several buildings in the district. Equally important to the character of the district is the presence of some original street paving. The streets within the West Chelsea district were likely once paved with granite Belgian blocks, which remain visible at West 27th Street between Eleventh and Twelfth Avenues (*see Figure 1*).

The industrial buildings in the historic district were designed by various architects, ranging from well-known designers such as Cass Gilbert, Clinton & Russell, Cory & Cory and William Higginson, to little-known designers who specialized in industrial design, such as Parker & Shaffer, and still others for whom industrial commissions were seemingly quite rare.

Post-Industrial West Chelsea⁷²

In 1900, the Cornell Iron Works liquidated its heavy production shops in response to the westward shift of steel and iron operations, retaining only shops for smaller-scale iron and steel products in the West Chelsea area. Despite this early loss of one of the neighborhood's most prominent industrial firms, light manufacturing and warehousing remained staples of the West Chelsea district for much of the twentieth century.

By the mid-twentieth century, light manufacturing operations in the area were quite varied, ranging from printing shops and box companies, to milk-bottling plants and electrical wire and cable manufacturers. By the 1950s, the Zinn Building had come under the ownership of the Royal Paper Corporation who used the building, at least in part, for the distribution and warehousing of printing paper, printing of gift wrapping paper, and manufacturing of envelopes. After the Terminal Warehouse Company sold its West Chelsea Properties in the 1940s, the Spear Box Company occupied many of that firm's previous holdings, including the buildings at 262 and 270 Eleventh Avenue, and 548 West 28th Street, the latter of which they occupied through the 1980s. Another box manufacturer was located at 515 West 26th Street, according to a 1976 announcement for that building. The buildings at 521-537 and 539-541 West 25th Street, once owned by the Conley Foil Company and later the Reynolds Metal Company, exemplify the variety of operations present in West Chelsea during the twentieth century. During the 1930s and 1940s, numerous box companies were among the tenants of these buildings, including the Favorite Paper Box Co., the Domestic Folding Box Co., and the Standard Paper Box Co. Also during this period, No. 539-541 was apparently being used for milk pasteurizing and bottling by McKay Milk Products, which also had a presence at 543 and 547 West 25th Street. Other tenants included at least one food manufacturer, the Eskimo Pie Corporation, as well as the Donahue Copper Corporation. By 1964 a certificate of occupancy indicates the buildings were being used for shipping and the storage of records.

During the middle of the twentieth century, highways began to replace rail as the preferred method of freight transportation. Despite the demise of the railroads, many of the

⁷² Information in this section is based on the following sources: John H. Mollenkopf and Manuel Castells, eds., *Dual City: Restructuring New York* (New York: Russell Sage Foundation, 1992); John Holusha, "A Building Used for Storage Now Houses Artists," *New York Times* (July 7, 2002) J6; John Holusha, "Ex-Garages Attracting Art Galleries from SoHo," *New York Times* (October 12, 1997) RE7; "West Chelsea Muddle," *Grid* 1 n.3 (Summer 1999) 24-25.

former freight terminals located in West Chelsea continued to be used for warehousing functions even after the railroad companies that built them collapsed. The B&O Freight Terminal, closed by the railroad in the 1970s, later came to be utilized for storage and warehousing purposes. The Lehigh Valley Railroad ended its association with the Starrett-Lehigh building in 1944, shortly thereafter removing the spur line tracks—but it too operates today in a manner close to its original function of supplying rental warehouse, manufacturing, and office space. Though the Terminal Warehouse Company began divesting itself of its Central Stores building in 1947, the structure continues to function as a warehouse, and much of the building is presently still devoted to this use.

The shift of freight transportation from rail to highway also played a major role in the demise of the High Line. By the 1960s, large sections of the High Line were already being dismantled. Train traffic along the railway was halted altogether in 1980 when the northern extent of the structure was rerouted to accommodate construction of the Jacob Javits Convention Center. Further portions of the railway between West 34th and West 35th Streets were removed in the 1980s, while a five-block section near the southern extent was torn down in 1991.

In addition to remaining a common use for the large warehouse structures in the area, a number of smaller buildings switched uses during the twentieth century from production to warehousing and storage functions. In 1943, the H. Wolff Book Manufacturing Co., which already owned buildings at 508 and 518 West 26th Street, rented space in the building formerly owned by the Cornell Iron Works at 555 West 25th Street, apparently for storage. The Noma Electric Company, an insulated wire enterprise once considered the largest Christmas lighting company in the world, purchased No. 555 in 1951 for use as offices and storage. Wholesale grocers R.C. Williams & Co. operated out of the building at 259 Tenth Avenue until 1953, at which point it relocated to a new warehouse, office, and distribution center at Bruckner Boulevard and Leggett Avenue in the Bronx. In 1957, the H. Wolff Book Manufacturing Co., which had been utilizing the Tenth Avenue structure's private rail siding for access to the High Line, took ownership of the building. By 1993, the building was being leased by Capital Cities/ABC for use as prop and scenery storage.

Towards the latter decades of the century, the character of the West Chelsea neighborhood began a dramatic transformation, largely a result of major shifts in New York City's economy. Beginning in the 1960s, the number of large industrial firms headquartered in Manhattan significantly declined. This decline continued into the 1970s as disinvestment decimated the city's previously thriving manufacturing economy. 73 The effects of the decline stretched to related sectors as well, taking a toll on trucking, warehousing, and wholesaling. By the 1990s, New York could no longer claim to be an "industrial city." This economic shift led to new uses for the large spaces of the old industrial buildings, one of the more innovative adaptations being nightclubs. For a time during the late 1970s and early 1980s, the Otis Elevator Company building, which was discarded by the company in 1974, was home to Les Mouches supper club. Another nightclub which opened in the former Terminal Warehouse Company's Central Stores building capitalized on the arched tunnel that once allowed whole train cars to enter the building. The club, appropriately named "The Tunnel," opened in 1987 and remained in that location for more than a decade. The oldest building in the district, 554 West 28th Street, since 2000, has also served as home to a nightclub.

⁷³ For more information on the decline of industry in New York City see John H. Mollenkopf and Manuel Castells, eds. *Dual City: Restructuring New York* (New York: Russell Sage Foundation, 1992). ⁷⁴ Mollenkopf & Castells.

By the 1990s, a fairly radical transformation was taking place in West Chelsea. The "gritty industrial neighborhood," as it was described in the *New York Times* in 1997, was beginning to attract art galleries and related businesses. The galleries, many which were being priced out of another former industrial neighborhood in Manhattan, SoHo, were taking over the former garages, factories, and warehouses, and converting them into show spaces. The cycle, according to the 1997 article, was a familiar one of "artists needing space and light tak[ing] over old industrial buildings whose days as manufacturing facilities are over. Galleries, which also need space and light, follow, changing the tone of the neighborhood to artsy from industrial." Among the attractions for artists of the old industrial buildings were the ground stories featuring wide expanses of column free space, 13-foot ceiling heights, and eight-foot-tall operating windows available in many of the buildings. The zoning of the area was also helpful. Given that manufacturers were permitted showrooms in their buildings, it was fortuitous for the art industry that art galleries qualify under the zoning code as "showrooms."

One of the first artistic presences in the district was the Dia Art Foundation, which owned the buildings at 262 and 270 Eleventh Avenue for some time in the 1980s. By 1997, nearly 40 galleries had opened or relocated to West Chelsea, mostly between West 20th and West 24th Streets, with 50 more anticipated to make a similar migration within that year. A 1999 article in Grid magazine noted "[t]he galleries have since multiplied like rabbits, creating a prosperous arts habitat with an inventive use of space." By 2002, the 95,000 square foot daylight factory building at 511 West 25th Street housed a mix of tenants, 50 percent of which were galleries, 30 percent artists and photographers, and approximately 20 percent offices for companies related to the arts (such as an accounting company monitoring the budgets of film companies). The building at 537 West 26th Street remained an automobile garage until the 1990s, at which time renowned photographer Annie Leibovitz converted it into the West 26th Street Studio. Today the Cedar Lake Contemporary Ballet occupies the space, using the building for rehearsal and performance space. The 21-story building at 543 West 25th Street, also known as the Chelsea Arts Tower, developed in 2006-07 as a response to the growing demand for art gallery space in the West Chelsea neighborhood. Today, West Chelsea remains a thriving district for galleries and art-related businesses, with more than 50 percent of the district's buildings dedicated to these uses.

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⁷⁵ Holusha, RE7.

⁷⁶ Ibid.

FINDINGS AND DESIGNATION

On the basis of careful consideration of the history, the architecture, and other features of this area, the Landmarks Preservation Commission finds that the West Chelsea Historic District contains buildings and other improvements that have a special character and a special historic and aesthetic interest and value and which represent one or more eras in the history of New York City and which cause this area, by reason of these factors, to constitute a distinct section of the city.

The Commission further finds, that among its special qualities, the West Chelsea Historic District is a rare surviving example of New York City's rapidly disappearing industrial neighborhoods; that during much of the nineteenth and twentieth centuries, the area was home to some of the city's and the country's most prestigious industrial firms, including the Otis Elevator Company, the Cornell Iron Works, the John Williams Ornamental Bronze and Iron Works, and the Reynolds Metal Company; that the neighborhood was first developed with a mixture of working-class residences and industrial complexes beginning in the late 1840s; that rising real estate values and the steady turn over of industrial tenants in the area led to a second major wave of development beginning around the turn of the twentieth century; that the buildings erected at the beginning of this period of redevelopment are representative of industrial architecture as practiced at the turn of the twentieth century, with simple brick facades, rhythmically placed window openings recessed between vertical brick piers, horizontal banding, and corbelled brick cornices; that as the pace of redevelopment in West Chelsea quickened during the second decade of the twentieth century, new industries moved to the area including notable printing and publishing businesses; that new technologies and construction techniques that revolutionized the design of industrial buildings in the early twentieth century, including the steel building frame, terra-cotta tile floors, and reinforced concrete, were adopted in West Chelsea and had a significant impact on the neighborhood's architecture; that in addition to its manufacturing businesses. West Chelsea was also a significant center of warehousing and freight handling activity beginning in the late nineteenth century; that the three massive terminal warehouse complexes in the western section of the district represent an important record of the architectural and technological evolution of warehouse design; that the Starrett-Lehigh Building (a Designated New York City Landmark), is a revolutionary example of early Modernist design and is greatly enhanced by the presence of two earlier terminal warehouse complexes immediately adjacent; that the ensemble of buildings within the West Chelsea Historic District reflects important trends in the development of industrial architecture in the United States and in New York City; that these buildings and improvements convey a well-defined sense of place and a distinct physical presence that sets the neighborhood apart from other areas of Midtown Manhattan; and that the West Chelsea Historic District represents a unique and enduring part of New York City's architectural and cultural heritage.

Accordingly, pursuant to Chapter 21 (formerly Chapter 63) of the Charter of the City of New York, and Chapter 8-A of the Administrative Code of the city of New York, the Landmarks Preservation Commission designates as an historic district, the West Chelsea Historic District, Borough of Manhattan, consisting of an area bounded by a line beginning at the intersection of the northern curbline of West 28th Street and the eastern curbline of the West Side Highway (aka Joe DiMaggio Highway, Twelfth Avenue), extending easterly along the northern curbline of West 28th Street to a point formed by its intersection with a line extending northerly from the eastern property line of 548-552 West 28th Street (aka 547-553 West 27th Street), continuing southerly across the roadbed, along said property line, and across the roadbed to the southern

curbline of West 27th Street, easterly along said curbline to a point formed by its intersection line extending northerly from with the eastern property 536-542 West 27th Street, southerly along said property line to the southern property line of 534 West 27th Street, easterly along said property line and the southern property lines of 532 through 516 West 27th Street, to the western property line of 510-514 West 27th Street, northerly along said property line to the southern curbline of West 27th Street, easterly along said curbline to a point formed by its intersection with a line extending northerly from the eastern property line of 510-514 West 27th Street, southerly along said property line to the southern property line of 510-514 West 27th Street, westerly along a portion of said property line to the eastern property line of 513 West 26th Street, southerly along said property line and across the roadbed to the northern curbline of West 26th Street, easterly along said curbline to the western curbline of Tenth Avenue, southerly along said curbline and across the roadbed to the southern curbline of West 25th Street, westerly along said curbline to a point formed by its intersection with a line extending northerly from the eastern property line of 210-218 Eleventh Avenue (aka 564-568 West 25th Street), southerly along said property line to the southern property line of 210-218 Eleventh Avenue (aka 564-568 West 25th Street), westerly along said property line to the eastern curbline of Eleventh Avenue, northerly along said curbline and across the roadbed to the northern curbline of West 25th Street, easterly along said curbline to a point formed by its intersection with the western property line of 551-555 West 25th Street, northerly along said property line to the northern property line of 551-555 West 25th Street, easterly along said property line and the property lines of 549 through 543 West 25th Street to the western property line of 518-534 West 26th Street, northerly along said property line to the southern curbline of West 26th Street, westerly along said curbline and across the roadbed to the western curbline of Eleventh Avenue, southerly along said curbline to a point formed by its intersection with a line extending easterly from the southern property line of 239-243 Eleventh Avenue (aka 600-626 West 26th Street), westerly along said property line to the western property line of 239-243 Eleventh Avenue (aka 600-626 West 26th Street), northerly along said property line to the southern curbline of West 26th Street, westerly along said curbline to the eastern curbline of the West Side Highway (aka Joe DiMaggio Highway, Twelfth Avenue), northerly across the roadbed and along said curbline to the point of the beginning.

Robert B. Tierney, Chair

Stephen F. Byrns, Diana Chapin, Christopher Moore, Margery Perlmutter, Roberta Washington, Commissioners

BUILDING PROFILES

WEST 25TH STREET, NOS. 501-555 (NORTH SIDE, BETWEEN TENTH & ELEVENTH AVENUES)

501-505 West 25th Street

See: 259 Tenth Avenue

507-509 West 25th Street (504-506 West 26th Street) aka The High Line, *see Figure 2* Borough of Manhattan Tax Map Block 697, Lot 27

Date of Construction: 1934

Architect: N/A

Original Owner: New York Central Railroad

Type: Elevated railroad tracks

Stories: N/A

Structure/Material: Iron

Features: Elevated railroad tracks above West 26th Street; rolling steel doors beneath tracks on north side of West 25th Street and the south side of West 26th Street; riveted iron railings along both sides of elevated track.

Alterations: Presently supported by series of exposed warren trusses.

History: The elevated rail line commonly referred to as the "High Line" was completed in 1934, as part of the West Side Improvement project that replaced at-grade New York Central Railroad (NYC) rail lines. In 1846 the New York State Legislature granted a charter to the Hudson River Railroad Company (which later merged with the New York Central) to open a line between New York City and Albany. The following year the City of New York passed an ordinance allowing the railroad to run tracks at grade along Manhattan's west side, with lines running down the middle of Tenth Avenue south of West 30th Street and along Eleventh Avenue north of that. Shortly after traffic began on the line, Tenth Avenue was dubbed "Death Avenue" as a result of the frequency of accidents, including fatalities, which occurred along the at-grade crossings. In 1907, in a Report of the New York Public Service Commission, it was written:

For many years the situation has been growing worse and worse; children are killed; needed streets are rendered almost impassible, traffic is constantly impeded by freight trains, and a large portion of an important section of the city finds its progress retarded.

Accidents continued to occur despite the implementation of safety measures, such as men on horseback waving white flags to warn of oncoming trains.

Years of public debate surrounded the hazardous conditions and eventually led to legislation including the 1906 Saxe Law which prohibited the operation of street level railways. Plans to

elevate the NYC's west side rail line were discussed as early as 1911, but were delayed as a result of World War I. In 1929, a cost-sharing agreement was reached between New York State, New York City, and the NYC, which resulted in the West Side Improvement project. Orchestrated by master builder and urban planner Robert Moses, one of the primary goals of the West Side Improvement was to remove all freight trains from the surfaces of the busy streets over which they had operated for more than 80 years. The West Side Improvement as a whole affected 13 miles of tracks, eliminated 105 street-level crossings, and added 32 acres of parkland to Riverside Park. In addition to decks built above the tracks that ran along the east bank of the Hudson River from 72nd Street to 123rd Street, resulting in the Henry Hudson Parkway and expansion of Riverside Park (a designated New York City Scenic Landmark), the rail lines along Tenth Avenue were elevated, resulting in the High Line. Upon its opening on June 28, 1934, the High Line ran in a loop around Caemmerer Yards (along Twelfth Avenue from West 34th to West 30th Street), passed mid-block through or alongside many of the buildings between West 29th and West 17th Streets between Tenth and Eleventh Avenues, then continued southerly along Tenth Avenue to Gansevoort Street. The structure was built to withstand the load of four fully loaded freight trains.

From the initial planning stages, the very idea of an elevated railway that would eliminate the dangerous at-grade conditions along Tenth Avenue and facilitate the delivery of goods to local businesses helped spur new development in West Chelsea. In September 1929, *The Edison Monthly* reported that the neighborhood was "destined, with the completion of the Eighth Avenue subway and the elevation of the New York Central Railroad Tracks, to enjoy a great improvement." In fact, three years before plans for the West Side Improvement project were officially announced, R.C. Williams & Co., which would become the railway's first client, had already purchased its West Chelsea site along Tenth Avenue between West 25th and West 26th Streets in anticipation of the High Line, which was slated to run adjacent to the lot. The H. Wolff Book Manufacturing Co., whose building at 508 West 26th Street was constructed in 1926-27 without any connections to the High Line, would later begin transporting books to the R.C. Williams Building solely for the purpose of utilizing its private rail sidings.

The decline of manufacturing in West Chelsea and throughout New York City, coupled with changes in transportation methods that favored interstate trucking over rail, eventually reduced the need and utility of the High Line. By the 1960s, large sections of the High Line were already being dismantled and train traffic along the railway was halted altogether in 1980 when the northern extent of the structure was rerouted to accommodate construction of the Jacob Javits Convention Center. Further portions of the railway between West 34th and West 35th Streets were removed in the 1980s, while a five-block section near the southern extent was torn down in 1991. Extensive demolition of the High Line, however, was stalled through the mid and late 1980s, in large part thanks to local residents and activists, including Peter Obletz, a local Chelsea railroad enthusiast who challenged demolition efforts in court and even tried to reestablish rail service. In 1999, the organization Friends of the High Line was founded to advocate for the structure's preservation and reuse as public open space, and the project soon garnered increasing support from both civic and community groups, as well as from numerous elected officials. The City of New York is presently committed to plans to turn the High Line into a public outdoor recreation space.

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511 West 25th Street (511-519 West 25th Street), *see Figure 3* Borough of Manhattan Tax Map Block 697, Lot 23

Date of Construction: 1915-17 (NB 366-15)

Architect: Francisco & Jacobus Original Owner: Marginal Realty Co.

Type: Factory

Style: Industrial Neo-Classical

Stories: 9

Structure/Material: Brick; reinforced concrete

Features: Nine-story, brick and reinforced concrete factory building, three visible elevations; South elevation: Five bays separated by concrete piers; rectangular openings feature concrete lintels spanning between piers at first story; outer bays above first story feature triple windows separated by recessed concrete posts above rectangular concrete sills; central bays above first story feature five windows separated by recessed concrete posts above rectangular sills that span the distance between flanking piers; deep concrete lintels span between flanking piers above window openings; 1x1 double-hung metal windows throughout; concrete cornice above third story supported by concrete corbels with geometric decoration at each pier; concrete cornice above seventh story spans central bays, features dentil course, and is supported by concrete corbels with geometric decoration; central piers terminate in simple concrete capitals; roofline of central bays coped with concrete and stepped around capitals of central piers; outer bays feature additional story with recessed brick panels and triangular pediments resulting from a 1927 alteration by Francisco & Jacobus that concealed new rooftop tanks; West and east elevations: Two bays with four rectangular windows each separated by recessed concrete posts located towards center of facade; 3-over-3 industrial steel sash; east elevation partially visible from street.

Alterations: Signage; first story windows and doors; security camera; concrete painted at first story; non-historic lighting above first story; air conditioners in windows.

History: The building at 511 West 25th Street is located on a block that was once owned by the Cornell Iron Works and on which the company had constructed foundries and related structures. By 1902, after the Cornell Iron Works had begun to liquidate its heavy production shops, a soda water factory is recorded as present on site. The current factory building at No. 511 was designed by Francisco & Jacobus in 1915-17 for the Marginal Realty Company. Francisco & Jacobus continued to perform alteration work on the building at least through 1930.

In 1924-25, the Conley Foil Company, based next door at 521-537 and 539-541 West 25th Street, was purchased by competitors Lehmaier, Schwartz & Co., acquiring those buildings. In 1925, Lehmaier, Schwartz & Co. also acquired No. 511, using the building for the manufacture of tinfoil. Like the structures at Nos. 521-537 and 539-541, ownership of the building passed to the Reynolds Metal Company following their purchase of Lehamaier Schwartz & Co. in 1930. Records indicate that the building was being used for the manufacture of lead foil bottle caps in 1939 and for general "factory purposes and storage" in 1945. In 1947, the building took advantage of its proximity to the High Line's elevated freight tracks which run adjacent to the property via an alteration that called for cutting a door opening in the east wall and constructing a steel and concrete interior ramp to connect the building. R.C. Williams & Co. and the H. Wolff Book Manufacturing Co., two local businesses with nearby buildings located within the West Chelsea Historic District, are listed as lessees in 1952 and 1960, respectively. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

"A Building Used for Storage Now Houses Artists," New York Times (July 7, 2002) J6.

New York City Department of Records (Municipal Archives), Block & Lot File for Block 697, Lot 23 (NB 366-1915; EL 189-1916; Alt 756-1925; Alt 2729-1925; Alt 754-1930; BN 2565-1939; BN 1784-1943; Alt 1750-1947; BN 65-1952; El 218-1960; BN 1047-1961).

New York City Directories.

New York City Docket Books (Alt 401-1920; Alt 2729-1925; Alt 756-1925; Alt 472-1927; NB 63-1927; Alt 754-1930; Alt 1750-1947).

"The Real Estate Field" New York Times (November 17, 1915) 20.

521-537 and **539-541** West **25**th Street, see Figure 4&5

Borough of Manhattan Tax Map Block 697, Lot 13

Date of construction: 1900-01 (NB 576-00)

Architect: Schickel & Ditmars

Original Owner: The Conley Foil Company

Type: Factory

Style: American Round Arch

Stories: 4 and 2 Materials: Brick

Features: <u>521-537 West 25th Street</u>: Four story, red brick factory building with two visible elevations; <u>South Elevation</u>: Tri-partite division into one-story base, two-story shaft, and one-

story capital; two-bay wide, four-story central tower; two round-arched openings with six-course deep brick relieving arches at tower base; stone banding between bays of tower base; checkered brick corbelling and stone banding above first story (stone banding runs continuous with outer bays and with 539-541 West 25th Street); three-story recessed archways with rectangular sills at tower shaft contain fenestration of second through fourth stories of tower and feature four-course deep relieving arches (fenestration further recessed within archways; 3x3 metal windows with rectangular sills that span the width of the recessed area; segmental arched window openings with three-course deep brick relieving arches at second story; rectangular window openings at third story; round-arched window openings with three-course deep arches and round upper sashes at fourth story); stone banding serves as lintels for third story tower windows and runs continuous with outer wings where it serves as sills of fourth story fenestration; stone banding and crenellated brick details at tower capital; triangular pediment with stone coping at tower; sixbay wide outer wings flank tower; mixture of segmental-arched openings containing doors or windows and wide rectangular openings at first story of outer wings; rectangular openings feature brick lintels laid continuously in a soldier course; segmental-arched openings feature five-course deep brick relieving arches; stone banding between bays of first story; two-story recessed rounded archways at left and right-most bays of outer wings feature four-course deep brick relieving arches and contain fenestration of second and third stories (segmental arched window openings with three-course deep brick relieving arches at second story; round-arched window openings with four-course deep brick relieving arches and rectangular sills that span the width of the recessed area at third story); rectangular window openings at third story above recessed rounded archways; remaining bays separated by continuous brick piers and contain paired rectangular windows (many historic 3x3 metal windows remain; rectangular sills at second story); historic wall bracket remains between second and third bays from left of left outer wing; crenellated brick details at roofline; stone coping at roofline; chimney at east-most bay features brick crenellations and stone coping; cylindrical chimneys at rear of building partially visible above roofline; East elevation: Red brick facade partially visible from street; four bays wide; segmental-arched window openings with three-course deep relieving arches, rectangular sills and 3x3 metal windows; projecting rectangular brick chimney rises above roofline; <u>539-541</u> West 25th Street: Two story, red brick facade, six bays with two visible elevations; South elevation: Five narrow and one wide segmental archways with three-course deep relieving arches form window openings and entranceways of first story; window openings feature rectangular sills; stone banding between bays at base; stone band below second story serves as sills of second story fenestration and is continuous with 521-537 West 25th Street; segmental-arched window openings at second story feature three-course deep relieving arches and 3-over-3 sash; brick corbelling and stone coping at roofline; segmental-arched window openings featuring brick relieving arches and 3x3 metal windows of six-story rear yard building partially visible above roofline; West elevation: Red brick facade; two segmental-arched windows with three-course deep relieving arches visible at second story; 3x3 metal windows; stone coping at roofline.

Alterations: <u>521-537 West 25th Street</u>: Signage; alterations to first-story window openings occurred in 1918, in 1933 to accommodate "installation of shipping door," in 1947 to create "eight new loading berths," and again more recently to reverse some of these changes; security camera at first-story; metal stairs at first-story; lights at roofline; windows and doors replaced (some historic windows and doors remain, see above); stone banding at first story painted black; <u>539-541 West 25th Street</u>: Signage; metal stairs and handrails; rolling steel security gate at first-

story, wide archway; stone banding of first story painted black; first-story window at west elevation appears bricked in but brick relieving arch remains.

History: The red brick buildings located at 521-541 West 25th Street are located on a block that was once owned by the Cornell Iron Works and on which the company had constructed foundries and related structures. Ownership of the site passed to the Conley Foil Company, manufacturers of tinfoil, ca. 1900, around the time the Cornell Iron Works began to liquidate its heavy production shops. The Conley Foil Company erected the four-story tinfoil factory building at 521-537 West 25th Street, designed by Schickel & Ditmars, in 1900-01. It is unclear when the two-story building at 539-541 West 25th Street was constructed, but its stylistic similarities to No. 521-537 suggest it was constructed around the same time and might have also been designed by Schickel & Ditmars. The six-story addition located at the rear of No. 539-541 and partially visible from West 25th Street was constructed in several phases, reaching its present height in 1916. In 1917, the smaller structure at No. 539-541, which originally housed a boiler room for the tinfoil factory at No. 521-537, was converted "for storage of the raw product in the form of pig metal." This conversion, as well as minor alterations including the extension of skylights and stairs, was performed by Francisco & Jacobus, architects of 511 West 25th Street, also located within the West Chelsea Historic District.

The John Conley & Son tinfoil manufacturing company was already an established New York City enterprise when it was acquired in 1899 by the American Tobacco Company—tinfoil being an essential item for the packaging of tobacco products. By agreement between the two businesses, the Conley Foil Company was formed with the American Tobacco Company owning 60 percent of the business' stock. Until 1901, the Conley Foil Company operated out of 2 and 4 Dominick Street, but like many industrial enterprises of the time, relocated northwards up Manhattan due to soaring downtown real estate prices.

Soon after formation, the Conley Foil Company began purchasing the capital stock of its competitor, the Johnston Tin Foil and Metal Company of St. Louis, which also manufactured and sold tinfoil, thereby obtaining control of the company and eliminating competition. The two companies were contracted with the American Tobacco Company to supply all tinfoil used by the trust, and at remunerative prices. Together, Conley Foil and Johnston Tin Foil composed the major part of the total production of tinfoil in the United States. This constituted a monopoly of interstate trade and commerce in tinfoil, and was a similar story to approximately 60 other corporations acquired by the American Tobacco Company at the time, forming the basis of the anti-trust case which would lead to the dissolution of the trust in 1911.

Following the dissolution of the trust, the Conley Foil Company continued to manufacture tinfoil at its West 25th Street location, employing 247 men, 66 women, 17 children, and 22 office staff as of 1913. In 1924-25, the company was purchased by a competing corporation and one of the oldest manufacturers of tinfoil in the United States, Lehmaier, Schwartz & Co. The latter company had a large plant in Richmond, Virginia near some of the country's largest producers of cigarettes, but used the West Chelsea building, at least in part, as its executive offices. Lehmaier, Schwartz & Co. acquired the adjacent building at 511 West 25th Street in 1925.

In 1930, Lehmaier, Schwartz & Co. was purchased by the Louisville, Kentucky-based Reynolds Metals Company, founded by Richard S. (R.S.) Reynolds, nephew of "tobacco king" R.J. Reynolds. The company, which began as the U.S. Foil Company in 1919, got its start by supplying tin-lead wrappers to candy and cigarette companies, including that of his uncle, the RJR Tobacco Company. The Reynolds Metals Company moved its executive and sales offices from Louisville to No. 521-537 in 1930. Among the departments that operated out of the building in the 1930s were Embossed Products & Bottle caps, Display & Container, Sheet & Extrusion Sales, Administration, Purchasing and General Sales.

Throughout the 1930s and 40s, the company leased space in the two buildings to corporations that included the Eskimo Pie Corporation, paper box companies such as the Favorite Paper Box Co., the Domestic Folding Box Co. and the Standard Paper Box Co., and the Donahue Copper Corporation. During this period, No. 539-541 was apparently being used for milk pasteurizing and bottling by McKay Milk Products, which also had a presence at 543 and 547 West 25th Street. Records also indicate that the western half of No. 521-537 was occupied at the time by "shipping and storage" as well as "experimental mech. [sic] laboratory and offices." In 1938, the Reynolds Metals Company moved its executive offices to Richmond, Virginia, but retained ownership of the two buildings. In 1947, the buildings were acquired by the Hendrickson Realty Corp., and the same year major alterations to the first floor openings were undertaken, converting several of the narrow, segmental arched openings to trucking docks in order to accommodate an increased demand for truck shipping. A certificate of occupancy from 1964 indicates that the building was being used for shipping, the storage of records, and offices. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

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- "Lehameir Schwartz" New York Tribune (June 23, 1906) 16.
- "Metals Co. Net Tops \$2 A Share," Wall Street Journal (January 12, 1931) 9.
- "New Corporations" New York Times (December 13, 1899).
- New York City Department of Records (Municipal Archives), Block & Lot File for Block 697, Lot 13 (Alt 1974-1964; Alt 1115-1941; Alt 580-1933; Alt 936-1917; Alt 271-1933).
- New York City Directories.
- New York City Docket Books (NB 576-1900; Alt 1418-1900; Alt 1928-1907; Alt 2346-1912; Alt 2854-1912; Alt 2021-1913; Alt 2300-1914; Alt 2442-1917; Alt 429-1918; Alt 167-1920; Alt 941-1925; Alt 472-1927; Alt 284-1933; Alt 532-1933; Alt 115-1941; Alt 749-1947; Alt 343-1949; Alt 23-1958).

Real Estate Record and Builders Guide, Alt 1067-1910 (February 5, 1910) 272; Alt 186-1910 (May 7, 1910) 980; Alt 2346-1912 (September 7, 1912) 458; Alt 2854-1912 (November 9, 1912) 881; Alt 2021-1913 (July 5, 1913) 67; Alt 2300-1914 (June 20, 1914) 1130; Alt 229-16 (January 29, 1916) 195.

Roxanne Ryce-Paul, "Documenting an Historic Structure: 521-541 West 25th Street, New York, NY," unpublished paper for Columbia University.

543 West 25th Street (543-545 West 25th Street), *see Figure 6*Borough of Manhattan Tax Map Block 697, Lot 7501 (*Historic Lot 10*)

Date of construction: 2006-07 (Job No. 103987376-01-NB)

Architect: Kossar & Garry Architects, LLP Original Owner: Bass Associates LLC

Type: Commercial Style: Modern Stories: 21

Structure/Material: Concrete, metal and glass

Features: South elevation: Twenty-one-story concrete, metal and glass building; glass and metal framing of ground floor recessed from street wall; canopy at main entrance extends over sidewalk; third through eighth stories set back and canted from street wall; ninth through 21st-story of main building set back and canted in opposite direction above eight story; canted, projecting balconies at 17th through 20th stories; 20-story, black metal tower-like element at right of south elevation features single bay with paired windows and extends above roofline of main building; East elevation: Black metal tower-like element with single bay of narrow windows; irregular openings at roofline; North and west elevations: Glass and metal throughout.

Alterations: N/A

History: The commercial tower at 543 West 25th Street is located on a block that was once owned by the Cornell Iron Works and on which the company had constructed foundries and related structures. A one-story brick structure was constructed on the site in 1869, followed one year later by a one-story timber structure, both likely occupied by the Cornell Iron Works. A three-story stone building was erected by the company in 1890. Like 547 West 25th Street, No. 543 was eventually purchased by the Progressive Smelting & Metal Company, at which time a two-story factory building was located on the site. Among the many companies to own or lease space in the building over the years are the General Metal & Copper Co., Donahue Copper Corporation, McKay Milk Products, and the Nathan Elkin Milk Company—many of the same

[&]quot;Plan of Dissolution of American Tobacco Company Into Fourteen Separate Companies," *Lexington Herald* (November 27, 1911) 2.

[&]quot;Plans Four-for-One Split," New York Times (July 31, 1928) 30.

[&]quot;Reaffirms Rule of Reason in Tobacco Trust Case," New York Times (May 30, 1911) 4.

[&]quot;Reynolds Metals," Wall Street Journal (October 2, 1934) 4.

[&]quot;Reynolds Metals Expands," Wall Street Journal (June 3, 1930) 5.

[&]quot;Still Seek Defeat of Tobacco Plan," New York Times (December 1, 1911) 8.

companies with a presence at No. 547. By the 1970s, the two-story structure had been demolished and the site was being used as a parking lot.

The 21-story building that presently occupies the site, also known as the Chelsea Arts Tower, was developed by Bass Associates and Young Woo & Associates in partnership with brokers Stuart Seigel and Alan Weisman of Grubb & Ellis in 2007-08, as a response to the growing demand for art gallery space in the West Chelsea neighborhood. For construction, the firm transferred the air rights from neighboring buildings, including the one-story structure at No. 547. The building at 543 West 25th Street is presently occupied by art galleries and related businesses, and is the tallest building in the West Chelsea Historic District.

References:

New York City Department of Records (Municipal Archives), Block & Lot File for Block 697, Lot 10 (Alt 391-1902).

New York City Directories.

New York City Docket Books (NB 794-1869; NB 1015-1869; NB 1704-1890).

Beth O'Neil, "The Art of the Art Dealer," *The Slatin Report (via www.theslatinreport.com)* (November 6, 2006).

"Scoutmaster is Held in Sodomizing of Boy," The New York Times (October 2, 1989) B5.

547 West 25th Street (547-549 West 25th Street), *see Figure 7* Borough of Manhattan Tax Map Block 697, Lot 8

Date of construction: Unknown

Architect: Unknown

Original owner: Unknown

Type: Garage Style: None Stories: 1

Structure/material: Unknown

Features: One-story building with concrete facade; wide rectangular opening towards left of elevation extends to ground and contains frosted glazing and vertical metal framing; small, recessed panel inscribed with name of present occupant ("Cheim & Reid").

Alterations: Original brick facade featured two or more large loading docks (leftmost loading dock enlarged into present opening in 2000-01 by Gluckman Mayner Architects); refaced in concrete.

History: The one-story building at 547 West 25th Street is located on a block that was once owned by the Cornell Iron Works and on which the company had constructed foundries and related structures. The structure presently located on the site may have been part of the company's vast West Chelsea operations, functioning as either a store house or foundry. The building changed hands ca. 1916, coming under the ownership, like its neighbor at 543 West 25th Street, of the Progressive Smelting & Metal Company. By 1922, No. 547 was owned the General Metal & Copper Co. which used the building as a "smelter's warehouse" and for "bottle

cleaning." It was around this time that trucking docks were added to the building. The building was being used by dairy-related industries in the 1920s, 30s and 40s. McKay Milk Products, who also had a presence next door at No. 543, utilized the structure as a milk pasteurizing and bottling plant in the 1930s and the 1940s. In 1941, the building was owned by the Creamery Package Manufacturing Company, from whom McKay Milk Products leased space.

The present appearance of the building is the result of extensive exterior renovations that took place in 2000-01 and which readied the building for occupancy by Cheim & Read, one of the many art galleries and related businesses presently located in the West Chelsea neighborhood.

References:

New York City Department of Buildings (Alt-102900915, Alt-102911814).

New York City Directories .

New York City Department of Records (Municipal Archives), Block & Lot File for Block 697, Lot 8 (Alt 701-1917; Alt 1936-1917; Alt 1833-1922; Alt 1196-1928; Alt -2430-1931; Alt 391-1932; Alt 580-1933; Alt 1470-1935; Alt 973-1936; MC 5-1940; Alt 785-1941; Alt 1041-1949; Alt 2109-1944).

555 West 25th Street (551-555 West 25th Street), *see Figure* 8 Borough of Manhattan Tax Map Block 697, Lot 5

Date: 1891 (NB 983-91) Architect: George B. Cornell

Original Owner: John M. Cornell (of J.B. and J.M. Cornell)

Type: Factory

Style: American Round Arch

Stories: 6

Structure/Material: Brick; iron & steel frame

Features: Six-story red brick factory building with four presently visible elevations; South elevation: Tri-partite division into double-height base, four-story shaft and one-story capital; double-height rounded archways at base feature concentric relieving arches above a corbelled spring course; narrow rectangular doorways with brick lintels present at outer bays of base; remnants of raised brick banding with decorative brickwork between first-story archways and above outer doorways; brick cornice above first story features dentil and dog-tooth courses; three bays flanked by continuous brick piers at shaft; three segmental-arched window openings with three-course deep brick relieving arches, stylized brick keystones and rectangular sills at each bay of shaft; brick corbelling between piers above fifth story; brick cornice above fifth story features dentil and dog-tooth courses and fretwork; four round-arched window openings with brick relieving arches and projecting arched banding at each bay of sixth story; stepped brick banding at stepped roofline; projecting brick pinnacle-like elements pierce roofline above each pier; ornamental iron tie rods on brick piers and pinnacles including foliate and mask motifs above second and sixth stories and lions heads above forth and fifth stories; bluestone coping at roofline; West elevation: Red brick facade; four bays grouped to left of facade (no applied ornament on remaining area); segmental-arched window openings with three-course deep brick relieving arches and rectangular sills at bays; iron star tie rod at roofline; bluestone coping at roofline; metal guard-rail visible above roofline; <u>East elevation</u>: Red brick facade; five bays originally featuring segmental-arched window openings with three-course deep brick relieving arches and rectangular sills; iron star tie rods; bluestone coping at roofline; metal guard-rail visible above roofline; <u>North elevation</u>: Red brick facade; three bays separated by continuous brick piers; three segmental-arched window openings with three-course deep brick relieving arches and rectangular sills at each bay; brick corbelling between piers above sixth story; brick corbelling at roofline; fire escape at central bays; bluestone coping at roofline; metal guard-rail visible above roofline.

Alterations: Windows replaced (some emulate historic 2x2 metal windows but lack curved upper sash) South elevation: Signage; first-story doors, frames, and transoms; metal staircase with handrails at first story; light fixtures; stucco paneling with metal banding at base of first-story; second-story tie rods missing original iron details; raised brick banding with decorative brickwork between first-story archways and above outer doorways damaged; West elevation: Two window openings bricked-in at first story; three window openings bricked-in and one modified at second story; through-wall air conditioners; unmodified above second story East elevation: Some window openings filled-in and some altered; North elevation: Some windows filled-in with louvers and other modifications.

History: The building at 555 West 25th Street was constructed by John Black (J.B.) Cornell and his father John Milton (J.M.) Cornell in 1891. The building originally was erected to house the Cornell Iron Works, founded in 1847 by J.M. Cornell and his brother W.W. Cornell, and originally located on Centre Street on the site of what is today the Manhattan Detention Complex (formerly the Tombs Prison, demolished). Like many industrial enterprises of the time, the company was interested in relocating due to soaring downtown real estate prices. By the late 1860s, the Cornell Iron Works had constructed foundries and related structures throughout the West Chelsea neighborhood. By 1893, the Cornell Iron Works was a significant presence, occupying all or parts of several blocks, including those bounded by West 26th and West 27th Streets, Eleventh and Twelfth Avenues, West 25th and 26th Streets, Tenth and Eleventh Avenues, and West 26th and West 27th Streets, Tenth and Eleventh Avenues. The Cornell Iron Works had several additional large fitting shops, pattern shops, and foundries dispersed throughout the neighborhood. The building at No. 555 was apparently designed by a relative of the family, George B. Cornell, and contained a pattern shop, iron works, and a stable at the first story.

By the late nineteenth century, the Cornell Iron Works had become one of New York City's foremost producers of cast-iron architectural elements and one of the largest manufacturing operations in the city. At its peak, the company employed some 1,200 people, providing steel and iron for projects such as the Product Exchange (considered the largest ironwork contract in New York City at the time), the Park Row Building (the tallest building in the world when constructed in 1898 and a designated New York City Individual Landmark), the iron base and stairways of the Statue of Liberty (a designated New York City Individual Landmark), as well as over 13,000 tons for elevated railroad stations throughout Manhattan and Brooklyn. During the Civil War, the company was employed in the production of turrets and pilot houses for the government, including the revolving turrets of the monitors Miantonomah and Tonawandah. By 1897, the company had expanded into Cold Spring on the Hudson River, a location which provided it with the capacity to provide 20 tons of castings per day.

In 1900, the Cornell Iron Works liquidated its heavy production shops in response to the westward movement of steel and iron operations across the country. Around this time, the company began to focus on smaller-scale iron and steel products. In 1900, letterhead for the firm described more than 25 different products, among them: awnings, balcony railings, bank screens, columns, beams, doors, fire escapes, lamps, mausoleum doors, memorial tablets, rolling shutters, sidewalk elevators, and stairs, to name a few. Additional letterhead from the time advertised other work performed by the company, including to "construct, erect and repair all kinds of architectural and other work in iron, bronze, electro-bronze, and brass" and "repairs of all kinds on buildings as well as repairs on skylights, patent lights, shutters, steel shutters, rolling shutters, sidewalk elevators, railings, gratings, etc; also painting."

In 1908, the Cornell Iron Works building at No. 555 was purchased by the Standard Oil Company. The company used the building for its branch offices and for warehousing, but only after undertaking extensive interior renovations and implementing fireproofing measures for the iron and steel frame building. When the Standard Oil Company was found guilty of anti-trust activity in 1911, the trust was divided into 34 individual operations. Socony (Standard Oil Company of New York) Vacuum Oil Co. (later the Mobil Oil. Co.), one of the new corporations founded upon the dissolution, retained the building. The depth of the building was increased in 1941, apparently around the time ownership was taken over by the G.B.R. Realty Corporation, who continued to use the building as a warehouse. In 1943, the H. Wolff Manufacturing Co., which owned buildings at 508 and 518 West 26th Street on the opposite side of the block, rented space in the building, probably for storage. The Noma Electric Company, manufacturers of insulated wire and cable and once considered the most innovative and largest Christmas lighting company in the world, purchased the building in 1951 and used it as offices and for storage. In 1965, the building was leased by the Clipper Warehouse and Trucking Company, which moved from a previous location at 541 West 22nd Street. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

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"John M. Cornell Dies of a Stroke," New York Times (March 11, 1934) 31.

New York City Department of Records (Municipal Archives), Block & Lot File for Block 697, Lot 5 (NB 983-1891; Alt 666-1900; Alt 2472-1900; Alt 1069-1908; MC 51-1935; PD-772-1935; Alt 1265-1935; BN 1562-1942; BN 1665-1942; Alt 16-1943; Alt 109-50; MC 2017-1951; FO 1982-1954; BN 978-1965).

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WEST 25TH STREET, NOS. 564-568 (SOUTH SIDE, BETWEEN TENTH & ELEVENTH AVENUES)

564-568 West 25th Street

See: 210 Eleventh Avenue

WEST 26TH STREET, NOS. 513-559 (NORTH SIDE, BETWEEN TENTH & ELEVENTH AVENUES)

513 West 26th Street, see Figure 9

Borough of Manhattan Tax Map Block 698, Lot 18 (In Part)

Date of Construction: 1921 (NB 435-21)

Architect: Abraham Ratner Original Owner: Percy Uris

Type: Factory Style: Vernacular

Stories: 3

Structure/Material: Brick

Features: Three-story structure with two visible elevations; <u>South elevation</u>: One bay wide; two large, rectangular openings separated by thin brick pier on ground floor; uninterrupted horizontal window openings on upper two floors; corbelled brick parapet; <u>East elevation</u>: Parged brick facade partially visible from street; three rectangular window openings punched through otherwise plain facade.

Alterations: New storefront windows and pedestrian entrance in ground floor openings; second and third floor pivot windows replaced by single panes of glass.

History: Historic maps indicate that this site was first used as a stone yard after it was reclaimed from the Hudson River in the 1840s. Contractor Thomas Cumming erected a residential structure—part of a row of at least six—on the property ca. 1860. James Moore subsequently purchased these buildings and his family owned the property into the twentieth century. Moore's heirs sold the lot of land at 513 West 26th Street in 1921 to Percy Uris, whose father, Harris H. Uris, had established an iron foundry on the block several decades earlier and owned several adjacent buildings (see building entry for 525 West 26th Street for a history of the Harris H. Uris Iron Works and the Uris family real estate business). Architect Abraham Ratner was commissioned to design a small industrial structure for the site. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

New York County, Office of the Register, Deed Liber 610, p. 309; Liber 812, p. 598; Liber 3218, p. 45.

515 West 26th Street (515-519 West 26th Street), *see Figure 10*Borough of Manhattan Tax Map Block 698, Lot 18 (In Part)

Date of Construction: 1911 (NB 139-11)

Architect: Rouse & Goldstone Original Owner: Harris H. Uris

Type: Factory

Style: Daylight Factory

Stories: 6

Structure/Material: Brick

Features: Three-story structure with two visible elevations; South elevation: Three bays wide; bays separated by vertical brick piers; bays contain large, rectangular window openings; window openings of middle bay fitted with double-hung, 8x8 metal windows flanked by double-hung, 6x6 metal windows; window openings of flanking bays fitted with pairs of double-hung, 6x6 metal windows; corner piers have small rectangular window openings cut in between floor levels, fitted with double-hung, 4x4 windows; all window openings have plain stone lintels and projecting sills; fourth and six floors retain original windows, fifth floor retains historic replacement windows; corbelled belt course on piers between sixth floor windows; corner piers extend beyond main roofline as bulkheads; East elevation: Parged brick elevation partially visible from street; several rectangular window openings punched through facade.

Alterations: New storefront windows and entrance door installed in ground floor openings; windows on second and third floor replaced; corbelled brick parapet with signage replaced with plain brick parapet.

History: Historic maps indicate that this site was first used as a stone yard after it was reclaimed from the Hudson River in the 1840s. Contractor Thomas Cumming erected three residential structures—part of a row of at least six—on the property ca. 1860. James Moore subsequently purchased these buildings and his family owned the property into the twentieth century. Moore's heirs sold the lot of land at 515 West 26th Street in 1908 to Charles B. Lambert, who in turn conveyed the property to Harris H. Uris in 1909. Uris had established an iron foundry on the block a decade earlier, and he and his sons would go on to become one of the largest developers of speculative office buildings in New York City (see building entry for 525 West 26th Street for a history of the Harris H. Uris Iron Works and the Uris family real estate business).

The building at 515 West 26th Street was apparently erected as a speculative real estate venture—perhaps the Uris family's first. After its completion in 1911, the top three floors were leased to Smith & Uhlig for their silk finishing business, while the bottom three floors were occupied by the American Corrugated Paper Company. The building was subsequently occupied by a series of commercial and industrial tenants. Classified advertisements placed in the *New York Times* during the 1920s, for example, indicate that a printing and lithography firm occupied at least part of the structure for a time, while an announcement from 1976 notes that a paper box manufacturer was located at 515 West 26th Street. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

Classified Advertisement, *New York Times* (July 11, 1925) 20. Classified Advertisement, *New York Times* (October 8, 1976) 44. New York County, Office of the Register, Deed Liber 610, p. 309; Liber 812, p. 598; Liber 143, p. 120; Liber 149, p. 306; Liber 167, p. 5; Liber 176, p. 380.

521 West 26th Street (521-523 West 26th Street), *see Figure 11*Borough of Manhattan Tax Map Block 698, Lot 18 (In Part)

Date of Construction: 1913-14 (NB 217-13)

Architect: Harris H. Uris Original Owner: Harris H. Uris

Type: Factory

Style: Daylight Factory with Arts and Crafts Style Elements

Stories: 9

Structure/Material: Brick

Features: Nine-story structure with three visible elevations; South elevation: Two bays wide; bays contain of large, rectangular window openings; bays separated by vertical brick piers; piers separating openings on ground floor have corbelled capitals supporting a stone lintel above openings; corbelled belt course under second floor windows doubles as window sill; window openings were originally fitted with sets of three 3x3 metal pivot windows; original windows on seventh and eighth floors; all window openings have flat stone lintels and projecting sills; brick piers have corbelled capitals on eighth floor supporting a stone lintel above window openings; corbelled belt courses above and below ninth floor windows; Arts & Crafts decorative motifs on corbelled brick parapet; small vents centered in each spandrel panel; West elevation: Red brick side elevation partially visible from street; rectangular window openings with flat stone lintels; bulkhead and two water tanks visible above roofline; East elevation: Plain red brick side elevation partially visible from street.

Alterations: Windows replaced on second through sixth and on ninth floors; second floor window openings partially bricked in to form three smaller window openings.

History: The land on which 521 West 26th Street now stands was originally developed ca. 1858 by contractor Thomas Cummings, who erected a pair of two-story tenements on the property. A pair of four-story tenements was later constructed at the rear of the lots. The two lots were conveyed together several times during the late nineteenth century and the early years of the twentieth century. Harris H. Uris, who had established an iron foundry on the block a decade earlier and owned several adjacent buildings, acquired the property in 1913 and soon commissioned a large loft building for the site. (see building entry for 525 West 26th Street for a history of the Harris H. Uris Iron Works and the Uris family real estate business).

The building at 521 West 26th Street was apparently erected as a speculative real estate venture—probably one the Uris family's earliest. Record files with the New York City Register note that after the building's completion in 1913, the top floor was leased to the Commercial Utilities Manufacturing Company, which fabricated clocks and time keeping devices. Advertisements

also appeared regularly in the *New York Times* during the 1910s and 20s, announcing loft space for lease at 521 West 26th Street. These listings especially touted the building's available light and the low fire insurance rates. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

Display Advertisement, New York Times (August 9, 1914) X10.

"In the Real Estate Field," New York Times (November 3, 1900) 12.

New York County, Office of the Register, Deed Liber 610, p. 309; Liber 765, p. 212; 181, p. 495; Liber 187, p. 436.

525 West 26th Street (525-531 West 26th Street), *see Figure 12*Borough of Manhattan Tax Map Block 698, Lot 18 (In Part)

Date of Construction: 1904-05 (NB 181-04)

Architect: Paul C. Hunter Original Owner: Harris H. Uris

Type: Factory Style: Vernacular Stories: 4 and basement Structure/Material: Brick

Features: Four-story plus basement structure with two visible elevations; South elevation: Six bays wide (four wide bays flanking two narrow central bays); street level entrances in bays one, three, and four, basement level entrances in bays two and five, raised entrance in bay six; small segmental-arch window openings with splayed brick lintels and stone sills beside entrances in bays one and six on basement and first floors; pairs of larger segmental-arch window openings with splayed brick lintels and stone sills in bays two and five on second floor; window openings on second and third floor in bays one, two, five, and six recessed in shallow panels framed with quoins, iron lintels, and stone sills; sets of three segmental-arch window openings with splayed brick lintels and stone sills on fourth floor in bays one, two, five, and six; single rectangular window openings on floors two through four in bays three and four with iron lintels and stone sills; historic fire escapes in front of second and fifth bays; brick parapet above central bays; original cast-iron flag pole bracket between central windows on fourth floor; West elevation: Red brick side elevation partially visible from street; seven bays of segmental-arched windows with radiating brick lintels and projecting stone sills; bulkhead visible above sixth bay.

Alterations: Cornice and rooftop baluster removed; oriel windows on second and third floors in bays one, two, five, and six removed, openings partially filled in to create pairs of smaller rectangular windows; window openings on second through fourth in fourth bay filled in; street level entrance cut into third bay (was rectangular window on ground floor and two segmental-arch windows on basement floor); all windows replaced, new doors and glazing in entrances; new stair to raised entrance in sixth bay.

History: The building at 525 West 26th Street stands on four city lots that were originally occupied by a row of residential buildings erected in the early 1850s, when George F. Talman

began partitioning his substantial land holdings in West Chelsea (the row of houses at 437-459 West 24th Street, all designated New York City Individual Landmarks, were similarly constructed for Talman during this period, although those structures are likely much more luxurious than the row that once stood on West 26th Street). These residences, which were described by the *New York Times* in 1895 as four-story brick tenements, remained under individual ownership until Lyon Whitney purchased all four in 1902. The following year he sold the property to Harris H. Uris, a Latvian emigrant who had been active in the iron industry since his arrival in the United States ca. 1892. A new four-story and basement factory building was soon erected on the site.

The structure was the first of several in the West Chelsea Historic District erected for the Harris H. Uris Iron Works (see also building entries for 521, 515, and 513 West 26th Street). When the plant was first opened, the company employed over 160 people. The building's basement housed the firm's structural department, while the first floor was given over to drafting rooms and offices. The upper floors were devoted to the actual manufacturing operations. The Harris H. Uris metal works specialized in fabricating structural and architectural iron. An article in the *Real Estate Record and Builders Guide* from 1905 notes that firm's more prominent commissions included work for the 71st Regimental Armory (1904-06, Russell & Clinton), the Harlem Hospital (ca. 1904, Horgan & Slattery), the Colonial Theater (1905, George Keister), Public School 81 (ca. 1902, C.B.J. Snyder), and an office building at 30-32 Pine Street designed by Warren & Wetmore (1902). The company also provided architectural iron work for at least seven of the city's first subway stations. The Uris Iron Works in fact maintained a working relationship with New York's transit companies into the 1920s—a relationship that was probably strengthened by the choice of Paul C. Hunter as architect for the building at 525 West 26th Street, since Hunter was at the time Architectural Assistant for the Interborough Rapid Transit Company.

By the 1920s, Uris had expanded the scope of his company's operations and entered into the speculative building business with his sons, Harold and Percy. The firm's real estate ventures initially focused on residential construction—their early projects included residential hotels such as the Buckingham (1925) and the St. Moritz (1930-32), as well as apartment buildings at 1 University Place (1929), 2 Sutton Place (1937), and 930 Fifth Avenue (1939). After World War II, the Uris family shifted its attention to developing large commercial structures. They contributed greatly to the transformation of East Midtown into a business district to rival Lower Manhattan; between 1945 and 1973, over 13 million square feet of office space was erected by the Uris family.

While the Uris family eventually exited the metal industry in favor of the real estate market, the building at 525 West 26th Street remained home to at least one metal manufacturer into the late twentieth century. International Retinning & Copper Repair, later renamed Retinning and Copper Repair, Inc., began renting space on the fourth floor of the West Chelsea loft in 1916 and remained in operation there until moving to New Jersey (as had so many of the neighborhood's former industrial tenants before it) in the 1990s. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

[&]quot;A Tin Shop is Rescued from the Heap," New York Times (March 16, 1978) C12.

[&]quot;In the Real Estate Field," New York Times (October 10, 1895) 15.

"The New Iron Works of Harris H. Uris," *Real Estate Record and Builders Guide* 75 (January 14, 1905) 83.

New York County, Office of the Register, Deed Liber 602, p. 581; 606, p. 596; Liber 635, p. 193; 96, p. 158; Liber 98, p. 35.

533 West 26th Street (533-535 West 26th Street), *see Figure 13* Borough of Manhattan Tax Map Block 698, Lot 16

Date of Construction: 1946 (NB 194-46)

Architect: Tobias Goldstone

Original Owner: Clinton Paper Corporation

Type: Garage Style: None Stories: 1

Structure/Material: Brick

Features: Simple brick facade of Flemish bond with two rectangular vehicle entrances and a smaller rectangular pedestrian entrance to the right; row of soldier bricks forms belt course above entrances.

Alterations: Converted to gallery space, new windows and pedestrian entrances in ground floor openings.

History: The site on which the current structure stands was initially occupied by a row of residential buildings that were erected ca. 1850 when the lots were reclaimed from the Hudson River. In 1921, the Harris H. Uris Iron Works replaced the residential building with a pair of single-story, wood-framed buildings used for temporary office space. The current structure was erected in 1946 as storage space for the Clinton Paper Corporation.

References:

New York County, Office of the Register, Deed Liber Indices.

537 West 26th Street (537-547 West 26th Street), *see Figure 14* Borough of Manhattan Tax Map Block 698, Lot 10

Date of Construction: 1912-14 (NB 499-12)

Architect: Charles H. Caldwell Original Owner: Jno Williams, Inc.

Type: Garage Style: Utilitarian

Stories: 1

Structure/Material: Brick

Features: Twin gable ends facing street; each section has a central round-arch vehicular entrance flanked by pairs of tall round-arch windows with stone sills; all openings have radiating brick lintels; stone coping at roofline; skylights along ridge of roof.

Alterations: Windows and vehicular entrance doors replaced with modern glass infill; windows immediately flanking central entrance of eastern section have been cut to grade and transformed into pedestrian entrances; pedestrian entrance between two sections bricked in; sills of westernmost two window openings replaced in kind.

History: The garage at 537 West 26th Street was erected for Jno. Williams, Inc. and was designed by the architect Charles H. Caldwell. The structure replaced a row of six residential buildings that had been erected ca. 1850 after the lots were reclaimed from the Hudson River. Jno. Williams was a local manufacturer of ornamental brass and iron products whose factories stand immediately adjacent to the garage and were also designed by Caldwell (see building entries for 549 West 26th Street, 544 West 27th Street, and 536 West 27th Street).

The building was initially supposed to be erected in 1912 for use by the North River Garage Company, but the structure was not actually completed until 1914, at which time it was leased to the Schwartz-Gaskell Corporation. The latter firm was established by two former officers of the Yellow Taxicab Company, which during the 1910s was one of the city's largest such operations, and it is likely that the garage originally served New York's earliest fleet of taxicabs. In 1948, the structure was sold to the Feidelson Trucking Corporation. It appears that the building remained an automobile garage until the 1990s, at which time renowned photographer Annie Leibovitz converted the building into the West 26th Street Studio. The building now houses a theater.

References:

"In the Real Estate Field," The New York Times (August 15, 1912) 15.

"In the Real Estate Field," The New York Times (May 7, 1914) 17.

New York County, Office of the Register, Deed Liber 621, p. 262; Liber 626, p. 504; Liber 360, p. 104; Liber .635, p. 193; Liber 635, p. 194; Liber 4599, p. 198.

549 West 26th Street (549-555 West 26th Street), *see Figure 15* Borough of Manhattan Tax Map Block 698, Lot 6

Date of Construction: 1900-01 (NB 1016-00)

Architect: Charles H. Caldwell Original Owner: John Williams

Type: Factory

Style: American Round Arch

Stories: 6

Structure/Material: Brick

Features: Six-story structure with three visible elevations; South elevation: Four bays wide; central two bays contain sets of three windows; flanking bays contain pairs of windows; openings of first through second and third through fifth floors recessed within shallow panels and topped with segmental-arched voussoirs of alternating brick and limestone; wide segmental-arched window openings on second floor, wide rectangular window openings on floors three through five, small round-arched windows on sixth floor and in corner piers; blind round-arched openings on six floor above piers separating bays; third floor and round-arched window openings

have stone sills; limestone belt course above second floor; pressed copper cornice with double brackets; small one-story structure attached to eastern side of primary facade, with round-arched window opening with radiating brick lintel, topped by triangular pediment with stone copping; <u>East elevation</u>: Red brick side elevation partially visible from street; ten bays of rectangular window openings with plain brick lintels and flat stone sills; hinges for fire shutters still evident; fire escape in front of bays 2-3 and 8-9; <u>North elevation</u>: Red brick rear elevation partially visible from street; three bays of window openings; each bay contains sets of three windows; windows are rectangular with plain brick lintels and flat stone sills; hinges for fire shutters sill evident; loading dock in ground floor of central bay.

Alterations: Vehicular entrance in right-most bay of ground floor enlarged, pedestrian entrance in right pier bricked in; vehicular entrances in center two bays partially bricked in, right center bay now a vent, left center bay now smaller vehicular entrance; vehicular entrance in left-most bay partially bricked in, now pedestrian entrance; all windows replaced; windows in right three bays and in right pier of fifth floor bricked in; right three round-arched windows on sixth floor partially bricked in to form rectangular openings.

History: The structure at 549 West 27th Street dates from 1900-01, when it replaced a row of four residential buildings erected in 1852 by builders Uel Reynolds and Gideon Fountain. It was one of several factory buildings constructed for the John Williams Bronze and Iron Works in the early twentieth century, all of which were designed by architect Charles H. Caldwell (see also building entries for 544 and 536 West 27th Street).

Until 1840, there were virtually no metal workers in the United States with the technical ability to cast ornamental bronze work. Prior to that time, most American sculptors either relied on European foundries or created their pieces out of marble. One of the first artists to successfully produce bronze work domestically was Henry Kirke Brown, who maintained a studio in Brooklyn. Brown soon outgrew his own foundry and struck up a close relationship with the Ames Manufacturing Company. This mode of production, where an artist would only work with a single foundry, persisted until the end of the Civil War. In the late nineteenth century, however, ornamental bronze works flourished and sculptors had greater opportunity to select the foundry best able to produce a particular piece. The proliferation of bronze foundries also drove down the price of such works of art, and by the early twentieth century bronze sculpture had become a relatively common domestic commodity. John Williams established his own bronze foundry in 1875. The firm was originally located at 115-121 East 13th Street, just a few blocks south of William's former employer, Tiffany & Co., which had recently opened a new store on Union Square West. In 1888, John Williams acquired the foundry buildings at 544-556 West 27th Street in West Chelsea (since demolished) that had previously belonged to the Colwell Iron Works.

William's foundry soon became one of the country's more prestigious manufacturers of ornamental bronze and iron work. The firm's most significant commissions include bronze doors cast for the Library of Congress in Washington D.C. (1892, Olin Levi Warner) and the Boston Public Library (1903, Daniel Chester French), as well as the statue *Alma Mater* for Columbia University (1903, French), and bronze tablets for the Carnegie-funded branches of the New York Public Library. The firm also produced all manner of architectural and decorative metal work for

domestic consumption. An advertisement in *Sweet's Catalogue* notes that the firm produced such goods as:

bronze and iron entrance doors, door grilles, window grilles, stair railings, tube railings, lamp standards, bank fittings, counter screens, mesh wire work, tellers' enclosures, elevator enclosures, mausoleum doors and fittings, memorial tablets, signs and separate bronze letters, fine bronze castings, statues, figures, portraits, busts and medallions, monumental bronze work, fountains, sun-dials, iron driveway gates, fencing, grille work.

The success of Williams' bronze and iron business during the late nineteenth and early twentieth centuries led to the firm's acquisition of several other parcels of land in West Chelsea and the erection of three new manufacturing buildings. The first of these new structures, located at 549 West 26th Street, was completed in 1901. While the building was erected specifically for John Williams' company and housed some of its foundry operations, the upper floors were leased from the beginning to other manufacturers such as shoe maker A. Garside & Sons. The growth of John Williams' firm was also reflected in its official incorporation in 1905 as Jno. Williams, Inc.

West Chelsea experienced a wave of development in the 1910s and the subsequent rise in real estate values had a definite impact on some of the neighborhood's established business, including the Jno. Williams, Inc. bronze works. In a brochure published in 1916, William Donald Mitchell, a relative and close associate of John Williams, lamented the fact that Williams' firm would soon have to relocate outside of Manhattan. Mitchell's prognosis was a little premature, but a portion of the Williams property, including the building at 549 West 26th Street, was sold in 1928 to the Otis Elevator Company, whose headquarters already occupied an adjacent lot. Jno. Williams, Inc. was able to retain two of its buildings on West 27th Street until the late 1940s (see entries for 536 and 544 West 27th Street), and the company was finally dissolved in 1956. Otis owned the building at 549 West 26th Street until the 1970s, when it moved to an office tower in East Midtown.

References:

New York County, Office of the Register, Deed Liber 598, p. 312; Liber 619, p. 24; Liber 614, p. 520; 68, p. 181; Liber 70, p. 388, Liber 71, p. 117.

"Obituary," New York Times (January 6, 1914) 13.

Michael Edward Shapiro. *Bronze Casting and American Sculpture*, 1850-1900 (Newark: University of Delaware Press, ca. 1985) 88-89, 101-02, 175-76, 188.

William Donald Mitchell, ed, "American Art in Bronze" (New York: Jno. Williams, Inc., 1902-1912) William Donald Mitchell, "The Art of the Bronze Founder, Especially in its Relation to the Casting of Bronze Statuary and Other Sculptural Work" (New York: Press of Gibbs & Van Vleck, Inc., 1916).

557-559 West 26th Street

See: 260 Eleventh Avenue

WEST 26TH STREET, NOS. 500-534 (SOUTH SIDE, BETWEEN TENTH & ELEVENTH AVENUES)

500-502 West 26th Street

See: 259 Tenth Avenue

504-506 West 26th Street

See: 507-509 West 25th Street (aka the High Line)

508 West 26th Street (508-516 West 26th Street), *see Figure 16* Borough of Manhattan Tax Map Block 697, Lot 42

Date of Construction: 1926-27 (ALT 186-26)

Architect: Parker & Shaffer

Original Owner: West 26th Street Realty Co. (Mrs. Esther Wolff, President)

Type: Factory

Style: Industrial Neo-Classical

Stories: 12

Structure/Material: Brick; reinforced concrete

Features: Twelve-story reinforced concrete factory building with two visible elevations; North elevation: Four central bays flanked by slightly projecting towers featuring two bays each; rectangular loading docks at first story of towers (recessed panel above left-most opening with metal lettering spelling "Wolf (sic) Building", raised concrete circle details, and raised concrete door surrounds; recessed area within left-most opening with canted sidewalls and doorway featuring stylized raised concrete triangular pediment); two rectangular loading docks and various rectangular recessed panels at central bays of first story; concrete cornice above first story serves as sills of second-story fenestration; multi-paned metal triple windows with fixed and pivot sash and recessed brick spandrels at central bays above first story; second through eighth stories of central bays separated and flanked by continuous concrete piers; ninth and tenth stories of central bays recessed above ninth story and separated by continuous concrete piers; tenth story of central bays canted skylights; towers feature narrow, paired bays separated by continuous concrete piers (openings of left-most bay are open and do not feature windows; remaining bays feature multi-paned industrial steel sash windows with movable sections; all openings feature recessed concrete spandrels); right tower is set back above tenth story; spandrels throughout contain small metal ventilators; concrete piers typically terminate in stylized pinnacles spanned by pointed-arch and miniature pinnacle details; East elevation: Partially visible form street; two bays with large multi-paned metal windows grouped towards left and two columns of narrow rectangular windows with multi-paned industrial steel sash windows towards central; no applied ornament on remaining areas.

Alterations: Signage at first story; lighting; entrance ramp; doors and frames at first story; original rectangular loading docks at first story modified and largely filled in; recessed panel above left-most tower at base missing an "F"; rolling security gates.

History: The reinforced concrete factory building at 508 West 26th Street was constructed in 1926-27 for the H. Wolff Book Manufacturing Co., and served as an annex to the neighboring Wolff Bindery building at 518 West 26th Street (1909-10). A 1925 demolition permit indicates that five or six three-story brick tenement dwellings were demolished to make way for the twelve-story factory structure, which, according to the *New York Times*, was to be "equipped as one of the most modern printing establishments in the city." Like the Wolff Bindery next door, arrangements were made early on for the leasing of space to allied trades, including other publishers and printers. Among the firms to rent space in the annex building at No. 508 were the firms Grosset & Dunlop, George H. Doran, Van Reese Press and Greenwich Lithographers (see 518 West 26th Street for more on the history of the H. Wolff Manufacturing Company).

The Wolff Bindery Annex was designed by Parker & Shaffer, an architectural firm that specialized in reinforced concrete industrial construction. Unlike the older Wolff Bindery, which utilized reinforced concrete in a more traditional beam and column skeletal system, the annex structure employed the newer Turner system, a method of construction developed by Claude Allen Porter (C.A.P.) Turner. Turner's system, as it came to be known, was patented in 1908, and used concrete slabs supported by specially reinforced concrete columns, called mushroom columns due to the shape of the flared column capitals. In the mushroom column system, floor loads are absorbed by the concrete floor slabs themselves then transferred via the flared capitals of the mushroom columns. By eliminating the need for deep overhead beams, the system allowed for more window area, thereby enabling more light to enter enclosed areas of a factory. This difference between the methods of reinforced concrete construction is expressed on the exterior of the two Wolff buildings, with the newer annex featuring considerably more glazed surface area that comes nearly to the outer-most surface. In a side-by-side comparison, the two Wolff buildings also represent an important period in the evolution of the American industrial aesthetic. Comparing the original 1909-10 structure to the later annex, an observer will notice the elimination of the older building's minimally applied classical ornament, with the 1926-27 structure nearly forgoing applied ornament altogether. The setback of the annex building above the ninth story is a result of New York City's 1916 Zoning Resolution, the first comprehensive zoning code in the country. The 1916 Zoning Resolution implemented height and setback controls that resulted in New York City's signature "wedding cake" typology for high-rise construction.

Upon its completion in 1934, the elevated rail line known as the High Line ran mid-block, directly adjacent to the Wolff Bindery Annex. Unlike the R.C. Williams Building, which was constructed around the same time and intentionally built with rail siding in anticipation of the High Line, the Wolff Bindery Annex did not make any such provisions. In order to better take advantage of its proximity to the rail line, the H. Wolff Book Manufacturing Co. later cut openings into the east facade of the building beneath the tracks and entered into an agreement with R.C. Williams & Co. that enabled them to transport goods on the High Line via the grocery company's siding. The agreement between the two companies continued until 1957, at which point the H. Wolff Book Manufacturing Co. took ownership of the building. The Wolff Bindery Annex is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

References:

"Addition to Wolff Book Bindery, New York," *The Architectural Forum* 51 (September 1929) Plate 66.

New York City Department of Records (Municipal Archives) Block & Lot File for Block 697, Lot 42 (DM 83-26; Alt 186-1926; EL 834-1926; CO 12353-1927; PD 624-1931; BN 2092-1945; BN 3725-1954; MC 2003-1949; BN 499-1953; Alt 1495-1963).

New York City Docket Books (Alt 186-1926; Alt 1968-1945; NB 51-1978).

J.P.H. Perry, "The Exteriors of Industrial Buildings," *Architectural Forum* (September 1929) 313 Anthony Robbins, "R.C. Williams Warehouse," *National Register of Historic Places Registration Form* (2004).

Anthony Robbins, West Chelsea Survey Review: A Report Submitted to the New York Landmarks Preservation Commission by the Society for the Architecture of the City, unpublished (May 2006).

"To Raze West Side Flats for Tall Printer's Building," New York Times (February 2, 1926) 48.

518 West 26th Street (aka 518-534 West 26th Street), *see Figure 17* Borough of Manhattan Tax Map Block 697, Lot 47

Date of Construction: 1909-10 (NB 119-09)

Architect: William Higginson

Original Owner: John Bradley (H. Wolff, lessee)

Type: Factory

Style: Industrial Neo-Classical

Stories: 10

Structure/Material: Brick; reinforced concrete

Features: Ten-story, buff brick factory building with two visible elevations; North elevation: Nine central bays flanked by slightly projecting ten-story towers featuring two bays each; rusticated brick piers with concrete capitals separate first-story bays containing windows and entrances; first-story windows feature canted brick sills; stylized classical entablature featuring brick frieze and concrete cornice above first story, projects slightly at towers; continuous rusticated piers separate second and third story bays; fourth through ninth stories separated by continuous brick piers; molded concrete cornice featuring fretwork above third story; 3x3 metal triple windows with fixed and pivot sash at central bays (second story features additional multipaned transoms; soldier course lintels span between brick piers above second story fenestration); 3x3 metal paired windows at towers; rectangular sills spanning between piers and recessed brick spandrels beneath fenestration typical; small metal ventilators at spandrels; central bays recessed above ninth story (tenth-story is a 1920s addition), except central-most bay which features twostory penthouse and is flanked by piers continuous above third story; cornice above ninth story pierced by central tower; cornices and pinnacle-like terra-cotta elements cap center-most bay and outer towers; West elevation: Red brick with buff brick return from north elevation; single column of segmental-arched windows above third story (no window at seventh story); irregular roofline; remnants of painted advertisements for "Grosset & Dunlop Publishers" and the "H. Wolff Book Manufacturing Company".

Alterations: Doors, frames and windows at first story; alterations to first story capitals; removal of jack arches above third story windows; awning at first story; non-original entrance ramp and stairs; lighting throughout; security cameras.

History: The brick factory building at 518-534 West 26th Street was constructed in 1909-10 to the designs of William Higginson for the H. Wolff Book Manufacturing Co. The large, eight-story factory building, constructed at a cost of \$300,000, replaced nine older buildings previously on the site. Records from the period indicate that the site was owned by John Bradley, while Harris Wolff, founder of the H. Wolff Book Manufacturing Co., was the lessee. Arrangements were made early on for the leasing of space to allied trades, including other publishers and printers.

Harris Wolff, who died in 1916, opened his binding business in 1893, with the intention of creating a "self-contained unit for the complete manufacture and even distribution of trade editions," i.e. low cost, mass-market books published for the express purpose of distribution to the general public through booksellers. All aspects of the book-binding process were performed by one of the company's several thousand employees. At its peak, the company offered complete editorial services, including composition and proofreading, electroplating, printing, binding, and even distribution of fully-bound books to retailers both within and outside of New York City. Raw materials, such as paper, binding cloth, and glue, entered the factory by trucks through loading docks along West 26th Street. The raw materials were then taken on freight elevators to the upper stories where massive printing and binding machines were suspended from the ceiling. After completion of the High Line in 1934, finished books were distributed exclusively via the elevated railway which ran adjacent to the Wolff Bindery Annex, constructed in 1926-27. An agreement between the H. Wolff Book Manufacturing Co. and R.C. Williams & Co. enabled the bindery to transport goods on the High Line via the grocery company's siding. The agreement between the two companies continued until 1957, at which point the H. Wolff Book Manufacturing Co. took ownership of the R.C. Williams Building.

The siting of the printing-related facility in West Chelsea was not unusual for the time. A 1914 article in the *New York Times* indicated that within the previous two years "the movement of large printing houses from the old downtown localities to the Seventh Avenue neighborhood have been of such proportions as to give the area from Twenty-third to Forty-second Street, extending from Seventh Avenue westward, the distinction of a new printing trade center." The proximity of Penn Station coupled with the completion of the Eight Avenue Post Office were cited as "contributory causes in bringing scores of printing, lithographing, and allied trades from the old district east of Park Row to a territory possessing more convenience." While the area between Seventh and Eight Avenues was generally occupied by larger firms willing to pay the higher rents in order to be nearer to the business corridors of Broadway and Fifth Avenue, the area west of Ninth Avenue was more typically the location of smaller enterprises, like the H. Wolff Book Manufacturing Co., that were less dependent on proximity to established trade arteries.

The design of the Wolff Building is typical of early twentieth-century industrial design, favoring simple, classically-inspired ornamentation. The substantial width of the pilasters, particularly those of the lower floors of the building, suggests the strength and solidity of the factory building, while large expanses of glazing allowed ample light. While brick decoration was utilized for the exterior of the building, its structure is actually poured-in-place reinforced concrete of a traditional beam

and column skeleton configuration. William Higginson, the architect of the Wolff Bindery building, would go on to design a series of pioneering reinforced concrete loft buildings in what is now the DUMBO Historic District, as well as numerous well-known commissions utilizing the material, including the Bush Terminal Warehouse Building in Brooklyn.

In the early 1920s, the building was raised to a height of ten stories. William Higginson was responsible for the alteration, which was required to follow the New York City's newly implemented 1916 Zoning Resolution, the first comprehensive zoning code in the country. An earlier proposal by Higginson to raise the building by two-stories was denied by the New York City Board of Appeals for not complying with the zoning resolution, and probably resulted in the hiring of a consulting engineer, Isaac Menline. In a letter to the Manhattan Department of Buildings in 1922, Menline wrote:

...the purpose of the drawing [being submitted] is to show only the limits of construction in so far as the Building Zone Resolution is effective... The story heights may be changed slightly maintaining, however, the principles as to planes of set-back, etc... The building in question was built some years ago and was intended to eventually be increased so as to be ten stories high... The Zoning Resolution has come into effect in the interval...

The 1916 Zoning Resolution implemented height and setback controls that resulted in New York City's signature "wedding cake" typology for high-rise construction, and is responsible for the additional stories being set back from the rest of the building's north elevation.

By the 1930s, the book-binding firm had become known as innovators, both of book design and of binding techniques. In pursuit of cutting edge book design, the Wolff Bindery hired Ernst Reichl in the mid-1930s, a book designer who had become famous for his 1933 cover design of the first edition of James Joyce's *Ulysses* published in the United States after the ban on the book was lifted. Around the same time, the bindery became innovators of a method for laying sheets of paper flat in the binding and sewing process, and was also one of the first binderies in the country to produce pre-printed offset cloth book covers. A booster for the company printed for the *Annual of Bookmaking* in the 1938, upon the 45th anniversary of the firm, stated:

...a bindery that can maintain an almost militant progressive spirit is something more than just another firm in search of profit. A plant that so cheerfully makes trouble for itself in pursuit of an ideal is what book lovers would call rare and treasurable [sic]. For here is a band of artisans who feel a jealous pride in the humble trade book and who engage in a kind of permanent conspiracy to make it worthier of its author and more attractive to its purchaser... Long may this quality endure and never may it falter!

Harris Wolff's wife, Esther, was president of the company at the time the building was constructed, while his two sons, Bertram and Arthur, and his grandson, remained active in the business at least through the 1940s. The company continued to expand throughout the 1940s and 50s, taking leases for more than five additional spaces in 1946, including one at 166 Perry Street. In 1943, the company let space in the former Cornell Iron Works building at 555 West 25th

Street. In 1952, the bindery began leasing space in the nearby Terminal Warehouse Company's Central Stores. In 1954 the company took over the lease for the ten-story R.C. Williams Building, taking ownership of the building in 1957. In 1960, the bindery let space at 511-519 West 25th Street. By the time the company was acquired in 1968 by American Book-Stratford Press, a major competitor and manufactures of encyclopedias and other books, the bindery was reporting annual sale exceeding \$10 million. Presently the building is occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

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- "American Book-Stratford and H. Wolff Book," New York Times (July 5, 1968) 37.
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"Building Leased on Tenth Avenue," New York Times (November 27, 1954) 23.

"Business Leases," New York Times (May 13, 1952) 39.

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WEST 26TH STREET, NOS. 601-649 (NORTH SIDE, BETWEEN ELEVENTH & TWELFTH AVENUES)

601 West 26th Street (245-259 Eleventh Avenue; 200-218 Twelfth Avenue; 601-649 West 26th Street; 600-650 West 27th Street), *see Figure 18*Borough of Manhattan Tax Map Block 672, Lot 1

Date of Construction: 1930-31 (NB 213-30)

Architect: Russell G. and Walter M. Cory, Yasuo Matsui, associate

Original Owner: Starrett Investing Corp. Type: Warehouse and Freight Terminal

Style: Modern

Stories: 7, 9, 18 & 19

Structure/Material: Brick; reinforced

Features: Seven, nine, eighteen, and nineteen-story warehouse and manufacturing structure; occupies entire trapezoidal block bounded by Eleventh and Twelfth Avenues, West 26th and 27th Streets; four major facades; a mezzanine level located between first and second stories is not included in the overall floor count; lowest portion of building consists of seven stories on all four facades; eighth and ninth stories "double-H" in plan; various setbacks and changes in massing occur above, with bulk of building towards the east; the tallest mass, the "central utilities section," reaches nineteen stories and is located towards the center of the building; the building base, consisting of first, mezzanine, and second-stories, organized by grid pattern of fenestration, concrete piers, concrete floor slabs, and brick spandrels, nine bays on east and west facades, 12 bays west of and 11 bays east of central utilities section on north and south facades; piers of south facade project slightly and have stone caps which rise slightly above the floor slabs of the mezzanine level; on the north facade, first nine bays from west open to interior of ground floor; four corners of base chamfered, feature rectangular windows at mezzanine and second story; the third through eighteenth floors are articulated horizontally with continuous concrete floor slabs, continuous red brick spandrels serving as parapets on the setbacks, and horizontal ribbon windows; all horizontal ribbon windows are multi-pane steel sash; coping of parapets is terracotta tile; all outer corners and those formed by the intersection of the various masses are polygonal, except for the central utilities section on the south facade and upper three stories of the north facade; the central utilities section is articulated with vertical details on the south facade and upper three stories of the north facade; the central utilities sections is divided into two sets of narrower bays on each side of a wider bay on the south facade; base of central utilities section framed by paired patterned-brick piers with stone caps.

Alterations: Signage on building; window panes (particularly operable sash) replaced by air conditioners, louvers, and vents; some alterations to ground floor bays of east facade and many of south and north facades.

History: The enormous freight terminal and warehouse at 601 West 26th Street, also known as the Starrett-Lehigh Building (a designated New York City Individual Landmark), was constructed as part of a cooperative venture of the Starrett Investing Corporation and the Lehigh Valley Railroad. The structure originally served as a freight terminal and warehouse for the railroad with rental manufacturing and warehouse space above. The Lehigh Valley Railroad, incorporated in 1846 as the Delaware, Lehigh, Schuylkill & Susquehanna Railroad, was one of a number of Northeastern railroads founded in the nineteenth century to haul coal from the coal regions of Pennsylvania and the Delaware River at Easton. Reorganized as the Lehigh Valley Railroad in 1853, the railroad entered a period of growth following the Civil War, expanding westward to western New York State and eastward to Perth Amboy, New Jersey. Construction of several branch lines, freight yards, and a large carfloat-lighterage terminal provided the Lehigh Valley with improved access to the New York Harbor at the turn of the century.

Although New York City was considered the leading port in the United States at the beginning of the twentieth century, its infrastructure was characterized by widely scattered facilities and multiple oversight authorities. Moreover, the New York Central (NYC) Railroad had come to

control nearly all rail crossings into Manhattan, forcing other railroads, particularly those approaching New York from the north and the west, to use the more economical "waterbelt" approach of using carfloats and lighterages to avoid paying fees for the use of the NYC's bridges. As a result, nearly all of the freight rail systems carrying approximately two-thirds of the port's total freight tonnage terminated across the Hudson River in New Jersey. Comprehensive regional plans for orderly development of New York Harbor and improvements to railroad freight facilities were ultimately abandoned for the construction of tunnels and bridges, as trucks emerged as a major force in the handling of freight. In the meantime, many railroad companies embarked themselves on a series of improvements by means of freight terminals and spur lines. The Bush Terminal Company was the first to operate a complex of coordinated facilities in Brooklyn in 1902 involving a railroad transfer line along a series of piers, warehouses and factories. In Manhattan, the Baltimore & Ohio (B&O) Railroad completed a freight terminal in 1912-13, located just two blocks south of the Terminal Warehouse Company's Central Stores constructed in 1891, both located within the West Chelsea Historic District. During this time, the Lehigh Valley Railroad also made improvements to its freight facilities in Manhattan and around the metropolitan area. The Starrett-Lehigh Building was the last of the Lehigh Valley's major terminal projects.

The Starrett-Lehigh Building was designed through the collaborative efforts of a group of architects and engineers including Russell G. and Walter M. Cory, architects, Yasuo Matsui, associate architect, and the firm of Purdy & Henderson, consulting engineers. A structurally complex feat of engineering with an innovative interior arrangement, the building is notable for its exterior design of horizontal ribbon windows alternating with brick and concrete spandrels. It was considered to be in the forefront of "modern" architecture in New York City at the beginning of the 1930s. The building combined the practical functionalism of American industrial architecture with the influence of the horizontal aesthetic of European modernism of the 1920s.

On June 26, 1930, the project was announced in the *New York Times* as "said to be the largest of its kind ever erected" which "will have no exterior columns." Under the terms of the lease, the building was to be completed within a year at a cost of between six and nine million dollars. The building was originally intended to be uniformly 15 stories tall with a central penthouse, but due to unforeseen problems during work on the foundation, was ultimately constructed with a 19-story midsection and nine-story western and 18-story eastern wings. The building officially opened in November 1931, and was touted as the largest multi-story structure in the United States having a flat-slab reinforced concrete frame. Because of ground-floor curving railroad spur lines and freight station platforms, an irregular open framing system of steel columns and girders was developed. The irregular spacing of columns allowed for increased maneuverability of trucks, as did the grouping of utilities in a central core. Trucks entered the building along West 27th Street, crossed under the railroad tracks, and proceeded directly into an elevator, where they could be carried to any floor. They then emerged from the building on West 26th Street. Electric transfer trucks carried freight directly between the ground floor railroad terminal and the floors, resulting in a "vertical street" type structure where "every floor is a first floor."

The completed Starrett-Lehigh building garnered favorable reviews for its architectural design, engineering, and functional aspects. In 1931, the *Real Estate Record and Builders Guide* considered it "a structure which, from an engineering and architectural point of view, is as

unusual as it is striking." The opening of the building at the height of the Great Depression, however, was not opportune. The Starrett-Lehigh also had to face direct competition from the Port Authority in New York which launched plans for an enormous counterpart at 111 Eighth Avenue and which established rates that underbid the company. Plans to develop a similar facility on the Passaic River in Newark, New Jersey, were soon abandoned, and after the death of William Starrett in 1932, the building was purchased by the Lehigh Valley Railroad Company "to insure its permanence as a freight terminal." Like other freight railroads in the northeastern United States, however, the Lehigh Valley experienced a decline in the years following World War II, and eventually merged with the ConRail system in 1976. The Lehigh Valley ended its association with the Starrett-Lehigh building in 1944, and the spur line tracks were removed from the ground floor. Today, the building continues its original function of supplying rental warehouse, manufacturing, and office space. It was designated a New York City Individual Landmark on October 7, 1986.

References:

Landmarks Preservation Commission, *Starrett-Lehigh Building (LP-1295)* (New York: New York City, 1986) prepared by Jay Shockley.

WEST 26TH STREET, NOS. 600-626 (SOUTH SIDE, BETWEEN ELEVENTH & TWELFTH AVENUES)

600-626 West **26**th Street

See: 239 Eleventh Avenue

WEST 27TH STREET, NOS. 547-559 (NORTH SIDE, BETWEEN TENTH & ELEVENTH AVENUES)

547-553 West 27th Street

See: 548 West 28th Street

555-559 West 27th Street

See: 262 Eleventh Avenue

WEST 27TH STREET, NOS. 510-514 AND 536-556 (SOUTH SIDE, BETWEEN TENTH & ELEVENTH AVENUES)

510 West 27th Street (510-514 West 27th Street), *see Figure 19* Borough of Manhattan Tax Map Block 698, Lot 44

Date of Construction: 1909-10 (NB 576-09)

Architect: W.W. Pearse

Original Owner: Sophia B. Silleck (for John J. Radley & Co.)

Type: Warehouse

Style: Vernacular

Stories: 6

Structure/Material: Brick

Features: Six-story structure with three visible elevations; North elevation: Four bays wide; bays separated by vertical brick piers; windows of upper five floors recessed in shallow panels with corbelled top courses; each bay on second through sixth floors contain pairs of rectangular window openings with flat stone lintels and projecting stone sills; ground floor bays contain large loading docks, each with iron lintel with rosettes; outer loading docks divided by vertical brick pier into two separate entrances; rusticated watertable; two rusticated belt courses between loading dock entrances; limestone belt course separates ground floor from upper floors; stone belt course below brick parapet; corners of brick parapet extend above main roofline, westernmost corner contains a bulkhead; East elevation: Red brick side elevation partially visible from street; five bays of segmental-arched window openings with radiating brick lintels; bulkhead above fourth bay; hinges for fire shutters still evident; historic sign painted on facade still partially visible; West elevation: Plain red brick side elevation partially visible from street.

Alterations: All windows replaced; projecting steel security grate added to right center ground floor loading dock; left-most loading dock converted into pedestrian entrance, metal access stair added.

History: The land on which the building at 510 West 27th Street stands was originally developed ca. 1846 with a row of three residences. These buildings survived until the early twentieth century, when Benjamin Lowenstein acquired the three individual lots and sold the consolidated property to Sophia B. Silleck in 1909. While building permits and deeds corroborate the fact that Silleck still owned the land when the warehouse was erected in 1910, it appears that the building was actually developed by John J. Radley & Co., a local construction company that held property throughout the city. The warehouse's architect, W.W. Pearse, was vice president and chief engineer of the Radley firm, and deeds note that the property was sold to John J. Radley months after the structure was completed.

It appears that the warehouse, like many of building's erected by John J. Radley & Co., was a speculative venture. The first documented tenant was the F.W. Devoe & C.T. Raynolds Company, a well known paint manufacturer that leased the property in 1916 for use as a storage warehouse. The company traces its origins to 1755, when William Post began a small business at 43 Water Street. The firm expanded over the course of the following century, with its more notable clients including the Pennsylvania and New York Central Railroads, and the firm established a substantial manufacturing complex in the Far West Village. Rising real estate values in that neighborhood during the 1910s caused the firm to relocate, and it apparently chose this building in West Chelsea to serve as its distribution center.

The building was subsequently occupied by a series of commercial and industrial tenants. Photographs of the building ca. 1939 indicate that the structure was used as a warehouse by the West Virginia Pulp & Paper Company, while a classified advertisement placed in the *New York Times* in 1947 notes that the Mutual Paper Co., Inc. was located at 510 West 27th Street. The Olympic Corrugated Container Corporation purchased the property in 1963, and it appears the firm occupied the building into the 1990s.

References:

Classified Advertisement, New York Times (February 16, 1947) F14.

New York County, Office of the Register, Deed Liber 476, p. 535; Liber 483, p. 634; Liber 484, p. 334; Liber 147, p. 329; Liber 156, p. 488; Liber 206, p. 358.

"The Real Estate Field," New York Times 29 August 1916, 17.

536 West 27th Street (536-542 West 27th Street), *see Figure 20* Borough of Manhattan Tax Map Block 698, Lot 57

Date of Construction: 1906-07 (NB 14-06)

Architect: Charles H. Caldwell Original Owner: Jno. Williams, Inc.

Type: Factory

Style: American Round Arch

Stories: 6

Structure/Material: Brick

Features: Six-story structure with two visible elevations; North elevation: Six bays wide (the left-three bays are identical to 536 West 27th Street, while the right-three bays are slightly different, giving the whole complex an "ABA" patterned composition); first and third-through-sixth bay contain pairs of windows; second bay contains sets of three windows; openings of first through second and third through fifth floors recessed within shallow panels and topped with segmental-arched voussoirs of alternating brick and limestone; wide segmental-arched window openings on second floor; wide rectangular window openings on floors three through five, third floor windows have stone sills and fourth and fifth floors have metal sills; small round-arched windows on sixth floor with radiating brick lintels; blind round-arch openings with radiating brick lintels on six floor above piers separating bays; limestone belt course above second floor; South elevation: Red brick rear elevation partially visible from street; six bays of window openings; western-most bay recessed in light court contains two windows, all other bays contain sets of three windows each; windows are rectangular with plain brick lintels; hinges for fire shutters still evident; fire escape in front of eastern-most bay.

Alterations: First ground floor opening partially bricked in for pedestrian entrance; second ground floor opening partially bricked in to make opening shorter; third through six ground floor openings have new infill doors; marquee above first ground floor opening; awning above first, fifth, and sixth ground floor openings; second floor window in first bay now filled with exhaust louvre; roof deck visible from street; bulkhead added to roof above sixth bay; all windows replaced; cornice removed.

History: A row of four residential buildings, erected ca. 1852 after the land had been reclaimed from the Hudson River, once stood on the property now occupied by the factory building at 536 West 27th Street. The site was acquired in 1905 by Jno. Williams, Inc., a manufacturer of ornamental bronze and iron that had occupied a nearby foundry building since 1888 (see entry for 549 West 26th Street for a history of the John Williams Bronze and Iron Works). 536 West 27th Street was the last of three six-story factory buildings erected for the Williams firm in the early years of the twentieth century. All three were designed in a similar manner by architect Charles H.

Caldwell—the rhythm of narrow and wide bays of number 536 in fact mirror and extend those of number 544, so that the complex along West 27th Street appears to be a single monolithic structure. Jno. Williams, Inc. sold the building in 1948, and the firm was officially dissolved in 1956.

References:

New York County, Office of the Register, Deed Liber 610, p. 68; Liber 613, p. 88; Liber 818, p. 210; Liber 112, p. 490; Liber 114, p. 453.

"Obituary," New York Times (January 6, 1914) 13.

Michael Edward Shapiro. *Bronze Casting and American Sculpture, 1850-1900* (Newark: University of Delaware Press, ca. 1985) 88-89, 101-02, 175-76, 188.

William Donald Mitchell, ed., "American Art in Bronze" (New York: Jno. Williams, Inc., 1902-1912). William Donald Mitchell, "The Art of the Bronze Founder, Especially in its Relation to the Casting of Bronze Statuary and Other Sculptural Work" (New York: Press of Gibbs & Van Vleck, Inc., 1916).

544 West 27th Street (544-548 West 27th Street), *see Figure 21* Borough of Manhattan Tax Map Block 698, Lot 61

Date of Construction: 1901-02 (NB 1684-01)

Architect: Charles H. Caldwell Original Owner: John Williams

Type: Factory

Style: American Round Arch

Stories: 6

Structure/Material: Brick

Features: Six-story structure with three visible elevations; North elevation: Three bays wide with attached elevator structure to right of main building (the structure at 536 West 27th Street extended and mirrored the architecture of this building, and the whole complex has an "ABA" patterned composition); central bay contains set of three windows; flanking bays contain pairs of windows; openings of first through second and third through fifth floors recessed within shallow panels and topped with segmental-arched voussoirs of alternating brick and limestone; wide segmental-arched window openings on second floor; wide rectangular window openings on floors three through five, third floor window openings have stone sills; small round-arched window openings with radiating brick lintels on sixth floor; blind round-arch openings with radiating brick lintels on six floor above piers separating bays; limestone belt course above second floor; elevator structure has pairs of round-arched window openings with radiating brick lintels and limestone sills on floors three through six, second floor has a pair of half segmentalarched window openings set within a recessed panel topped with a segmental-arched voussoir, limestone belt course above second floor windows; both main section and elevator structure have a pressed copper cornice with double brackets; East elevation: Red brick side elevation partially visible from street; nine bays of rectangular window openings with flat stone sills; hinges for fire shutters still evident; fire escape in front of southern-most bay; South elevation: Red brick rear elevation partially visible from street; three bays of window openings; first bay contains pairs of windows, other bays contain sets of three windows; windows are rectangular with plain brick lintels and flat stone sills; hinges for fire shutters still evident; chimney at southwest corner of building.

Alterations: Left ground floor entrance bricked in; right (third) ground floor entrance converted to pedestrian entrance, new glazing in opening; left ground floor entrance in elevator structure bricked in; metal marquees installed above central and right ground floor entrance of main building and above right ground floor entrance of elevator structure; most windows replaced.

History: The six-story factory building at 544 West 27th Street was erected in 1901-02 for the John Williams Bronze and Iron Works. It replaced an earlier foundry structure that had stood on the site since the 1850s, when the Colwell Iron Works established one of the areas oldest, and eventually largest, metal businesses. Williams acquired the property in 1888 following a court-ordered auction of the Colwell family's West Chelsea holdings. The Williams firm grew rapidly in the following decade and initiated an expansion campaign in the first years of the twentieth century. From 1900-1907, the company erected three new buildings, of which 544 West 27th Street was the second, all designed by architect Charles H. Caldwell (see entry for 549 West 26th Street for a history of the John Williams Bronze and Iron Works).

While the building was erected specifically for John Williams' company and housed some of its foundry operations in its lower floors, the upper stories were leased from the beginning to other manufacturers such as the Meyer Sniffer Company, a major fabricator of plumbing equipment in the early decades of the twentieth century.

Jno. Williams, Inc. sold the building in 1948, and the firm was officially dissolved in 1956. The elevator structure attached to the right of the building and erected under the same building permit was actually on the plot of land sold by the Williams firm to the Otis Elevator Company in 1928, and ownership of the two sections of the building was not reunified until several decades later.

References:

New York County, Office of the Register, Deed Liber 572, p. 494; Liber 2171, p. 55; Liber 2189, p. 71; Liber 109, p. 428.; Liber 3667, p. 299.

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550-556 West 27th Street, see Figure 22

Borough of Manhattan Tax Map Block 698, Lot 1 (In Part)

Date of Construction: N/A

Architect: N/A

Original Owner: N/A
Type: Empty Lot

Style: N/A Stories: N/A

Structure/Material: N/A

History: The land on the western side of the block bounded by West 26th and West 27th Streets, including the lots at 550-556 West 27th Street, was reclaimed from the Hudson River ca. 1850. The property was purchased by Lewis Colwell and Jeremiah Colwell in 1851, and an iron foundry was soon erected on the site. The Colwell Iron Works continued to occupy the property until 1888, when the John Williams Bronze and Iron Works acquired the land and the foundry building following a court-mandated auction of the Colwell family's West Chelsea holdings. The Otis Elevator Company purchased the site in 1928 and it is likely that the old foundry building was torn down at that time.

WEST 27TH STREET, NOS. 601-651 (NORTH SIDE, BETWEEN ELEVENTH & TWELFTH AVENUES)

601-651 West 27th Street

See: 261 Eleventh Avenue

WEST 27TH STREET, NOS. 600-650 (SOUTH SIDE, BETWEEN ELEVENTH & TWELFTH AVENUES)

600-650 West 27th Street

See: 601 West 26th Street

WEST 28TH STREET, NOS. 548-560 (SOUTH SIDE, BETWEEN TENTH & ELEVENTH AVENUES)

548 West 28th Street (547-553 West 27th Street; 548-552 West 28th Street), *see Figure 23* Borough of Manhattan Tax Map Block 699, Lot 5

Date of Construction: 1899-1900 (NB 1263-99)

Architect: William Higginson

Original Owner: Augustus Meyers (Berlin Jones Envelope Company, lessee)

Type: Factory

Style: American Round Arch

Stories: 6

Structure/Material: Brick

Features: Six-story structure with four visible elevations; <u>Exterior elevations</u> (north and south): five bays wide along West 27th Street, four bays wide along West 28th Street; bays separated by vertical brick piers; windows of second through fifth floors recessed in shallow panels with segmental-arched, radiating brick top course; on second through fourth floors, each bay contains

large rectangular window openings with projecting stone sills and metal lintels, fitted with sets of three double-hung, 3x3 windows; on sixth floor, each bay contains segmental-arched window openings with projecting stone sills, fitted with sets of three double-hung, 3x3 windows; sets of three small rectangular window openings in each bay on sixth floor; large vehicular entrances in ground floor of each bay with metal lintels; three stone belt courses between vehicular entrances; corbelled brick and stone belt course above first floor, stone doubles as sills for second floor windows; stone bands on piers between windows of second and fifth floors; corbelled brick and stone belt course above fifth floor, stone doubles as sills for sixth floor windows; stone belt course above sixth floor windows doubles as lintels; corbelled brick cornice; ornamental tie rods on piers between third floor window; stone watertable; historic fire escapes in front of central bay of West 27th Street elevation and in front of second bay of West 28th Street elevation; East elevation: Red brick side elevation partially visible from street; recessed light court in middle third of building contains eight bays of segmental-arched window openings with radiating brick lintels and projecting stone sills; stepped brick parapet above light court; three bulkheads visible above roofline; West elevation: Plain red brick side elevation partially visible from street.

Alterations: Third through fifth loading bays on West 27th Street converted to storefronts, new doors in pedestrian entrance in second bay; first loading bay on West 28th Street converted to storefront, second and fourth covered with roll-down metal security grate, third bricked in to create pedestrian entrance; some signage attached to facade.

History: The site was originally occupied by the NY Steam Stone Dressing Co. after the land had been reclaimed from the Hudson River ca. 1850. It is unclear if this operation was associated with the adjacent lumber yard of George Colyer and Thomas Duggard's similarly-named NY Steam Saw Mills, or if it was run by an independent proprietor. In 1863, half of the site was sold to Henry Ferris, who owned a nearby brewery. The other half was sold to Joseph and Lewis Colwell whose Colwell Iron Works was one of the major industries in West Chelsea during the second half of the nineteenth century. The Colwells eventually purchased the remainder of the site from Ferris in 1868. An iron works stood on the site until 1888, when the Colwell Iron Works' West Chelsea property was sold at auction following a court decision between Sarah J. Willett and Augusts W. Colwell.

The structure that now stands at 548 West 28th Street was erected in 1899-1900 for Augustus Meyers, a speculative developer who had purchased the site in 1889 following the partition sale of the Colwell Iron Works. It was designed by prolific industrial architect William Higginson, whose notable commissions include a number of imposing structures erected for Robert Gair (within the DUMBO Historic District) as well as the annex erected for the Wolff Bindery at 518 West 26th Street (see entry). Even before construction had begun on the building, Meyers had leased the property to the Berlin Jones Envelope Company.

The Berlin Jones Envelope Company traces it origins to 1843, when a Mr. Pierson (first name unknown) became the first recorded manufacturer of envelopes in New York City. Pierson abandoned the trade soon thereafter and sold the business to William Dangerfield, who in turn was forced to sell the operation to his landlord, Jacob C. Berlin, in 1847. Berlin himself contemplated giving up on the industry, but reconsidered as business began to expand in the wake of new federal legislation that directed the United States Post Office to charge by weight

rather than by the number of pages being sent (creating substantial demand for envelopes as postal devices). Berlin's operation was particularly well positioned to capitalize on the new market and the company grew rapidly during the second half of the nineteenth century. In 1847 the firm moved to larger quarters at 180 Fulton Street; it moved again in 1853 to 67 Pine Street, then in 1854 to 120 William Street, and finally in 1856 it erected its own large, six-story factory at 134 William Street. The firm soon became one of the country's largest producers of envelopes and related paper products, manufacturing 600,000 per day by 1860. Berlin & Jones remained at 134 Williams Street until 1899. In October of that year, the company took out a lease on Meyers' new factory building at 548 West 28th Street. The timing proved to be fortuitous, as the company's existing facilities on William Street were gutted by fire just two months later.

The Berlin Jones Envelope Company occupied the building into the 1930s, when it moved across the street to the recently opened Starrett-Lehigh Building (see entry for 601 West 26th Street). The company later relocated to East Rutherford, New Jersey, in 1962. The structure at 548 West 28th Street was subsequently leased by a series of manufacturers. In 1937, the A.H. Stiehl Furniture Company moved to the building. A decade later, in 1949, the Spear Box Company, which already occupied several adjacent buildings, took out a lease on the property. At this time the structure was connected internally with the former Terminal Warehouse Company Annex at 262 Eleventh Avenue (see entry). The Spear Box Company occupied the structure into the 1980s. The building is presently occupied, like many in the West Chelsea neighborhood, by artrelated businesses, including galleries.

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554 West 28th Street, see Figure 24

Borough of Manhattan Tax Map Block 699, Lot 63

Date of Construction: 1885 (969-85)

Architect: John Brandt

Original Owner: Latimer E. Jones

Type: Stable Style: Vernacular

Stories: 2

Structure/Material: Brick

Features: Two-story, three bay wide structure; ground floor has two pedestrian entrances flanking a larger vehicular entrance; second floor has three rectangular window openings; sandstone belt course doubles as lintels for pedestrian entrances; sawtooth brick belt course

topped with sandstone belt course above first floor doubles as a continuous sill for the second floor windows; sandstone belt course between second floor windows; corbelled brick belt course above second floor; stone coping at roofline; narrow brick piers run vertically along corners of building.

Alterations: Right pedestrian entrance cut through brick facade; all ground floor entrances covered with roll-down metal security gates; windows replaced; metal fence encloses rooftop terrace.

History: The property now known as 554 West 28th Street was originally occupied in the 1850s and 60s by the NY Steam Stone Dressing Co. The Colwell family, whose Colwell Iron Works was a major presence in West Chelsea during the second half of the nineteenth century, purchased the lot and several others on the block in 1863. In 1885, the property was leased to Latimer E. Jones, who had recently married Blanche Colwell (daughter of the head of the Colwell Iron Works). Jones had began his career as a lumber dealer with his father in the Brooklyn-based firm of Jones & Son, and within a few months of his marriage he had established the New York Lumber Auction Company in a large building on West 27th Street. Soon thereafter he filed a building permit for the stable at 554 West 28th Street. According to an article in the *New York Times* from 1885, the New York Lumber Auction Company was the first such operations in the city. Wholesale lumber auctions were a common practice in England and other parts of Europe, but New York City dealers resisted the business model, worrying that it would cut into their profits. Jones' own wholesale business lasted only a short time, but it did manage to stage several successful auctions of large lots of lumber imported from the western and southern United States.

Jones parlayed his legitimate business accomplishments into a lucrative criminal career. His largest scheme was carried out in 1886, when he induced former senator Benjamin L. Ludington to contribute approximately \$200,000 for a lumber transaction that proved to be fraudulent. Jones was brought up on forgery charges the following year and he eventually fled the country to escape prosecution (a decade later he was extradited back to the United States and was convicted for his crimes—causing the *New York Times* to call him "one of New York's boldest forgers and swindlers").

Shortly after the crimes of Latimer E. Jones were publically revealed, the Colwell family's West Chelsea property, including the stable building at 554 West 28th Street, were sold at auction following a court decision in the case of Sarah J. Willett versus Augustus N. Colwell. While it is unclear if this legal proceeding had anything to do with Jones or his swindling of Benjamin L. Ludington, deeds filed with the New York City Register demonstrate that the stable was purchased by Ludington at the auction (the deed was executed under the name of his wife, Marietta) and that the building remained in the family for several decades. In 1916, the stable was sold to the Terminal Warehouse Company, whose new annex had recently been erected on the property immediately to the west (see building entry for 270 Eleventh Avenue). After the Terminal Warehouse Company divested itself of its West Chelsea property in the late 1940s, the building and its immediate neighbors were occupied by the Spear Box Company. Like many structures in the area, the former stable of Latimer E. Jones has recently been turned to new use; since 2000 it has been home to a night club.

References:

- "Forgery by Wholesale," New York Times (November 12, 1887) 5.
- "Latimer E. Jones Caught," New York Times (January 29, 1897) 3.
- "Lumber at Auction," New York Times (September 2, 1885) 8.

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556-560 West 28th Street

See: 270 Eleventh Avenue

WEST 28TH STREET, NOS. 600-654 (SOUTH SIDE, BETWEEN ELEVENTH & TWELFTH AVENUES)

600-654 West 28th Street

See: 261 Eleventh Avenue

TENTH AVENUE, NOS. 259-273 (WEST SIDE, BETWEEN WEST 25TH & WEST 26TH STREETS)

259 Tenth Avenue (259-273 Tenth Avenue; 501-505 West 25th Street; 500-502 West 26th Street), *see Figure 25*

Borough of Manhattan Tax Map Block 697, Lot 31

Date of Construction: 1927-28 (NB 63-23)

Architect: Cass Gilbert

Original Owner: R.C. Williams Company

Type: Warehouse

Style: Industrial Modern

Stories: 10

Structure/Material: Reinforced concrete

Features: Ten story concrete warehouse building with four visible elevations; concrete finish slightly rusticated from original formwork; tower-like elements at each corner feature a column of narrow rectangular window openings and raised concrete details at first story (typically feature two stacked rectangular windows at first story; east towers of north and south elevation feature doorways); central bays feature three at north and south elevation, eight at east and west elevation; central bays typically feature recessed rectangular loading docks spanned by an overhanging concrete canopy at first story (small rectangular doors with transoms present at north and south elevations; left-most bay features two stacked triple windows separated by continuous concrete posts at first story of east elevation; fourth bay from left of east elevation contains copper door surrounds with three doors featuring large rectangular plate glass windows

and multi-paned transoms; historic bronze light fixtures on flanking piers; lowest windows typically feature ornamental wrought-iron window grilles); central bays feature recessed triple windows separated by continuous concrete posts above first story; all windows feature historic multi-paned industrial steel windows with pivot sash above first story; projecting concrete water spouts above windows of tenth story; small metal ventilators above central windows of each bay; west elevation partially visible from street; one-story penthouse structure housing water tank at center of roof partially visible from street.

Alterations: Lighting beneath canopy at east facade; lower window bricked-in at right tower of east facade; some windows replaced at first story; rolling steel doors at first story loading docks.

History: The ten-story, concrete building at 259 Tenth Avenue, also referred to as the R.C. Williams Building, was built as headquarters for a wholesale grocery company with branches around the world. R.C. Williams & Co. was first established in 1809 as a small grocery store by Richard S. (R.S.) Williams and his partner John Mott. Located at 167 Fly Market, at what is now Maiden Lane and South Street, the small grocery operation grew quickly into a major corporation. By 1811, the firm was importing a diverse range of products including cane sugar, rum, molasses, coffee, salt, pepper, cinnamon, rice, bananas, oranges, wines, ales, brandies, liqueurs, dates, raisins, and even French bonbons. In 1814, the company relocated to a site closer to the new Fulton Ferry, and in 1820, following the death of Mott, the business was renamed the R.S. Williams Company after its surviving founder. In 1881, the operation, which had already undergone numerous name changes in its previous seven decades, was renamed, for the last time, R.C. Williams & Co. after Roswell C. (R.C.) Williams, cousin to R.S. Williams. In 1888, the company relocated again to new quarters at 56-60 Hudson Street in the Washington Market area (now TriBeCa), where it would remain for nearly 40 years.

By 1926, around the time of the company's 115th anniversary, having outgrown its Hudson Street location, R.C. Williams & Co. acquired the entire block front on the west side of Tenth Avenue between West 25th and West 26th Streets. Integral to the selection of the site was the proposed removal of the New York Central (NYC) Railroad's at-grade tracks along Tenth Avenue, and their replacement by an elevated and electrified freight line that would run immediately adjacent to the site (see entry for the High Line, 507-509 West 25th Street). Seven four-story brick tenement structures were demolished for construction of the new building, which was designed by renowned architect Cass Gilbert and which was completed in 1927. The building was officially occupied on February 27, 1928. On August 1, 1933, the very first carload of freight to utilize the High Line was consigned to R.C. Williams & Co.

From its new location in West Chelsea, R.C. Williams & Co. continued to ship goods up and down the Atlantic seaboard, throughout the south, and overseas. According to an article written about the building in *The Edison Monthly* in 1928, the export department of the company supplied mission posts in Africa and Asia, shipped canned corn on the cob and shrimp to Argentina, supplied engineering parties in the "hearts of Asia and Africa" and "the jungles of South and Central America," shipped sauerkraut to South Africa, powdered sugar to Peru, canned oysters to the West Indies and maple sugar to Germany. Within the United States, the firm supplied numerous hotels, restaurants and institutions, and was most well-known as distributors of the "Royal Scarlet" brand food products. Although the building was constructed

primarily as a warehouse, the company also packed coffee from Brazil and Guatemala at the plant—for which "the most modern machinery for mixing, roasting, grinding, and packing" was installed. Three refrigeration chambers—one for cheese, one for dried fruit and one for caviar—were also located within the building. During World War II, R.C. Williams & Co. joined in the efforts to feed American troops overseas, writing a letter to the Department of Housing and Buildings in 1940 pressing for approval of plans for a new loading platform:

We have an unprecedented amount of shipping to do in the immediate future in view of our contracts with the Government for supplying foodstuffs to the various camps, bases, depots and institutions throughout the country and the proposed additional facilities are needed immediately.

Selection of Cass Gilbert as architect for the grocery warehouse, a nationally renowned architect already famous for major New York commissions such as the U.S. Customs House and the Woolworth Building (both designated New York City Individual Landmarks), can be seen as an indication of the company's wealth and prominence at the time. Gilbert considered the utilization of concrete construction as functional in industrial commissions. The Brooklyn Army Terminal (1918-19), for example, was one of Gilbert's most prominent works in concrete, one of the world's first poured-concrete industrial complexes, and also one of the world's largest. Construction of the Brooklyn Army Terminal utilized a recently patented method of construction developed by Claude Allen Porter (C.A.P.) Turner. Turner's system, as it came to be known, was patented in 1908, and used concrete slabs supported by specially reinforced concrete columns, called mushroom columns due to the shape of the flared column capitals. In the mushroom column system, floor loads are absorbed by the concrete floor slabs themselves then transferred via the flared capitals of the mushroom columns. By eliminating the need for deep overhead beams, the system allowed for more window area, thereby enabling more light to enter enclosed areas of a factory. The system also allowed for easier placement of shafting and sprinkler systems.

Gilbert first used the Turner system in 1914-15 for the Austin-Nichols warehouse in Brooklyn, also constructed for a grocery wholesaler. The facade of the main building at Austin-Nichols was emphasized by projecting tower-like bays with narrow slit windows, similar to that of the R.C. Williams Building. Writing in 1923 about concrete industrial architecture for *Architectural Forum*, Gilbert clearly articulated his reasoning for leaving the exterior of such buildings largely unadorned:

It may be taken as an axiom in concrete construction that the simpler the form the better the design. The nature of the material dictates the form of all its parts, and assuming that the purpose of the structure is kept in mind, as it should be, this purpose is necessarily expressed in very simple terms... Why attempt to adorn this simplicity with trinkets and gewgaws and patterns and raw bits of colored tiles or panels of brick, or fictitious corbels, cornices, capitals or other details culled from traditional architecture constructed of other materials? In short, the logic forbids such intrusions.

In 1928, a review of the R.C. Williams Building that appeared in *The Edison Monthly* said:

Simplicity is the keynote of the building, and yet its solidity and symmetry of line bear witness to the skill of the architect, Mr. Cass Gilbert. No frills would be appropriate here, for the business of dispensing coffee and sugar, flour, cheese and pineapples is an intensely practical one. Everything for use, is the principle embodied in this building...

Gilbert planned the interior of the R.C. Williams Building for maximum efficiency and the seamless flow of goods—from the adjoining High Line, through the warehouse, and onto delivery trucks. The interior plan of the building allowed for the greatest amount of light and, according to a booster released on the occasion of the company's 125th anniversary in 1936, "the highest degree of efficiency in operation." All elevators, staircases, and fire towers were centered in the middle of the building so that all aisles and floors would be clear for the movement of goods over the shortest possible route to the freight elevators. The first story contained loading platforms, the third story featured rail sidings for connection to the High Line, and loading berths on the three major elevations of the building enabled trucks to back directly onto street-level loading platforms. Distribution of goods throughout the New York City metropolitan area was covered by a system of 45 trucks.

R.C. Williams & Co. continued to operate out of the building until 1953, at which point it relocated to a new warehouse, office, and distribution center at Bruckner Boulevard and Leggett Avenue in the Bronx, on a site adjoining the yards of the New York, New Haven, and Hartford Railroad. In 1957, another local enterprise, the H. Wolff Book Manufacturing Co., which had been utilizing the building's private rail siding for access to the High Line, took ownership of the building. In 1960, records indicate the building as owned by Amperite Realty and used for "light manufacturing." In 1993, the building was leased by Capital Cities/ABC for use as prop and scenery storage, and continues in this use today.

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ELEVENTH AVENUE, NOS. 210-218 (EAST SIDE, BETWEEN WEST 24TH & WEST 25TH STREETS)

210 Eleventh Avenue (210-218 Eleventh Avenue; 564-568 West 25th Street), *see Figure 26* Borough of Manhattan Tax Map Block 696, Lot 65

Date of construction: 1910-11 (NB 658-10)

Architect(s): Shire & Kaufman

Original Owner(s): Martin and Arthur Zinn

Type: Factory

Style: Gothic Revival

Stories: 11

Structure/material: Brick, stone, and terra cotta; steel frame; reinforced concrete floors

Features: Eleven-story factory building with four visible elevations; North and west elevations: Five bays each, projecting outer bays forming towers; tri-partite division into three-story base, seven-story shaft and one-story capital; two-story segmental archways at base form window openings and entranceways of first and second stories (window openings rest on canted granite ledges; all arched openings feature molded segmental arches, terra-cotta surrounds and voussoirs, decorative metal spandrels and triple windows with curved transoms at second story; decorative ironwork at west elevation entrance includes fluted columns with foliate and mask details at capitals and Gothic details and lettering above doorway; granite stairs with iron handrails at west elevation entrance); terra-cotta banding between segmental-arched openings; cornice above second story; triple windows with brick posts at third story; decorative brickwork between third story fenestration including raised brick panels and geometric patterning; cornice above third story; seven-story segmental archways at shaft contain fenestration of fourth through tenth stories (fenestration comprised of triple windows and decorative metal spandrels; some historic 3x3 metal windows with fixed and pivot sash remain); decorative brickwork between seven-story arches including elongated raised brick panels on piers; terra-cotta gargoyles at tenth story form base of terra-cotta pinnacles; segmental arched triple windows with brick posts at central bays of eleventh story; segmental arches at outer bays of eleventh story feature triple-windows with continuous curved transoms, molded terra-cotta arches, and terra-cotta surrounds and voussoirs; terra-cotta tile coping at roofline; free-standing penthouse at corner of north and west elevations is a 1914 addition by Edward Lehlbach (one narrow, rectangular window opening with terra-cotta surrounds and voussoirs at each elevation; terra-cotta pinnacles at roofline); East elevation: Redbrick facade partially visible from street; ten unevenly spaced bays containing mostly segmentalarched windows with rectangular sills and no applied ornament (recessed left-most bays feature narrower windows); some historic 3x3 and 2x2 sash remain; buff brick return from north elevation; buff brick quoining at recessed area and at connection to south elevation; irregular roofline; remnants of painted advertisement for "Royal Paper Corporation"; South elevation: Red brick facade partially visible from street; eleven unevenly spaced bays containing mostly

segmental-arched windows with rectangular sills and no applied ornament (staggered heights at five left-most bays; six right-most bays recessed); fire escape at right-most bay; some historic 3x3 and 2x2 sash remain; buff brick return from west elevation; buff brick quoining at recessed area and at connection to east elevation; red brick painted white at tenth story of non-recessed area; free-standing parapet at roofline; remnants of painted advertisement.

Alterations: Signage; windows and doors throughout (some historic windows and doors remain, see above); awning and staircase at north elevation; entrance ramp at north elevation; security cameras; red brick painted white at seventh through eleventh story of east elevation.

History: The building at 210 Eleventh Avenue, also known as the Zinn Building, was constructed in 1910-11 by Simon Zinn and his two sons, Martin and Arthur, "manufacturers of fancy metal goods" according to the New York Times. The Zinn brothers would gain prominence in 1919 as founders of the Gem Safety Razor Corporation. The company, which was started by the brothers for only \$250,000, was purchased by the American Safety Razor Corporation for \$4 million only six months later. Arthur Zinn would go on to become a noted philanthropist, erecting the Zinn Home for convalescent children with heart disease in White Plains, New York, in 1920 as a memorial to his mother, Mary Zinn. A prominent member and trustee of Temple Emanu-El on 5th Avenue and East 65th Street in Manhattan, Arthur would give up his business activities entirely in 1924 to devote himself to philanthropic and religious interests.

Previous to construction of the Zinn Building, and preceding their later success, the Zinn family operated its metal goods manufacturing business, Arthur Zinn & Co., out of a downtown location. Like many industrial enterprises of the time, they were interested in relocating due to soaring real estate prices. The family already owned the plot of land on which the building was to be erected and hoped to rent space in the completed building to related industries. Prior to the erection of the Zinn Building, the site was occupied by a succession of one-story structures, most likely storage or factory buildings, that included a brick building built for John W. Holgate in 1878 and a stone and brick building constructed for McArdle & Reilly in 1900. At the time the 11-story Zinn Building was erected, the conveniently located corner site was surrounded by buildings of a low scale, including a lumber yard directly to the south. In this way, the ornate manufacturing tower is representative of the later wave of development in West Chelsea that followed improvements to waterfront and rail facilities in the area.

Like many of the neighborhood's later buildings, reinforced concrete was incorporated into the structure of the primarily steel frame Zinn Building by way of its foundation walls and floor slabs. The slabs were constructed using the A.S. & W Company's Triangular Mesh System "H". The building, which employs a series of pneumatic caissons buried 75 feet below street level to sustain its heavy manufacturing loads was noted at the time of its construction for being one of the first buildings to employ this system for its foundation. The building was also considered to be "of the highest type of fireproof construction, every device available having been provided for the safety of the occupants and the prevention of fire." Some of the fireproof "devices" included reinforced concrete floor slabs, elevators and stairs encased in brick towers, terra-cotta wall partitions, windows and skylights protected by hollow metal frames, and fire appliances such as sprinklers, standpipes and linen hoses located throughout the building. A fire that ravaged the location in 1910 was written about extensively in the press, and was surely the impetus for

constructing the building in a manner allowing it the minimum insurance rating possible in New York at the time. Concrete construction would later surpass all other methods for fire-proofing in industrial buildings.

Though constructed primarily as a manufacturing structure, advertisements in the New York Times for the Zinn Building in the 1920s touted it as "the best factory building in the city, also suitable for other than manufacturing purposes [sic]." The building's soaring arched bays filled with large expanses of windows, corner siting, and height advantage over neighboring structures allowed significant natural lighting from all directions, and would certainly have made a wide variety of uses possible. The ornate exterior of the building, unusual for factory buildings of the time, may be a result of the owners' intention, from the outset, to rent out space in the building. The Zinn Building took more than two years to fully let, but by 1914, in addition to the manufacture of metal novelties, the Zinn Building housed lithography companies, such as the A.N. Gitterman Corporation, and other printing-related businesses. Such occupancy was fully in keeping with the neighborhood's character during this period, which had begun to be referred to as a new center for the printing trade—one that began at Penn Station to the east and stretched westward to the river. The centralization of printing trades in West Chelsea continued for several decades, and is apparent in the sale of the building in 1930 to the 210 Eleventh Avenue Corporation, a group of printing and paper jobbers. By the 1950s, the building was under the ownership of the Royal Paper Corporation, who used the building for distribution and warehousing of printing paper, printing of gift wrapping paper, and manufacturing of envelopes. The building is presently occupied, like many in the West Chelsea neighborhood, by art-related businesses, including galleries.

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ELEVENTH AVENUE, NOS. 239-243 (WEST SIDE, BETWEEN WEST 25^{TH} & WEST 26^{TH} STREETS)

239 Eleventh Avenue (239-243 Eleventh Avenue; 600-626 West 26th Street), *see Figure 27* Borough of Manhattan Tax Map Block 670, Lot 70

Date of Construction: 1912-13 (NB 355-12)

Architect: Maurice Alvin Long, Architect; Francis Lee Stuart, Engineer

Original Owner: Baltimore and Ohio Railroad Company

Type: Warehouse and Freight Terminal

Style: Industrial Neo-Classical Stories: 8 stories plus mezzanine

Structure/Material: Reinforced concrete

Features: Eight-story, concrete factory building with four visible elevations; tri-partite division into a one-story base, six-story shaft and one-story capital; a mezzanine level located between first and second stories is not included in the overall floor count; twenty-one bays at north and south elevations, four bays at east and west elevations; south facade mostly obscured below seventh story; rectangular loading docks at each first story bay of north elevation, mixture of rectangular door and window openings along east and west elevations (recessed double-door with sidelights flanked by masks concealing water spouts at east elevation); two awnings suspended from north elevation beneath mezzanine level; chamfered-arch window openings at each bay of mezzanine story at north and east elevations typically contain multi-paned metal windows with fixed and pivot sash (remnants of similar windows at west elevation); simple concrete cornice below mezzanine windows at east elevation; rectangular wall opening at second story of west elevation; concrete band and cornice above second story at north, east and west elevations, partially visible at south elevation; bays of shaft feature single columns of small, rectangular window openings on all facades; windows of shaft typically feature multi-paned metal windows with fixed sash; shaft comprised of single rusticated bays alternating with multiple bays featuring a recessed, smooth concrete finish at second through sixth stories; recessed areas of bays terminate above seventh-story fenestration; rusticated bays feature raised concrete window surrounds; concrete cornices above sixth-story at rusticated bays serve as base of pilasters flanking seventh-story fenestration; stylized concrete keystones at seventh-story fenestration above rusticated bays; large, projecting concrete cornice above seventh story continuous on all four elevations incorporates capitals of seventh-story pilasters; eighth story windows feature scored concrete window surrounds and stylized concrete keystones engaged with concrete cornice above eighth story; four free-standing penthouses at roofline of north facade spanned by pedimented parapets, each with a single recessed circular details; similar parapets on east, west and south elevations, centered above recessed bays; free-standing penthouses along north elevation and single free-standing penthouse along south elevation feature concrete corbelling below roofline.

Alterations: Signage and hanging banner advertisement; rolling steel doors; security camera; first story painted gray below mezzanine level; altered first story loading docks and windows at east and west elevations; some window replacements including first through third bays of east elevation, eighth story, and penthouses; damage to cornice at corner of east and north elevations.

History: The large concrete freight terminal of the Baltimore & Ohio Railroad (B&O) located at 239 Eleventh Avenue was constructed in 1912-13 to the designs of Maurice Alvin Long, an engineer for the railroad. The B&O was chartered in Maryland in 1827 by a group of merchants with the goal of creating a passenger and freight rail route from Baltimore to Ohio. The opening of the Erie Canal in 1825 had an immediate impact on the growth of New York City's importance as a port and gateway to the west, and the merchants hoped that the rail link would help Baltimore compete. On February 28, 1827, an act formally sanctioning the incorporation of the B&O was passed by the state of Maryland. Ground was broken for the first rails of the railroad in 1828, and in 1930 the B&O's first line was opened—a passenger line of only 1-1/2 miles. It would be another 23 years before the B&O would reach its goal of Wheeling, West Virginia (then a part of the state of Virginia), with the entire 379-mile route officially opening in 1851. The railroad was expanded numerous times in the 1880s, adding lines from Baltimore to Philadelphia, to Cleveland and Akron, and also into West Virginia. New York City, however, remained the leading port in the United States in the late nineteenth and early twentieth centuries, and by the 1890s, the B&O had acquired track rights over the rails of the competing Philadelphia & Reading Railroads and the Central Railroad of New Jersey in order to bring freight into the port of New York.

Although New York City was considering the leading port in the United States at the beginning of the twentieth century, its infrastructure was characterized by widely scattered facilities and multiple oversight authorities. Moreover, the New York Central (NYC) Railroad had come to control nearly all rail crossings into Manhattan, forcing other railroads, particularly those approaching New York from the north and the west, to use the more economical "waterbelt" approach of using carfloats and lighterages to avoid paying fees for the use of the NYC's bridges. As a result, nearly all of the freight rail systems carrying approximately two-thirds of the port's total freight tonnage terminated across the Hudson River in New Jersey. Comprehensive regional plans for orderly development of New York Harbor and improvements to railroad freight facilities were ultimately abandoned for the construction of tunnels and bridges, as trucks emerged as a major force in the handling of freight. In the meantime, many railroad companies embarked themselves on a series of improvements by means of freight terminals and spur lines. The Bush Terminal Company was the first to operate a complex of coordinated facilities in Brooklyn in 1902 involving a railroad transfer line along a series of piers, warehouses, and factories. The B&O shipped much of its freight via yards at St. George on Staten Island, transporting approximately 50 floats a day in 1914, each carrying between 10 and 20 cars. The cars were then unloaded either in Brooklyn, at docks along the East River, or at the company's rail yards along the Hudson, located on the block bounded by West 25th and West 26th Streets, Eleventh and Twelfth Avenues. In 1912-13, the B&O constructed its own freight terminal and warehouse on the northeast corner of these rail yards which would assist the railroad in warehousing vast quantities of freight on its way into and out of Manhattan via the "waterbelt" approach.

At the time of its construction, the B&O Freight Terminal, which covers about a third of a typical New York City block, was touted as the largest reinforced concrete structure in Manhattan. The warehouse was constructed with 1.75 million cubic feet of space and four acres of floor area, and was designed to store the freight of 12 trains of 50 box cars each. A contract was placed with the Phoenix Construction Company of New York for the foundation work,

while the Turner Construction Company of New York was responsible for erecting the superstructure. Curtain walls were poured at the same time as the floors and columns, rather than after the skeleton was in place, as was more typical. At the time of its construction, the B&O Freight Terminal was espoused as the first to be built using flat slab construction with no interior beams, and, according *American Architect*, was the first of its kind approved by the Manhattan Department of Buildings. The flat slab construction technique utilizes reinforcing rods that radiate in all directions from the columns into the floors, thereby transmitting the load from the floor directly to the columns. This method of construction enabled the B&O to increase available storage space by increasing headroom. Six five-ton electric elevators were installed in the 10-story building, each operated by a 20-horsepower motor and serving each floor of the warehouse, including the basement. The exterior of the structure was left intentionally utilitarian in design with only a few stylized classical ornaments. The facade of the structure seemed to function primarily as an advertising surface for the warehouse.

The siting of the warehouse building on the northeast corner of the B&O's rail yards enabled the railroad to keep most of its yard open to permit the shifting of railcars to siding. While the rail yards were used for unloading goods directly to trucks for distribution, railcars could also come alongside and even into the building to be unloaded for warehousing. The building, constructed with double siding, was designed to take up to 15 cars at a time. Construction of the freight terminal and warehouse enabled the B&O to hold shipments, large and small, until they were ready to be picked up by the consignee. This ability stood in marked contrast to past operations, when a consignee who needed parcels held until a future date had to undertake the transport of his own goods to a public warehouse. The new freight terminal gave the B&O a further advantage by making it possible for consignees to picked up goods at the building rather than at a pier, as was required by other railroads. Although not exclusively a result of the terminal warehouse, it is nevertheless notable that between 1910-11 and 1920, freight revenue for the B&O reportedly grew by more than 300 percent.

By the 1920s, the B&O was still the oldest of the major trunk line railroads in the Northeast, but was far from the largest. In 1927, both the Pennsylvania and NYC Railroads had larger systems in terms of both mileage and revenue. In the late 1920s, the B&O employed less than half the number of workers of the NYC and only about 40 percent of the Pennsylvania. By 1930, the total passenger train schedules of the B&O were only about one-third of those operated by the Pennsylvania, and much less than half that of the NYC. Nevertheless, the B&O continued to expand its operations through the mid-1930s, at which time the railroad acquired the block directly to the south, between West 24th and West 25th Streets, with the intention of doubling the size of its rail yards. The period following World War II, however, was a time of general decline for all of the country's railroads, as highways began to surpass rail as the preferred method of freight transportation in the 1940s and 1950s. The B&O's two largest competitors in the region, the Pennsylvania and the NYC, merged around this time to become the Penn Central Railroad, and in 1963, the B&O was taken over by the Chesapeake & Ohio (C&O) Railroad.

In the early 1970s, the B&O Freight Terminal was permanently closed. In 1981, the yards and the warehouse, by this time under the control of the CSX Corporation, were sold to Coleman Burke LLP (Bulgroup Equities), a company that specializes in warehousing and storage. In 1986, the southern of the two blocks formerly owned by the B&O was sold to the United States Postal

Service, which built a new garage repair shop on the site in 1987. In the same year, the City of New York condemned the remaining areas of the northern block, specifically the L-shaped portion surrounding the B&O Freight Terminal building, for the erection of a Department of Sanitation vehicle repair shop that obscured most of the south elevation of the building, visible for more than 85 years. Today, B&O Freight Terminal continues to be operated as rental storage space.

References:

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"West Side Factories," The Edison Monthly 8 (September 1915) 129-131.

ELEVENTH AVENUE, NOS. 244-260 (EAST SIDE, BETWEEN WEST 26TH & WEST 27TH STREETS)

260 Eleventh Avenue (244-260 Eleventh Avenue; 557-559 West 26th Street; 558 West 27th Street), see Figure 28

Borough of Manhattan Tax Map Block 698, Lot 1 (In Part)

Date of Construction: 1911-12 (NB 662-11)

Architect: Clinton & Russell

Original Owner: Otis Elevator Company

Type: Office and Factory

Style: Italian Renaissance Revival

Stories: 7

Structure/Material: Brick; steel frame

Features: Seven-story structure with four visible elevations; Exterior elevations (north, west, east): Nine bays along Eleventh Avenue, six bays along West 26th Street, five bays along West 27th Street; bays separated by vertical brick piers; large, single window openings in ground floor of each bay, two rectangular windows with limestone sills in each bay on second through sixth floors, three rectangular windows in each bay on seventh floor; windows slightly recessed in brick enframement; decorative brick belt course between first and second floors, topped with

deeply projecting, denticulated limestone sills under second floor windows; limestone cartouches and denticulated belt course between six and seventh floor; limestone bands on brick piers between second and third floors and between fifth and sixth floors; sawtooth brick bands on vertical piers and under second floor windows; granite water table; main entrance in central bay of Eleventh Avenue facade; cast-iron enframements around pedestrian side entrances in fifth bay of West 26th Street facade and in first bay of West 27th Street facade; cast-iron enframement around vehicular entrance in sixth bay of West 26th Street facade and fifth bay on West 27th Street; all other ground floor entrances have cast-iron grillwork over windows; deeply projecting pressed copper cornice with dentils and brackets; Interior elevation (east): interior light court partially visible from street; regularly placed rectangular window openings with projecting stone sills; bulkhead visible at southeast corner of building.

Alterations: All windows replaced; cast-iron enframement around main entrance in central bay of Eleventh Avenue facade has been replaced with concrete and metal enframement; cast-iron enframement around vehicular entrances in second and third bay of West 27th Street facade have been removed; new pedestrian entrance has been cut into ground floor window opening in first bay of West 26th Street facade; bulkhead visible on roof above fifth bay of West 26th Street facade.

History: In 1852, George Colyer and Thomas Dugard purchased this parcel of land from James H. Woods. Colyer and Dugard owned a steam-powered saw mill in the vicinity, and historic maps from the period indicate that the site was used as a storage yard for wood, coal, and charcoal. The property was eventually acquired by Joseph and Lewis Colwell, whose Colwell Iron Works was a major industry in West Chelsea from the mid-1860s until 1888, when the company's property was partitioned during a court-ordered public auction. The lot on the northeast corner of Eleventh Avenue and West 26th Street was purchased by Henry Meinken, who commissioned architect James W. Cole to design a French flat for the site, while the rest of the site was acquired by real estate speculator Ambrose Kitchell Ely. It appears that Ely leased the former iron works buildings to a marble manufacturer, and that by 1899 that part of the site was occupied by an elevator works (it is unclear if this was the Otis Elevator Company). The Otis Elevator Company purchased the property in 1909 and soon thereafter erected a handsome new building to serve as its corporate headquarters, a regional sales office, and as a research and development facility.

The Otis Elevator Company traces its origins back to 1852, when Elisha Graves Otis designed his first mechanical freight hoist for his employer at a bedstead factory in Yonkers, New York. This contraption possessed an innovative safety feature that prevented the platform from falling in case the lifting rope was severed. Otis soon sold two of these revolutionary hoists to a furniture manufacturer in Manhattan, and the commercial potential of the device led in 1853 to the official establishment of the E.G. Otis Company. Otis' invention gained prominence in 1854 at the Exhibition of the Industry of All Nations, held in the newly-erected Crystal Palace on 42nd Street. In a famous display of showmanship, the inventor stood on the hoist's platform as it was raised above the heads of an expectant crowd. Otis then cut the rope holding the hoist aloft. The safety mechanisms promptly engaged, halting the platform's decent. The crowd was thrilled and Otis's safety elevator gained substantial popular attention.

In spite of this favorable reception, it took several years for Otis's business to take off. It was not until 1857 that the firm received its first commission for a passenger elevator—installed that same year in the E. V. Haughwout Building at the corner of Broadway and Broome Streets (a designated New York City Individual Landmark, also within the SoHo Cast Iron Historic District). Otis was apparently a poor business manager; when he passed away in 1861, his company was \$8,200 in debt. It was his sons, Charles and Norton Otis, who propelled the renamed Otis Brothers & Co. to national—and eventually international—prominence in the ensuing decades. Much of the firm's growth came through technical innovation. The hydraulic elevator was perfected in the 1870s and Otis soon became a major manufacturer. A decade later, in 1889, the company installed the first successful electric-powered elevator in the Demarest Building in New York City (demolished).

As the company expanded during the second half of the nineteenth century, it began to acquire rival firms throughout the country. Otis purchased William Hale's Hydraulic Elevator Company of Chicago in 1878, and in 1888 both Stoke & Parrish of Philadelphia and the C.R. Crane Company of Illinois were brought into the fold. By the 1890s, Otis controlled a significant percentage of the elevator businesses in the United States. Instead of merging these operations into a single corporation, however, Otis Brothers & Co. managed its elevator empire as a series of allied companies. The Elevator Trust, as the conglomeration came to be known, engaged in many of the monopolistic business practices that marked the Gilded Age, including artificial price fixing and collusion between allied companies. In 1893, Alonzo B. See, who owned a rival elevator company, went to court in order to challenge the Otis firm's use of patent claims to squeeze out the competition. While See won his court case, the ruling did little to inhibit Otis Brothers & Co.'s efforts to corner the elevator industry. The firm's corporate ambitions were in fact given legal sanction by the New Jersey legislature only a few years later, when a series of laws allowing for the creation of holding companies were enacted. In 1898, the Otis Elevator Company was formally incorporated in that state, merging Otis Brothers & Co. and 14 allied firms into a single entity. William Delaney Baldwin, who had previously served as treasurer for Otis Brothers and was the driving force behind the merger, was elected president.

During the following decade, the consolidated Otis Elevator Company continued its monopolistic business practices, but in an increasingly regulatory environment. The firm was sued again in 1906, this time under the Sherman Anti-Trust Act, although again the court's decision did little to quell the company's expansionary practices. If anything, the ruling, which did not impose any fines on the conglomerate nor order its dissolution, led to the further consolidation of the Otis Elevator Company. The firm's decision to erect a new headquarters building in West Chelsea directly followed this court action and was an integral component in the company's attempts to regularize its operations in accordance with its agreement in the antitrust case. From the wood-trimmed executive offices on the seventh floor of the new structure, William Baldwin was able to oversee the entire operation of his newly-consolidated corporation. Research and development functions were centralized on the building's lower stories—the first floor was dedicated to heavy manufacturing, with a complete machine shop and a forge, while the second floor was used for light manufacturing and as a stock room. The upper floors contained the Otis Elevator Company's corporate offices, including a well-appointed Board of Director's room, a dinning room for company employees, and even a law library. The building

also housed one of the company's regional sales offices, which had been established to regularize the distribution of the firm's once-complicated product line.

The Otis Elevator Company's new headquarters were inaugurated the same year that the firm was commissioned to outfit Frank Woolworth's new office tower, which upon its completion was the world's tallest building. Over the course of the twentieth century, Otis would provide elevators to a series of buildings vying for the height record—the Manhattan Company Building (1929-30, a designated New York City Individual Landmark), the Chrysler Building (1928-30, a designated New York City Individual Landmark), the Empire State Building (1930-31, a designated New York City Individual Landmark), the twin towers at the World Trade Center (1966-73), and the Sears Tower in Chicago (1970-73), were all equipped with Otis elevators while the company maintained its corporate offices in West Chelsea. A number of important innovations were also introduced by the Otis Elevator Company during these years. The modern escalator was perfected in the 1920s under Otis' chief engineer David L. Lindquist, who appears to have had an office on the seventh floor of 260 Eleventh Avenue. A decade later, in 1932, the company installed the first ever double-decker elevator cabs in the Cities Service Building at 70 Pine Street (while double-decker service was eventually eliminated from that building during the 1960s, the concept has been successfully implemented by Otis elsewhere, including the Citigroup Center in Midtown Manhattan (1974-77) and the Petronas Towers in Kuala Lumper, Malaysia (1992-98)). Improvements in elevator control were also introduced while Otis occupied its building at 260 Eleventh Avenue. Push-button operation, mechanized cab movement, and automatic doors were all relatively common by the 1930s; by the 1960s, the occupation of elevator operator had all but disappeared.

The Otis Elevator Company expanded their West Chelsea operations in 1928, acquiring an adjacent factory building at 549 West 26th Street, as well as a plot of land at 550-556 West 27th Street, both of which had previously been owned by the Jno. Williams, Inc. ornamental bronze and iron works. The firm retained its headquarters in the neighborhood until 1974, when it sold its West Chelsea property and moved to leased office space in East Midtown. Two years later, in 1976, the company was acquired by United Technologies Corporation. The building at 260 Eleventh Avenue was subsequently sold to a series of real estate investors and leased out as speculative office space. For a time during the late 1970s and early 1980s, the building also was home to the Les Mouches supper club.

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ELEVENTH AVENUE, NOS. 245-259 (WEST SIDE, BETWEEN WEST 26TH & WEST 27TH STREETS)

245-259 Eleventh Avenue

See: 601 West 26th Street

ELEVENTH AVENUE, NOS. 262-280 (EAST SIDE, BETWEEN WEST 27TH & WEST 28TH STREETS)

262 Eleventh Avenue (555-559 West 27th Street), *see Figure 29*Borough of Manhattan Tax Map Block 699, Lot 1 (In Part)

Date of Construction: 1890 (NB 1479-90)

Architect: John H. Friend

Original Owner: Thomas E. Crimmins

Type: Hotel (Boarding House)

Style: Vernacular

Stories: 4

Structure/Material: Brick

Features: Four-story structure with two visible elevations; four bays wide along Eleventh Avenue, eight bays deep along West 27th Street, with a two-story, four bay extension to the east on West 27th Street; crisp rectangular window openings with stone lintels and projecting sills; sill on second story continues as a belt course; original storefront openings along West 27th Street, with openings separated by pairs of brick pilasters supporting a stone belt course; historic castiron fire escape; pressed-metal cornice above easterly five bays of four-story section on West 27th Street.

Alterations: Two-story extension on West 27th Street added ca. 1915; Eleventh Avenue facade and first two bays of West 27th Street facade covered with cementious material, obscuring or removing historic fabric and all window openings; new storefront windows at ground level; ground floor openings in two-story section on West 27th Street altered to create smaller window openings and a pedestrian entrance; most second floor windows and one third floor window bricked in; all windows replaced; parapet built up along Eleventh Avenue facade to roofline of adjacent building.

History: The eight lots along the east side of Eleventh Avenue between West 27th and West 28th Streets were used as a lumber and building materials yard from the time of their reclamation from the Hudson River ca. 1850 until the last decade of the nineteenth century. The earliest such operation was run by George Colyer and Thomas Dugard, who also owned a steam-powered saw mill in the West Chelsea area. The property passed through several hands until Thomas E. and John D. Crimmins—whose Crimmins Contracting Company was well established in the New York City building industry—acquired the site in 1890 and set up a contactor's yard. Soon thereafter they erected a building on the southern edge of the property at 262 Eleventh Avenue. Days after the structure's completion, the Crimmins leased it to Gustave A. Heninger for a term of five years at \$3,600 per year (they continued to occupy the remainder of the property). It is

unclear how the building was originally used—the lease between Crimmins and Heninger contains no explicit stipulations—although alteration permits filed with the Department of Buildings in 1896 and 1897 indicate that for at least a time it served as a hotel (perhaps meaning boarding house for local workers).

The Pennsylvania Railroad Company acquired the property, including the building at 262 Eleventh Avenue and the contractor's yard to the north, at the end 1896, after Heninger's lease had expired. They improved the latter with a cab stable in 1897, but retained the former for use as offices from which the company could manage its fleet of 60 vehicles serving the passenger ferry terminal at West 23rd Street. The Terminal Warehouse Company in turn bought the property in 1914. They replaced the cab stable with a five-story storage building, but the structure at 262 Eleventh Avenue was again preserved. It is likely that the two-story extension at the rear of the building dates from this period (see building entry for 261 Eleventh Avenue for a history of the Terminal Warehouse Company).

The Terminal Warehouse Company sold its West Chelsea properties in the late 1940s. The building at 262 Eleventh Avenue, along with several of its immediate neighbors, was subsequently occupied by the Spear Box Company for a number of decades. In the 1980s, the building was owned for a time by the Dia Art Foundation and has since been converted into commercial space.

References:

"A Cheap Cab System," New York Times (May 6, 1897) 7.

New York County, Office of the Register, Deed Liber 548, p. 209; Liber 889, p. 339; Liber 1933, p. 464; Liber 2353, p. 244; Liber 16, p. 396; Liber 47, p. 318; Liber 192, p. 47.

270 Eleventh Avenue (264-280 Eleventh Avenue; 556-560 West 28th Street), *see Figure 30* Borough of Manhattan Tax Map Block 699, Lot 1 (In Part)

Date of Construction: 1915-16 (NB 15-15)

Architect: Otto M. Beck

Original Owner: New York Terminal Warehouse Company

Type: Warehouse Style: Vernacular

Stories: 5

Structure/Material: Brick

Features: Five-story structure with four visible elevations; Exterior elevations (north, west, south): eleven bays wide along Eleventh Avenue, seven bays deep along West 28th Street; crisp rectangular window openings with rusticated stone lintels and sills; rectangular brick panels and brick belt course between windows of fifth floor; stone belt courses above third and fourth floor windows on West 28th Street facade; corbelled brick cornice; brick parapet above fifth through tenth bays from left on Eleventh Avenue; brick bulkhead above easterly bay on West 28th Street; fire escape in front of central bay of West 28th Street facade; Interior elevation (east): Red-brick facade partially visible from street; regularly placed rectangular window openings with projecting, rusticated stone sills and double-hung, 6x6 windows.

Alterations: First through third floors of entire Eleventh Avenue facade and of westerly two bays along West 28th Street clad with modern metal paneling, obscuring or removing historic fabric and window openings; new storefront windows and pedestrian entrances at ground level along entire Eleventh Avenue facade and westerly two bays of West 28th Street facade; two new vehicular entrances and two pedestrian entrances cut through ground floor of West 28th Street facade; vent openings punched through on either side of left-most second floor window of West 28th Street facade; parapet extended two bays to the south above Eleventh Avenue facade; fourth floor windows bricked in on Eleventh Avenue Facade; all windows replaced in Eleventh Avenue facade and some replaced in West 28th Street facade.

History: The eight lots along the east side of Eleventh Avenue between West 27th and West 28th Streets were used as a lumber and building materials yard from the time of their reclamation from the Hudson River ca. 1850 until the last decade of the twentieth century. The earliest such operation was run by George Colyer and Thomas Dugard, who also owned a saw mill in the West Chelsea area. The property passed through several hands until Thomas E. and John D. Crimmins—whose Crimmins Contracting Company was well established in the New York City building industry—acquired the site in 1890 and set up a contactor's yard. Soon thereafter they erected a structure on the southern edge of the property at 262 Eleventh Avenue (see building entry). The remainder of the site continued to be used as a building materials yard until 1896, when the entire parcel, including the structure at 262 Eleventh Avenue, was sold to the Pennsylvania Railroad Company. The railroad company soon filed building permits to erect a three-story structure on the site's vacant land, while retaining the existing structure for use as an office. The new building was used as a cab stable for the Pennsylvania Railroad Company's fleet of 60 vehicles that served the passenger ferry terminal at West 23rd Street.

In 1914, the Terminal Warehouse Company bought the property and soon replaced the cab stable with a five-story warehouse building that served as an annex to the company's Central Stores complex located directly across Eleventh Avenue (the existing structure at 262 Eleventh Avenue was again retained for use as an office). Construction on the annex was initiated in 1915, at about the same time that permits for the expansion of Stores 21-26 of the main complex were allowed to lapse—it is possible that difficult soil conditions forced the Terminal Warehouse Company to abandon their initial plans of enlarging the Central Stores and that erecting an annex was the only practical way for the company to expand their operations. Otto M. Beck, architect of record for the expansion of the Central Stores, was also responsible for the design of 270 Eleventh Avenue (see building entry for 261 Eleventh Avenue for a history of the Terminal Warehouse Company).

The Terminal Warehouse Company sold its West Chelsea properties in the late 1940s. 270 Eleventh Avenue, along with several of its immediate neighbors, was subsequently occupied by the Spear Box Company for a number of decades. In the 1980s, the building was owned for a time by the Dia Art Foundation and has since been converted into commercial space.

References:

"A Cheap Cab System," New York Times (May 6, 1897) 7.

New York County, Office of the Register, Deed Liber 548, p. 209; Liber 889, p. 339; Liber 1933, p. 464; Liber 2353, p. 244; Liber 16, p. 396; Liber 47, p. 318; Liber 192, p. 47.

ELEVENTH AVENUE, NOS. 261-273 (WEST SIDE, BETWEEN WEST 27TH & WEST 28TH STREETS)

261 Eleventh Avenue (261-279 Eleventh Avenue; 220-238 Twelfth Avenue; 601-651 West 27th Street; 600-654 West 28th Street), *see Figure 31*Borough of Manhattan Tax Map Block 673, Lot 1

Date of Construction: 1890-91 (NB 1069-90); 1910-11 (NB 497-10); 1912-14 (NB 107-12, NB

171-12, NB 381-12)

Architect: George B. Mallory; Otto M. Beck

Original Owner: New York Terminal Warehouse Company

Type: Warehouse

Style: American Round Arch

Stories: 7 & 9

Structure/Material: Brick; slow-burning mill construction (7-story sections) and steel frame

construction (9-story sections)

Features: Seven- and nine-story warehouse structure occupying the entire block bounded by West 27th and 28th Street and by Eleventh and Twelfth Avenues; the building is separated into twenty five semi-independent compartments (numbered 1-23 odd along West 27th Street and 2-26 even along West 28th Street). Stores 1 & 2: Eleventh Avenue facade is composed of a main section flanked by two massive corner towers (modified after the late-nineteenth century to remove the corbelled brick parapet); the main section contains a very large round-arch opening in the middle of the ground floor, which originally allowed two rail tracks to enter the building; three vertical bays of round-arch windows with splayed brick lintels and rusticated stone sills puncture an otherwise solid brick face; window openings have a shallow rebate that originally allowed fire shutters to lay flat with the facade, mounting hinges for shutters still evident; corbelled brick belt courses extend between window openings on the second floor and under the window openings of the seventh; cast-iron supports for a flag pole are anchored to the left of the central windows on the sixth and seventh floors; the main section is topped with a corbelled brick cornice; the corner towers have double-height round-arch openings at ground level, with splayed brick lintels supported by terra-cotta imposts and decorated terra-cotta spandrel panels recessed between first and second floors; floors three through six in corner towers have staggered round-arch windows with splayed brick lintels and rusticated stone stills; all openings have a shallow rebate that originally allowed fire shutters to lay flat with the facade, mounting hinges for shutters still evident; corbelled brick belt course run under third and seventh floor window openings; corner towers terminate in a corbelled brick cornice; corner towers wrap around three bays onto side streets, continuing architectural pattern of main facade with double-height, roundarched openings at the ground floor and segmental-arched windows on the upper floors; side elevations have ornamental iron tie rods between windows at each floor level; sign applied to facade on fifth through seventh floors reads "TERMINAL WAREHOUSE FREE COLD BONDED STORAGE"; sign above massive round arch opening reads "TERMINAL STORES." Store 3: Nine stories tall, five bays wide; first bay ground floor has original round-arch opening in left-most bay, remaining ground floor bays contain rectangular loading docks; window openings of upper floors are all segmental-arched with splayed brick lintels and rusticated stone sills; window openings have a shallow rebate that originally allowed fire shutters to lay flat with

the facade, mounting hinges for shutters still evident; corbelled brick belt course between windows on seventh floor; corbelled brick cornice above ninth floor windows; right bay extends past cornice line with a crenellated bulkhead containing a blind segmental-arch opening; brick parapet extends above central bay, a sign attached to the parapet announces the store number; ornamental iron tie rods between windows at each floor level; supports for awning evident between windows on third floor. Stores 4-14, 21-22, 24: Seven stories tall; Stores 4-6 are five bays wide, Stores 7-14, 21-22, and 24 are three bays wide; bays on ground floor originally contained round-arched openings (most have since been altered to rectangular openings); window openings of upper floors are all segmental-arched with splayed brick lintels and rusticated stone sills; window openings have a shallow rebate that originally allowed fire shutters to lay flat with the facade, mounting hinges for shutters still evident; stores are separated by a projecting vertical brick pier; most stores have a corbelled brick cornice with a brick parapet extending above central bay containing a sign announcing the store number; the central stores on each side street (Store 11 on West 27th Street, Stores 12 and 14 on West 28th Street) project out slightly from the other stores and have taller brick parapets with signs reading "TERMINAL STORES"; ornamental iron tie rods between windows at each floor level; supports for awning evident between windows on third floor. Stores 15; 17-20: Nine stories tall, three bays wide; bays on ground floor contain rectangular loading docks; window openings of upper floors contain single rectangular window with lintels of header bricks and rusticated stone sills; corbelled brick belt course between window openings on seventh floor; recessed, corbelled brick panels between window openings on ninth floor; corbelled brick cornice above ninth floor window openings; eastern-most bay extends past cornice line with a crenellated bulkhead; brick parapet extends above central bay, a sign attached to the parapet announces the store number; supports for awning evident between windows on third floor; projecting vertical brick pier separates stores. Stores 16: Same design as Store 15 and 17-20 except window openings of upper floors are wider and contain pairs of rectangular windows separated by a narrow brick pier. Stores 23 & 26: Twelfth Avenue facade is composed of a main section flanked by two massive corner towers; the main section contains a very large round-arch opening just to the right of center that originally allowed two rail tracks to enter the building; window openings arranged in four vertical bays and as a continuous row across the third floor, all originally round-arched with splayed brick lintels and rusticated stone sills (there are also several non-historic rectangular window openings); window openings of Store 23 have a shallow rebate that originally allowed fire shutters to lay flat with the facade (the original Store 26 likely had this detail, but when the building was reconstructed ca. 1902 it was omitted); mounting hinges for fire shutters are still evident on both stores; on the main section of the Twelfth Avenue facade, corbelled brick belt courses extend between window openings on the second floor and under the window openings of the seventh; the main section is topped with a corbelled brick cornice; the corner towers originally had double-height round-arch openings at ground level, with splayed brick lintels supported by terra-cotta imposts and decorated terra-cotta spandrel panels recessed between first and second floors (the second floor windows of the southern corner tower have since been altered to rectangular openings); floors three through seven in both corner towers have staggered round-arch windows with splayed brick lintels and rusticated stone stills; corbelled brick belt courses run under third and seventh floor window openings; corner towers terminate in a corbelled brick cornice; corner towers wrap around three bays onto side streets, continuing the architectural pattern of the Twelfth Street facade; Store 23 has ornamental iron tie rods between windows at each floor level of side elevation.

Alterations: Original metal fire shutters have been removed from every window in the complex; the metal awning that once stretched along both side street facades and covered the ground floor entrance has been removed; fire escapes have been added to Stores 16-26 along the north facade of the complex and Stores 1-9 and 13-23 along the sound facade. Stores 1 & 2: Central arch filled in with glazing and converted to pedestrian entrance; some windows replaced; parapet above corner towers cut down nearly to roofline of main section of building; chimney reconstructed; bulkhead added above cornice between first and second bays of main section of Eleventh Avenue facade; three new rectangular openings punched through ground floor of main section of facade; several ground floor openings in corner towers have been converted to plate glass windows, three of the openings in the northern corner tower have been partially bricked in and Neo-Georgian door enframements have been added to two; in two bays along West 27th Street and one bay along West 28th Street, the recessed terra-cotta spandrel between the first and second floors has been replaced with a non-recessed brick spandrel; a large advertising banner covers the seventh floor facade of Store 2 along West 28th Street. Store 3: Enlarged to nine stories in 1910-11; all windows in first through fourth bays replaced; window openings in first through third bays of second floor partially bricked in to make rectangular openings; all but western-most ground floor loading docks enlarged with rectangular openings (were originally round-arched); roll-down security gates installed above two eastern-most loading docks. Store 4: Windows in first and third through fifth bays replaced; second floor window openings covered in plywood; gutter crosses diagonally across windows in first through third bays of second floor; window opening on second floor in first bay partially bricked in; all ground floor loading docks enlarged with rectangular openings (were originally round-arched), first ground floor opening enlarged beyond floor plate of second floor; elevator bulkhead installed above second bay; parapet rebuilt, sign indicating store number removed. Store 5: Some windows replaced; window openings in second bay from right enlarged, now rectangular with pairs of windows separated by thin brick pier; window openings on second floor enlarged, now rectangular with pairs of windows; all but western-most ground floor loading docks enlarged with rectangular openings (were originally round-arched); ground floor openings in fourth bay now a smaller loading dock with a pedestrian entrance to the right; roll-down security gates installed above ground floor openings in bays one and two; elevator bulkhead added above eastern-most bay. Store 6: All windows in bay three, and some windows in other bays, replaced; all ground floor loading docks enlarged with rectangular openings (were originally round-arched). Store 7: Windows in first and third bays replaced; second floor window openings in first and third bays enlarged, now rectangular with pairs of windows; window opening on seventh floor of middle bay covered with plywood; all but western-most ground floor loading docks enlarged with rectangular openings (were originally round-arched); roll-down security gates installed above all ground floor openings; fire escape replaced (different than other stores), counter weight attached to facade. Store 8: All but one window replaced; second floor window openings in first and second bay shortened; window openings on floors 4-5 and 7 in first bay bricked in; all ground floor loading docks enlarged with rectangular openings (were originally round-arched); first and second ground floor openings enlarged beyond floor plate of second floor; roll-down security gates installed above first and second ground floor openings; drain pipe installed horizontally across third floor windows. Store 9: Most windows in first bay and all windows in third bay replaced; all ground floor loading docks enlarged with rectangular openings (were originally roundarched); roll-down security gates installed above all ground floor openings; elevator bulkhead

added above center bay. Store 10: All but five windows replaced; second floor window opening in first bay shortened; all ground floor loading docks enlarged with rectangular openings (were originally round-arched); first ground floor opening enlarged beyond floor plate of second floor. Store 11: Most windows in first and third bays replaced; second floor window opening in third bay enlarged, now rectangular with paired window; all ground floor loading docks enlarged with rectangular openings (were originally round-arched); ground floor opening in second bay partially bricked in, now a gallery window; roll-down security gates installed above second and third ground floor openings. Store 12: All but four windows replaced; all ground floor loading docks enlarged with rectangular openings (were originally round-arched). Store 13: All windows in first and third bays replaced; second floor window openings in first and third bays enlarged, now rectangular with pairs of windows; all ground floor loading docks enlarged with rectangular openings (were originally round-arched); roll-down security gates installed above first and third ground floor openings. Store 14: All but one window replaced; second floor window openings in first and third bays enlarged, now rectangular with pairs of windows; all ground floor loading docks enlarged with rectangular openings (were originally round-arched); roll-down security gates installed above first ground floor opening; elevator bulkhead installed above second bay. Store 15: Enlarged to nine stories in 1912-13; all windows in first bay and most in second bay replaced; second floor window in third bay bricked in; small window openings punched to left of left-most bay on third and fifth floors; ground floor loading dock in third bay enlarged heightwise; roll-down security gates installed above second and third ground floor openings. Store 16: Enlarged to nine stories in 1913-14; windows in second and third bays on floors two and five through nine replaced. Store 17: Enlarged to nine stories in 1912-13; all windows in first bay and some in second bay replaced; small window openings punched to left of left-most bay on floors two through six and eight through nine; roll-down security gate installed above third ground floor opening. Store 18: Enlarged to nine stories in 1912-13; all windows replaced; small window openings punched to right of right-most bay on floors two, three, and five. Store 19: Enlarged to nine stories in 1912-13; all windows in first bay and some in second bay replaced; small window openings punched to left of left-most bay on floors three, six, and eight; ductwork installed vertically to left of second bay and horizontally above ground floor opening in first bay, ducts punched through facade on ground floor. Store 20: Enlarged to nine stories in 1912-13; all windows in second and third bay replaced; small window openings punched to right of rightmost bay on third floor; roll-down security gate installed above third ground floor opening. Store 21: All windows replaced; second floor window openings in first and third bays enlarged, now rectangular with pairs of windows; second floor window opening in second bay slightly enlarged, now rectangular with single window; small rectangular window openings punched between existing window opening on third floor; all ground floor loading docks enlarged with rectangular openings and steel lintels (were originally round-arched). Store 22: All but one window replaced; all ground floor loading docks enlarged with rectangular openings (were originally round-arched). Store 23: Central arch filled in with glazing and converted to pedestrian entrance; all windows replaced; several new rectangular window openings have been cut into Twelfth Avenue facade; parapet above main section of Twelfth Avenue facade rebuilt, corbelled brickwork replaced with flat brickwork; round-arched window openings on second floor of corner tower enlarged to rectangular openings; third floor window openings along West 27th Street enlarged with rectangular openings; window openings in first bay on floors four and five of side facade bricked in; metal awning installed between first and second floor windows of side facade; steel I-beam tie rods attached to facade between Store 23 and Store 26 on fourth and fifth

floors. Store 24: All but two windows replaced; all ground floor loading docks enlarged with rectangular openings (were originally round-arched); roll-down security gate installed above ground floor opening in third bay; ornamental tie rods on fifth floor replaced; steel I-beam tie rods attached to building corners between fifth and sixth floors. Store 26: Reconstructed in 1902, retains most elements of original design although windows no longer have the shallow rebate that originally allowed fire shutters to lay flat with the facade; all windows replaced; in main section of Twelfth Avenue facade, one new rectangular window opening has been cut on the fourth floor and the round-arched window below on the third floor has been partially bricked in to make it narrower; metal awning covers ground floor entrances on much of Twelfth Avenue facade; rooftop addition set back above corner tower; bulkhead added above second bay of main section of Twelfth Avenue facade; steel I-beam tie rods attached to facade between Store 23 and Store 26 on fourth and fifth floors; along West 28th Street facade an advertising banner covers windows in third bay on fourth and fifth floors.

History: Much of the land on which the Terminal Warehouse Company's Central Stores now stand was underwater as late as the 1880s. Historic maps indicate that a portion of the easterly side of the block was filled in as early as 1855 and that the New York Steam Saw Mills of George Colyer and Thomas Dugard had been erected there, but it is not until several decades later that the entire property had been reclaimed from the Hudson River. By the middle of the 1880s, a lumber yard occupied the site and a series of train tracks running north along Eleventh Avenue connected the property to the freight yards of the New York Central and Hudson River Railroad at West 30th Street. It was only in 1888, however, that the land was officially granted by the City of New York to Emma L. Van Ness and Mary B. Harmon. Two years later, in 1890, the pair sold the entire block to William Wickes Rossiter. Shortly thereafter, the massive Central Stores complex of Rossiter's Terminal Warehouse Company was erected.

The Terminal Warehouse Company was founded in 1889 by Rossiter, whose brother was a ranking officer with the New York Central and Hudson River Railroad. The warehouse company benefited from this close connection with the only freight line with a direct rail link into Manhattan—the Central Stores were erected so that trains could travel down the middle of Eleventh Avenue from the New York Central's yards on West 30th Street and enter the warehouse complex through the massive round arch in the building's eastern facade. The company also had operating agreements with the Erie and Lehigh Railroads, which had tracks leading out the Twelfth Avenue facade to transfer bridges along the Hudson River waterfront, from which car floats could transport whole freight cars to New Jersey and the westward-bound rail lines traversing the country's interior. In addition to the Central Stores, the Terminal Warehouse Company owned the Rossiter Stores at West 59th Street and the West Shore Stores in Weehawken, New Jersey.

An advertisement in *King's Handbook of New York* notes that the company offered a range of services including "general merchandise storage (free or bond), freezing and cold storage, and furniture storage." The company also offered to provide transportation by lighter around New York Harbor for its clients. The advertisement particularly touted the facilities of the newly-constructed Central Stores, where "furniture storage is given particular attention...[and] where large or small lots of household furniture, pictures, pianos, mirrors, bronzes, statuary, trunks, carriages and other goods are received and cared for at moderate charges." The company

also stored theatrical scenery, as well as furs, carpets, and woolens, in the specialized cold storage rooms. An article from the *New York Times* in 1900, reporting on a fire in the Central Stores, included a list of the goods that had been destroyed during the conflagration that confirms the stores were indeed used as the company had originally intended. Amongst the articles lost in the fire were "new and stored furniture, household effects, theatrical scenery belonging to Anna Held and Julia Marlowe, and the Halleran collection of antiques, owned by the Schmitt Brothers." In addition to private individuals, several prominent companies also leased space from the Terminal Warehouse Company. John Wanamaker and the Gimbel Brothers, both department store firms, as well as grocer Francis H. Leggett, all occupied parts of the Central Stores during the early twentieth century.

The Central Stores were erected in 1890-91 according to the plans of George B. Mallory. The complex was designed to appear as a single monumental structure and its simple brick facade—articulated primarily by the rhythmic placement of arched window openings and a corbelled cornice—gave the buildings an appropriately imposing presence to customers seeking a secure place to store their possessions. The solidity of the building's primary facade along Eleventh Avenue is enhanced by the vast expanses of unbroken masonry, as well as the massive round-arch entrance and the castle-like projecting corner towers. Russell Sturgis, a noted architecture critic and one of the first to academically study industrial building design, praised the "far away, unpretending" look of the building, which clearly expressed the architect's understanding that the warehouse was "not anywhere near the world of residence" and would not be enhanced by the architectural ornament typically found on residential buildings. Sturgis also commended the feeling of strength of the structure's walls, created by the deeply recessed windows and fire shutters, and the "obvious necessity" of those few architectural details that interrupt the otherwise plain brick facade.

Several of the stores were altered or enlarged during the early years of the twentieth century. Store 26 was rebuilt in 1902 to the plans of D'oench & Yost. It is nearly identical to the original designs of Mallory, except for the small detail that the hinges for the fire shutters are not recessed into the building's facade, but rather lay outside of the window openings (notably, this is the one aspect of the warehouse that Sturgis criticized in his review of the building). Store 3 was expanded from seven stories to nine stories in 1910-11 by architect was Otto M. Beck. Two year later, in 1912, the same architect drafted plans to replace the entire western section of the complex after a fire had damaged the edifice. While building permits were issued for the enlargement of Stores 15-26, only Stores 15-20 were actually expanded. It is likely that difficult soil conditions caused the company to abandon its plans for Stores 21-26 (the company did, however, continue to use renderings of the complex with the entire western section enlarged in advertisements and promotional materials). Of the sections that were rebuilt, Stores 15 and 17-20 were enlarged at the same time, from May 1912 to August 1913. The renovation of Store 16, however, was not started until later in August 1913 and was not completed until May of 1914. Its design is slightly different than the other remodeled stores, with larger, paired window openings rather than the narrow, single openings of Stores 15 and 17-20. Beck's plans for these later additions were clearly intended to compliment the original stores designed by Mallory, and the complex retains the solid, unpretentious appearance that Sturgis, and many later critics, so admired.

According to deeds filed with the New York City Register, the Terminal Warehouse Company sold the Central Stores in 1947. The building continued to function as a warehouse in the ensuing decades, and much of the structure is still devoted to that use. The arched tunnel that once allowed whole train cars to enter the building was for a time in the late 1980s and 90s occupied by a night club; it now serves as a concourse for art galleries and other commercial tenants that occupy the ground floors of several of the stores.

References:

- "Flames in Warehouse Destroy Rare Objects," New York Times (September 21, 1900) 8.
- "How Field Warehousing (As Operated by the Terminal Warehouse Company of New York) Aids the Manufacturer, Protects the Banker, and Benefits Trade," (New York: Terminal Warehouse Company of New York, 1935).
- New York County, Office of the Register, Deed Liber 2143, p. 198; Liber 2283, p. 338; Liber 8, p. 437.
- Obituary, New York Times (May 1, 1897) 9.
- Russell Sturgis, "The Warehouse and the Factory in Architecture," *The Architectural Record* XV (January 1904) 14-17.

ARCHITECTS' APPENDIX

Beck, Otto M.

261 Eleventh Avenue (1910-11; 1912-14) 270 Eleventh Avenue (1915-16)

Little is known about the life or professional career of Otto M. Beck (1887-1957). Census records from 1920 and 1930 indicate he lived in Brooklyn and that his occupation was as an engineer. His only known architectural commissions were for the Terminal Warehouse Company, which engaged him to design the reconstruction of seven of the Central Stores at 261 Eleventh Avenue as well as an annex building across the street at 270 Eleventh Avenue (both within the West Chelsea Historic District). Beck's association with the Terminal Warehouse Company lasted for over a decade—all of the alteration permits issued by the Department of Buildings for the Central Stores complex from 1910-22 list Beck as the architect of record.

Ancestry.com, 1920 United State Federal Census [database online] (Provo, UT: The Generations Network, Inc., 2006)

—, 1930 United State Federal Census [database online] (Provo, UT: The Generations Network, Inc., 2006)

New York City Department of Records (Municipal Archives), Block & Lot File for Block 673, Lot 1.

Obituary, New York Times 10 October 1957, 33.

Brandt, John

554 West 28th Street (1885)

John Brandt (ca. 1856-1966) began practicing architecture in 1879 and was active through 1925. From 1892-1908, he practiced with his brother Louis in the firm of L. & J. Brandt. John Brandt designed several residences on Manhattan's Upper East Side, including a row of five neo-Grec style houses on East 92nd Street, of which the two at numbers 59 and 61 survive largely intact (within the Carnegie Hill Historic District). The Brandt firm also designed a pair of five-story, six-family flats buildings at 120-122 East 91st Street in the Renaissance Revival/Queen Anne style (also within the Carnegie Hill Historic District).

Dennis Steadman Francis, *Architects in Practice in New York City*, 1840-1900 (New York: Committee for the Preservation of Architectural Records, 1979) 17.

Landmarks Preservation Commission, Carnegie Hill Historic District Designation Report (LP-0861) (New York: City of New York, 1974); Carnegie Hill Historic District Extension Designation Report (LP-1834) (New York: City of New York, 1993), prepared by David M. Breiner, et. al.

James Ward, Architects in Practice in New York City, 1900-1940 (Union, NJ: J&D Associates, 1989) 9.

Caldwell, Charles H.

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549 West 26<sup>th</sup> Street (1900-01)
544 West 27<sup>th</sup> Street (1901-02)
536 West 27<sup>th</sup> Street (1906-07)
537 West 26<sup>th</sup> Street (1912-14)
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Charles H. Caldwell (1863-1932) was born in Rochester, New York. Records indicate that he joined the Architectural League of New York in 1892 and that he had established his own practice on Fifth Avenue by 1900. According to his obituary in the *New York Times*, Caldwell designed a number of commercial buildings in New York City, including the factory buildings commissioned by the John Williams Ornamental Bronze and Iron Works in West Chelsea, and the Medford Building at 16 West 40th Street (1910). Caldwell also received several civic commissions during his career. In 1908, he submitted plans for a Borough Hall in Queens (never built), and also designed the Cavalry Armory in Utica, New York. Caldwell was a member of the American Institute of Architects.

"Catalogue of the Eleventh Annual Exhibition of the Architectural League of New York" (New York: Architectural League of New York, 1896) 12.

"Fortieth Street Loft," New York Times (August 14, 1910) X7.

Dennis Steadman Francis, *Architects in Practice in New York City, 1840-1900* (New York: Committee for the Preservation of Architectural Records, 1979) 20.

"Plan to Provide Adequate Quarters for City Departments in Queens," *New York Times* (March 15, 1908) 10.

James Ward, Architects in Practice in New York City, 1900-1940 (Union, NJ: J &D Associates, 1989) 12.

Clinton & Russell

244 Eleventh Avenue (1911-12)

Charles William Clinton (1838-1910) was born and raised in New York. He received architectural training in the office of Richard Upjohn, leaving in 1858 to begin an independent practice. The following year, he formed a partnership with Anthony B. McDonald, Jr., which lasted until 1862. Later he was associated with Edward T. Potter. For the next 32 years Clinton practiced alone. Most of Clinton's important buildings during this period were office buildings based on Italian Renaissance prototypes. All of these works shared a pronounced layering of the facade consisting of horizontal sections with monumental pilasters or piers carrying cornice bands, a standard treatment of the tall building during the nineteenth century. Clinton also designed the country estate Glenview for James Bond Trevor in Yonkers in 1876-77, which exhibited Victorian Gothic ornament. While in independent practice, Clinton designed a row of Renaissance Revival style houses in the Upper West Side/Central Park West Historic District, one of which survives. He is also responsible for the design of the Seventh Regiment Armory at 643 Park Avenue (1877-79, a designated New York City Individual Landmark).

William Hamilton Russell (1856-1907), also a native New Yorker, studied at the Columbia School of Mines before joining the firm of his great-uncle, James Renwick in 1878. Five years

later, he became a partner in the firm and remained there until 1894, during which time the firm became Aspinwall, Renwick & Russell.

In 1894, Clinton and Russell formed a partnership. The firm was responsible for scores of buildings including early skyscrapers, luxury apartment houses, institutions, and fashionable hotels. The firm's apartment buildings include the Beaver Building (1903-04, at 82-92 Beaver Street, a designated New York City Individual Landmark), the Astor Apartments (1901-05, 2141 Broadway), and the Apthorp (1906-08, 2101-2119 Broadway, a designated New York City Individual Landmark), all constructed for the Astor family. The Lanham Apartments (1904-07, Upper West Side/Central Park West Historic District) is a massive 12-story Beaux-Arts apartment building with a modified U-shaped plan around a series of light courts. In the NoHo Historic District, the firm designed a 12-story, steel-framed store and loft building with neo-Classical details.

Clinton was a Fellow of the American Institute of Architects and a member of the Architectural League. Russell was a member of the New York chapter of the American Institute of Architects and of the Architectural League. After Russell's death, Clinton continued to practice under the name of Clinton & Russell.

"Charles W. Clinton," *Mcmillan Encyclopedia of Architects*, vol. 1, ed. Adolf K. Placzek (New York: Free Press, 1982) 426.

"Clinton & Russell," *Mcmillan Encyclopedia of Architects*, vol. 1, ed. Adolf K. Placzek (New York: Free Press, 1982) 426.

Landmarks Preservation Commission, *Ladies' Mile Historic District Designation Report* (*LP-1609*) (New York: City of New York, 1989).

James Ward, Architects in Practice New York City, 1900-1940 (Union, NJ: J &D Associates, 1989) 14, 37.

Henry F. Whithey, *Biographical Dictionary of American Architects (Deceased)* (Lose Angeles: Hennessey & Ingalls, Inc., 1970) 126, 533.

Cornell, George B.

555 West 25th Street (1891)

George Birdsall Cornell (1856-1929) graduated in 1877 from the Columbia School of Mines with degrees in Mechanical Engineering and Civil Engineering. After graduation, he began a nearly half-century long career as an engineer, designing the red-brick factory building at 555 West 25th Street in 1891. Cornell was chief engineer of the East River Bridge Company, established in 1892 by the New York State Legislature for the planning of a second East River bridge to keep up with population growth since the opening of the Brooklyn Bridge in 1863. In 1893, Cornell testified on behalf of the company regarding the necessity and feasibility of the two bridges proposed by the East River Bridge Company—a suspension bridge at the present site of the Williamsburg Bridge, and a cantilever bridge exclusively for trains just north of the present Manhattan Bridge. The proposals were eventually stymied by legal battles among New York City officials and powerful interests, such as the ferries who did not want the bridge.

In 1897, Cornell was chief engineer of the Brooklyn Elevated Railroad and is probably best known for installing, for that company, the electric elevated railroad that eventually crossed the Brooklyn Bridge. During the latter part of his career, Cornell was a consultant for various public utilities and other companies, including the New York Central Railroad.

"George B. Cornell, Engineer, Dead," New York Times (March 15, 1929) 19.

"Little Cash to Begin With," New York Times (June 1, 1893) 8.

"Rival Interests Clash: Plans of the East River Bridge Company Discussed," *New York Times* (October 30, 1892) 9.

School of Mines Quarterly. IV (New York: The Alumni Association, The Engineering and the Chemical Societies of the School of Mines, Columbia College, 1883) 346.

"Williamsburg Bridge: Historic Overview," http://www.nycroads.com/

Cory & Cory

601 West 26th Street (1930-31)

Russell Gherdes Cory (1882-1946) was born in Jersey City and attended the night school of Cooper Union, receiving an electrical engineering degree in 1910. While attending school, Cory was employed by Cyrien O. Mailloux, a consulting engineer. Cory established an independent architectural and engineering practice in 1908 and in 1920 he was joined as an associate by his brother Walter, who became a partner in 1924 in the firm known as R.G. & W.M. Cory. Russell Cory served as president of the firm throughout its existence. Specializing in industrial buildings, Russell Cory's first known major commission in New York City was the American News Company Building (1923-24, 131 Varick Street), a loft structure with vertical articulation and colorful tiles (now painted). The New York Dock Trade Facilities Building (1928-29, East River at Joralemon Street, Brooklyn; Russell Cory, architect and engineer, Walter Cory, associate, N.E. Driver, chief engineer) is credited by noted American engineering historian Carl Condit as the first "vertical street" type industrial structure, having a central utilities core with elevators that carried trucks to each floor. Russell Cory received patents for several aspects of this concept in 1929 and 1933. The Starrett-Lehigh Building marked a distinctive new and "modern" direction for Cory & Cory. After Starrett-Lehigh, the Cory brothers designed the Cashman Laundry Corporation Building (1932, Gerard Avenue and East 140th Street, the Bronx), employing a variation on the exterior architectural treatment and cantilever construction of the Starrett-Lehigh for a small three-story building. Russell Cory was architect of a notable complex of one-story Moderne style buildings for the Johnson & Johnson Company (1940-41) at its plant near New Brunswick, New Jersey. Russell Cory retired from architectural and engineering practice in 1942 and dissolved the firm.

Walter Monroe Cory (1888- unknown), born in Watsessing, New Jersey, also attended the Cooper Union night school and received an electrical engineering degree in 1920. Beginning in 1909, he worked in his brother's firm as a draftsman, designer, and project manager. Serving in the U.S. Army from 1917 to 1919, he worked for a time in construction and maintenance for the Ordnance Department. Returning to practice, he became as associate of his brother in 1920 and was project manager for the American News Company Building and a building for E.R. Squibb & Sons. From 1924 until 1934, Walter Cory was a partner in the architectural and engineering firm of R.G. & W.M. Cory. Moving to Florida, where he was also active as a consultant, he

participated in the development of the Apshawa Groves, Inc. citrus company in Minneola (of which Russell was president). Walter resumed practice as an industrial architect-engineer in 1936 and returned to New York City in 1942. Specializing in the design and modernization of industrial plants, particularly for the beverage industry, he produced designs for Canada Dry Ginger Ale, Inc. and the Coca-Cola Bottling Company throughout the United States, Canada, and Cuba, as well as for the F.L. Smithe Machine and Underwriters Salvage Companies in New York.

- "Building for Defense...An Industrial Community," *Architectural Forum* 75 (November 1941) 300-334, supplement 46.
- Carl W. Condit, *American Building Art: The Twentieth Century* (New York: Oxford University Press, 1961) 354.
- Landmarks Preservation Commissions. Starrett-Lehigh Building Designation Report (LP-1295) (New York: City of New York, 1986), prepared by Jay Shockley
- "New York Dock Trade Facilities Building," *American Architect* 135 (March 5, 1929) 329-331.
- "Planning for Laundry Efficiency," Architectural Record 72 (October 1932) 252-256.
- "Russell G. Cory Obituary," National Architect 2 (July and August 1946) 15 and 7.
- "Russell G. Cory Obituary," New York Times (May 28, 1946) 21.
- "Russell Gherdes Cory," *National Cyclopedia of American Biography* 34 (New York: James T. White & Co., 1948) 71.

Francisco & Jacobus

511 West 25th Street (1915-16)

Ferris LeRoy Francisco (1880-1946) was born in Cleveland, Ohio and earned degrees in engineering and architecture by attending night classes, though it is unknown where. In 1902, Francisco joined the engineering department of the American Tobacco Company, and three years later became chief engineer. In 1912, upon leaving the American Tobacco Company, Francisco established the private architectural and consulting engineering firm of Francisco & Jacobus at 200 Fifth Avenue in Manhattan. He was a life member of the American Society of Mechanical Engineers, the American Society of Civil Engineers, and the American Institute of Electrical Engineers. Francisco was the senior partner of the private practice which he started. Not much is known about his partner in the practice, Robert F. Jacobus. It is only known that Jacobus is listed in the New York City Directories as a consulting engineer, and that he probably died in the early 1960s.

The firm of Francisco & Jacobus designed a number of prominent buildings throughout the greater New York area, with the work of the firm including industrial, residential and commercial projects. The brick and reinforced concrete factory building at 511 West 25th Street was one of the firm's earlier works. Shortly after No. 511 the firm was hired to design a factory building for 1,000 employees of the Norma Company of America in Elmhurst (Queens) in 1916. In 1921, the firm was commissioned to design a 23-story tower to be erected at 1775 Broadway in Manhattan, given the name the Colonnade Building due to the distinctive series of tall Ionic columns proposed; following a series of delays and litigation, however, only the three-story colonnaded base of the building was completed in 1923, though a tower was later built upon it. In 1935, the firm designed a one-story reinforced concrete garage/shop building for General Tire,

primarily notable for its exterior which was covered in brightly colored enameled metal panels (demolished).

Francisco's association with the American Tobacco Company did not end upon his leaving the company in 1912. In 1925, Francisco & Jacobus designed the Clay, Henry and Bock Cigar Factory in Trenton, New Jersey (Mercer County)—Henry Clay being one of the two leading cigar brands of the American Tobacco Company. The Spanish-revival building, listed on the National Register of Historic Places, was converted in the 1980s into a luxury apartment complex. In 1938, the firm was selected to design the American Tobacco Company's building at the New York World's Fair. The completed fair building, which resembled a giant pack of Lucky Strike cigarettes, featured a full-sized manufacturing unit showing how cigarettes were made and packaged, and animated dioramas of the various steps in the planting, growing, curing, and auctioning of tobacco.

Despite the death of Francisco in 1949, the firm apparently continued designing, including a 14-story office building the Brooklyn Union Gas Company at 195 Montague Street in Brooklyn in 1960-62. It is possible that the firm continued to work following the death of Jacobus as well, as the United Parcel Service (UPS) distribution plant in Maspeth (56th Road between 44th and 48th Streets, Queens), a pink-mansarded complex attributed to the firm, was not erected until 1967.

"Big Utility Building to Rise in Brooklyn," New York Times (January 15, 1960) 42.

Christopher Gray, "Streetscapes: General Tire Building; 'Gas Station' Style: An Overlooked Gem of the 1930's," *New York Times* (March 27, 1988) R14.

New York City Directories.

Norval White & Elliot Willensky, "United Parcel Service Distribution Center," *AIA Guide to New York City*, 4th ed. (New York: Three Rivers Press, 2000) 833.

"Plans Cigarette Exhibit," New York Times (May 16, 1938) 34.

James Ward, Architects in Practice New York City, 1900-1940 (Union, NJ: J &D Associates, 1989) 26.

"Work Resumed on Broadway Block Improvement by Deputy Police Commissioner Harriss's Company," *New York Times* (August 6, 1922) 100.

Richard Wurts, et. al., Stanley Appelbaum, ed., *The New York World's Fair, 1939/1940 in 155 Photographs* (N. Chelmsford, MA: Courier Dover Publications, 1977) 75.

Friend, John H.

262 Eleventh Avenue (1890)

John H. Friend (ca. 1856-1931) was established as an architect in New York as early as 1875, the year in which he joined the American Institute of Architects. Directories indicate he moved from Manhattan to the Bronx ca. 1891, and that he practiced architecture at least into the 1920s. The architect's known designs include a row of Renaissance Revival style houses erected in 1892 within the Upper West Side/Central Park West Historic District, as well as the Beaux-Arts carriage house erected in 1902 at 178 East 73rd Street (a designated New York City Individual Landmark).

Dennis Steadman Francis, *Architects in Practice in New York City*, 1840-1900 (New York: Committee for the Preservation of Architectural Records, 1979) 32.

Landmarks Preservation Commission, 178 East 73rd Street Building (LP-1069) (New York: City of New York, 1980), prepared by Andrew S. Dolkart; Upper West Side/Central Park West Historic District Designation Report (LP-1647) (New York: City of New York, 1990).

Obituary, New York Times (December 30, 1931) 16.

James Ward, Architects in Practice New York City, 1900-1940 (Union, NJ: J &D Associates, 1989) 26.

Higginson, William

548 West 28th Street (1899-1900) 518 West 26th Street (1909-10)

William J. Higginson (1867-1943) was born in England in 1867 and immigrated to the United States in 1886. Little is known about his early life or education, although city directories indicate that Higginson had established an architecture practice by 1894. He soon took an office in the same building as the established architect Edward L. Angell (whose work includes a number of rowhouses within the Manhattan Avenue and Upper West Side/Central Park West Historic Districts), and from 1897-99 it appears the two men practiced together as the firm of Angell & Higginson. Of the designs attributed to Angell & Higginson, the buildings erected for the American Manufacturing Company in the Greenpoint neighborhood of Brooklyn in the late 1890s perhaps best indicates that Higginson had already begun to specialize in industrial architecture. In 1899-1900, Higginson was commissioned to designed the brick factory at 548 West 28th Street.

Around the turn of the twentieth century, Higginson left his partnership with Angell and established his own practice on Park Row in Lower Manhattan. Soon thereafter he received a commission that in many ways would determine the direction of his career. In 1901 the Scottishborn industrialist Robert Gair chose Higginson to design the relatively small six-story brick warehouse at 21 Washington Street. It was located directly across the street from Gair's first building in Brooklyn, 26-38 Washington Street, designed in 1887-88 by Benjamin Finkensieper. Like the earlier building, Higginson's factory was a simple masonry structure of slow-burning mill construction, articulated primarily by segmental-arched window openings and restrained brick ornamentation. While this building was a modest, if well-executed, factory building with little to distinguish it from the countless other industrial buildings being erected throughout the area, it must have pleased Gair enough for the industrialist to hire the architect again in 1904 this time to design a much larger structure at 41-49 Washington Street. In the intervening three years, however, Gair had been introduced to the recently-developed technology of reinforced concrete and was particularly interested in its fire-proofing qualities. Higginson was initially hesitant to adopt the new technology, but eventually agreed to work with the Turner Construction Company in designing the building. When it was completed, the building was the largest reinforced concrete building yet erected.

Higginson would continue to use reinforced concrete in the design of factory buildings, utilizing the material in his 1909-10 design for the book bindery of the H. Wolff Book Manufacturing Co.

at 518 West 26th Street. Higginson's relationship with the Turner Construction Company also proved to be highly productive. Over the next fifteen years the two firms joined together in designing and building several more reinforced concrete buildings for Gair. The industrialist was quick to praise his buildings and the architect and engineers who designed them—leading to other major commissions such as the massive Bush Terminal complex in Sunset Park, Brooklyn (1906-1926) and the Loose-Wiles Company Building in Long Island City, Queens (1914).

"A Century of Excellence 1902-2002," Turner News (Turner Construction Company, 2002).

Andrew S. Dolkart, "American Manufacturing Company: A Brief History and Preliminary Analysis of Buildings Construction."

Dennis Steadman Francis, *Architects in Practice New York City, 1840-1900* (New York: Committee for the Preservation of Architectural Records, 1979) 39.

Landmarks Preservation Commission, *DUMBO Historic District Designation Report* (*LP-2279*) (New York: City of New York, 2007), prepared by Andrew S. Dolkart, architects appendix by Christopher D. Brazee.

"Wm Higginson, 76, Architect, is Dead," The New York Times (August 6, 1943) 15.

Hunter, Paul C.

525 West 26th Street (1904-05)

Paul Cairnes Hunter (ca. 1862-1935) was first established as an architect in New York in 1894, when he formed the partnership of Collins & Hunter with W. Scott Collins. In 1895, he began independent practice in Queens—although for a while in 1899 he parnered with architect Everett Murgatroyd in the firm of Hunter & Murgatroyd. In the early years of the twentieth century, Hunter was employed by the Interborough Rapid Transit Company as its Architectural Assistant. In this capacity, Hunter consulted on the design of the monumental IRT Powerhouse at Eleventh Avenue between West 58th and West 59th Streets (1904, McKim, Mead & White) and was responsible, along with engineer John Van Vleck, for the system's original eight substations. Hunter also designed a number of commercial buildings, including a hotel for the Allerton Houses chain in 1915. In 1931, Hunter altered a row house into a five-story, neo-Federal commercial building now within the Upper West Side/Central Park West Historic District.

- David J. Framberger, "Architectural Designs for New York's First Subway," Interborough Rapid Transit Subway (Original Line) (HAER NY-122) (Washington, D.C.: Historic American Engineering Record, 1978) 380, 382.
- Dennis Steadman Francis, *Architects in Practice in New York City, 1840-1900* (New York: Committee for the Preservation of Architectural Records, 1979) 42.
- Landmarks Preservation Commission. *Upper West Side/Central Park West Historic District Designation Report (LP-1647)* (New York: City of New York, 1990).
- James Ward, Architects in Practice New York City, 1900-1940 (Union, NJ: J &D Associates, 1989) 38.

Long, Maurice A.

239 Eleventh Avenue (1912-13)

Maurice Alvin Long (1875-1938) was born in Middletown, Ohio. He studied both architecture and engineering, though it is unknown where. Long began working for the Baltimore & Ohio Railroad's (B&O) Office of Engineering in 1899, and eventually settled in Baltimore in 1904. Long designed the Wheeling Baltimore & Ohio Railroad Passenger Station for the B&O in 1907-08, a Beaux-Arts structure listed on the National Register of Historic Places which was in continuous use for 53 years. Long was employed as chief architect for the B&O when he designed the freight terminal at 239 Eleventh Avenue for the railroad in 1912-13. At of the time of his death, Long was president of an engineering contracting company bearing his name, the M.A. Long Company, headquartered in Baltimore, Maryland.

Beverly B. Fluty, "Wheeling Baltimore & Ohio Passenger Station," *National Register of Historic Places Registration Form* (November 1, 1978).

"Maurice Alvin Long," obituary, New York Times (March 1, 1938) 22.

Mallory, George B.

261 Eleventh Avenue (1890-91)

George Benjamin Mallory (1847-unknown) was born in Mystic, Connecticut, and graduated from the Rensselaer Polytechnic Institute with a degree in civil engineering in 1867. From 1869-71 he worked for Maxwell, Grant & Co. in Macon, Georgia, and from 1871-73 was a draftsman in the Chester, Pennsylvania, firm of John Roach & Sons. In 1873 he became a principal assistant to W.B. Reaney, an engineer and naval architect in Philadelphia. Mallory moved to New York City in 1877 and established his own engineering and naval architecture practice.

Mallory worked closely with the country's railroad companies throughout his career. In 1886, he designed the steamer "Susquehanna" for the Anchor Line, the lake shipping subsidiary of the Pennsylvania Railroad. Four years later in 1890, he served as building architect for the Terminal Warehouse Company, which was aligned with the New York and Hudson River Railroad, when that firm erected its Central Stores complex in the West Chelsea neighborhood of Manhattan. Mallory filed a number of patents during his career, including one for a ship-based grain elevator system recorded in 1899. He also designed the private yacht "Dungeness" for Lucy Coleman Carnegie (the first female member of the New York Yacht Club) in 1894.

Mallory was a member of the American Society of Civil Engineers and was a founding member of the American Society of Mechanical Engineers. He also belonged to the London Institution of Mechanical Engineers.

"A Large Lake Steamer," New York Times 5 September 1886, 2.

"A Trip on Dungeness," New York Times 20 July 1894, 3.

George B. Mallory, "Grain-Elevator" U.S. Patent 635,561, filed 24 October 1899.

Henry B. Nason, ed.., "Biographical Record of the Officers and Graduates of the Rensselaer Polytechnic Institute, 1824-1886" (Troy, NY: William H. Young, 1887) 377.

Mark L. Thompson, *Queen of the Lakes* (Detroit, MI: Wayne State University Press, 1994) 40.

Matsui, Yasuo

601 West 26th Street (1930-31), associate architect

Yasuo Matsui (1883-1962) was born and educated in Japan and later attended M.I.T. and the University of California, Berkeley. He worked as a draftsman in the offices of several prominent New York architectural firms, including those of George B. Post, Ernest Flagg, Palmer & Hornbostel, Warren & Wetmore, and Starrett & Van Vleck. Though little is known about the specifics of Matsui's career as a registered architect in New York and New Jersey, he did act as an associate or consulting architect on a number of buildings in New York City—10 East 40th Street (1928-29, Ludlow & Peabody), the Bank of Manhattan skyscraper (1929-30, Craig Severance, 40 Wall Street), constructed by Starrett Brothers & Eken, and the Japanese Pavilion of the New York World's Fair (1939). Matsui was associated with the firm of Wengenroch & Matsui, served as president of F.H. Dewey & Company, and designed both the General Hospital and Free Academy in Corning, New York.

Landmarks Preservation Commission, *Starrett-Lehigh Building Designation Report (LP-1295)* (New York: City of New York, 1986), prepared by Jay Shockley.

"Yasuo Matsui," *American Architects Directory*, ed. George S. Koyl (New York: R.R. Bowler Co., 1962).

"Yasuo Matsui Obituary," New York Times (August 12, 1962) 81.

Parker & Shaffer (Frank S. Parker)

508 West 26th Street (1926-27)

Frank S. Parker (1889-1954) was trained as an architect and engineer. In 1917, Parker was apparently working as a clerk for the Bronx Bureau of Buildings. By the 1920s, he had partnered with Ivan O. Shaffer in the firm Parker & Shaffer. Not much is known about the career of Shaffer; little is also known about the firm. In 1924, Parker & Shaffer were commissioned as engineers for a large apartment complex at 33 Fifth Avenue in Manhattan, designed by Sussman & Hess and now part of the Greenwich Village Historic District. A 1926 announcement in the *New York Times* for the Masters Printer Building, an 18-story reinforced concrete building at Tenth Avenue and West 34th Street in Manhattan, notes the firm as "engineers who specialize in this class of construction." Parker was apparently the chief architect and engineer on the 34th Street project, as he was for the Graphic Arts Center (1927) at 200 Varick Street and the Wolff Bindery Annex (1926-27) at 508 West 26th Street, both constructed of reinforced concrete.

In his *New York Times* obituary, Parker is praised as "a pioneer in the designing [sic] of reinforced concrete buildings... [and] one of the first engineers to start redesigning steel structures into concrete..." due to steel shortages during World War I. Parker's obituary also notes him as chairman of the reinforced concrete division of the committee that drafted the New York City Building Code. A 1929 article in *The Architectural Forum* names Parker as a "leading industrial architect," among such illustrious company as Albert Kahn and Russell G. Cory, noting his numerous "very large concrete factory and loft buildings running as high as 22 stories" which

generally utilized brick for their lower stories with exposed concrete at the top. According to the article, Parker's rationale behind such construction was that the "defects of ordinary concrete exteriors" would not be visible at the taller height. The aforementioned Graphic Arts Center is cited as an example of this method. Parker is also linked, as an associate architect, to the Packard Motor Car Company building at 787 Eleventh Avenue, designed by renowned industrial architect Albert Kahn ca. 1929, and described in *American Architect* as a simple and straightforward loft building "that reflects its strictly utilitarian purpose without loss of character or dignity." In the 1940s, Parker was senior partner in the firm Frank S. Parker and Associates.

- "A \$3,500,000 Project: Eighteen-Story Reinforced Concrete Building for Tenth Avenue," *New York Times* (May 15, 1926) 39.
- "Addition to Wolff Book Bindery, New York" and "Graphic Arts Center, New York" *The Architectural Forum* 51 (September 1929) Plate 66.
- "Frank S. Parker, Architect, Was 65," obituary, New York Times (March 4, 1954) 25.
- Landmarks Preservation Commission. *Greenwich Village Historic District (LP-04899)* (New York: New York City, 1969) 47-48.

New York City Directories.

- "Packard Motor Car Company Service Building, New York City," *American Architect* 136 (October 1929) 40-41.
- J.P.H. Perry, "The Exteriors of Industrial Buildings." *Architectural Forum* (September 1929) 323, 326.
- "To Raze West Side Flats for Tall Building," New York Times (February 2, 1926) 48.
- "Two Commercial Projects to Cost \$2,200,000," New York Times (February 20, 1926) 27.
- "Village Houses Remain Unchanged," New York Times (March 23, 1924) RE2.

Pearse, W.W.

510 West 27th Street (1909-10)

Willis Worth Pearse (1872-unknown) was born in Toronto, Canada, where his grandfather was an established building contractor. He came to New York City following his graduation from secondary school and enrolled in Cooper Union, where he received a Bachelor of Science in Civil Engineering. He soon joined the American Society of Civil Engineers and became vice president and chief architect for John J. Radley & Co. (later the Radley Steel Construction Co.). Pearse returned to his childhood home in 1914, where he was appointed City Architect for Toronto. He served in that capacity until 1919, during which time he helped revise Toronto's building code. Pearse also conducted extensive research into building materials during his career.

James Hull, "The Expert Professor: C.R. Young and the Toronto City Building Code," *Spontaneous Generations* 1:1 (2007) 6.

Ratner, Abraham

513 West 26th Street (1921)

Abraham Ratner (ca. 1885-1945) immigrated to the United States from Russia in 1902. He graduated from Cooper Union in 1909 with a degree in mechanical drawing. Census records from 1910 list his occupation as draughtsman in an architect's office, while records from 1920

and 1930 list him as a practicing architect living in the Bronx. Ratner's only known commissions in New York City are the building at 513 West 26th Street and two single-story structures at 533 West 26th Street and 228 East 41st Street.

"111 Are Graduated from Cooper Union," New York Times 4 June 1909, 2.

Ancestry.com, 1910 United State Federal Census [database online] (Provo, UT: The Generations Network, Inc., 2006)

- —, 1920 United State Federal Census [database online] (Provo, UT: The Generations Network, Inc., 2006)
- —, 1930 United State Federal Census [database online] (Provo, UT: The Generations Network, Inc., 2006)

Obituary, New York Times 29 April 1945, 37.

Office of Metropolitan History, "Manhattan NB Database 1900-1986," (2008), http://www.MetroHistory.com.

Rouse & Goldstone

515 West 26th Street (1911)

William L. Rouse (1874-1963) was born in New York City and educated at the Stevens Institute of Technology in Hoboken, New Jersey. After setting up his practice in the early twentieth century, he began to design apartment buildings. The Hendrick Hudson Apartments at Riverside Drive and West 110th Street in Manhattan (1907) is one of his most successful early works, noted for its ornate Renaissance-inspired belvederes at the roof line. Early in his career, Rouse worked with John T. Sloan.

Lafayette A. Goldstone (1876-1956) was born in Poughkeepsie, New York, and came to New York City at the age of 15, after receiving lessons in architecture and drawing from William Henry Cusak. First an apprentice with Carrère and Hastings, Goldstone later obtained positions with William A. Bates of Bates & Barlow, and Cleverdon & Putzel. After service in the Spanish-American War in 1898, he was employed by a real estate developer and builder active in erecting old law tenements in Manhattan's Lower East Side. In this position he supervised the construction of tenements designed by George F. Pelham. Goldstone also worked for a time with the building firm of Norcross Brothers. In 1902, he opened his own practice with the design of three private residences on the Upper West Side. His early work was devoted largely to the design of new law tenements, but he later received commissions for apartment houses. It was during this period that Goldstone also designed store-and-loft buildings, including several within the Ladies' Mile Historic District.

Rouse & Goldstone were practicing together by 1910, and they established an early foothold in the redevelopment of the Upper East and Upper West Sides of Manhattan with apartment buildings that altered the appearance and character of these neighborhoods in the years before and after World War I. Examples of the firm's work can be found in the Riverside-West End Historic District and in the Upper West Side/Central Park West Historic District, where their designs reflect a variety of revival styles. After 1930, Rouse and Goldstone practiced separately, each continuing to specialize in apartment house design. In 1941, Goldstone was associated with

Frederick L. Ackerman on the design of the Lillian Wald Houses (1947), a joint project of the New York City Housing Authority and the New York State Division of Housing.

Landmarks Preservation Commission, Carnegie Hill Historic District Extension Designation Report (LP-1834) (New York: City of New York, 1993), prepared by David M. Breiner, et. al.; Ladies' Mile Historic District Designation Report (LP-1609) (New York: City of New York, 1989); Riverside-West End Historic District Designation Report (LP-1626) (New York: City of New York, 1989); Upper East Side Historic District Designation Report (LP-1051) (New York: City of New York, 1981); Upper West Side/Central Park West Historic District Designation Report (LP-1647) (New York: City of New York, 1990).

Obituary, New York Times (June 23, 1953) 2.

Obituary, New York Times (August 20, 1963) 33.

Trow's New York City Classified Directory (New York: Trow Directory, Printing and Bookbinding Co., 1925) 2462.

James Ward, Architects in Practice New York City, 1900-1940 (Union, NJ: J &D Associates, 1989) 66.

Elliot Willensky and Norval White, *AIA Guide to New York City*, 3rd ed. (San Diego: Harcourt Brace Jovanovich, 1988) 386.

Schickel & Ditmars

521-537 and 539-541 West 25th Street (1900-01)

William Schickel (1850-1907) rose to prominence as a leading late-nineteenth century designer of churches and institutional buildings in the United States, and is considered one of the most successful architects practicing in New York at the time. Born and educated in Germany, he came to the United States at the age of twenty. On the day after his arrival in New York, he was hired by Richard Morris Hunt, one of the country's most eminent and influential architects in the second half of the nineteenth century. Shickel worked for Hunt for approximately six months before entering the office of Henry Fernbach, a German-born architect who practiced in New York between 1855 and 1883. In January 1873, Schickel set up his own practice. His first commissions were from fellow Germans for tenement houses on the Lower East Side. Throughout the 1870s he designed a number of tenements and private houses in addition to working extensively for Catholic institutions in New York, Brooklyn, and New Jersey. By 1875, Schickel was so well known as an ecclesiastical designer that he secured a commission for a major church in Boston, Our Lady of Perpetual Help, which was illustrated in the *American Architect and Building News* in July 1877.

Aside from religious institutions, Schickel's most important client during this period was Oswald Ottendorfer, publisher of the German Language paper *New Yorker Staats-Zeitung*. In the 1870s and 80s, Schickel designed several buildings for Ottendorfer and his wife Anna, including buildings for institutions that were founded by the couple, such as the German Dispensary (now Stuyvesant Polyclinic), the Freie Bibliothek and Lesehalle (now the Ottendorfer Branch of the New York Public Library, 1883-84), both designated New York City Individual Landmarks. In 1880-81, Schickel deigned the Century Building at East 18th Street just north of Union Square (a designated New York City Individual Landmark) as a speculative venture for the owners of the

Arnold Constable department stores, one of his major clients. Schickel continued to act as architect for the Arnold-Constable families until 1904, designing stores, office buildings, stables, summer homes and even Frederick A. Constable's vault at Woodlawn Cemetery. He was also apparently a recognized authority in the field of hospital design, responsible for many of the buildings at the German Hospital (now Lenox Hill) and at St. Vincent's Hospital, among others. Shickel also designed buildings in the Upper West Side/Central Park West and Upper East Side Historic Districts.

In the late 1880s, Schickel began to enlarge his office, forming the partnership of William Schickel & Company in 1887 with the architects Isaac E. Ditmars and Hugo Kafka. The expanded firm was responsible for designing a Renaissance Revival style rowhouse in the Upper West Side/Central Park West Historic District, as well as several major department stores in the Ladies' Mile Historic District. Though Kafka soon left the firm to practice again on his own, Schickel & Ditmars was an active firm from 1896 into the first decade of the twentieth century. Ditmars (1850-1934), born in Nova Scotia, had been associated with New York architect John F. Miller before joining Schickel. He was a founder and past president of the Brooklyn Chapter of the American Institute of Architects (AIA) and was nominated a Fellow in 1895.

Schickel & Ditmars were responsible for the design of buildings for Lenox Hill Hospital, the successor to the German Hospital for which Schickel had designed the dispensary on the Lower East Side. The firm also designed a number of impressive Roman Catholic churches, including several in Brooklyn and the neo-Classical style St. Ignatius Loyola Church (1895-1900) on Park Avenue (a designated New York City Individual Landmark). Shickel & Ditmars are also responsible for buildings in the Madison Square North, Greenwich Village, Upper West Side/Central Park West, Upper East Side, Ladies' Mile, Expanded Carnegie Hill, and Tribeca West Historic Districts. The factory buildings designed by the firm at 521-537 and 539-541 West 25th Street in 1900-01 for the Conley Foil Company appear to have been an unusual commission for the firm.

Ditmars continued to design buildings after Schickel's death in 1907, and is credited with the design the Cathedral of Sacred Heart in Newark, New Jersey, listed on the National Register of Historic Places. The firm Shickel & Ditmars continued to practice until 1925.

American Architect and Building News 2 (July 28, 1877) 83.

Landmarks Preservation Commission, Expanded Carnegie Hill Historic District (LP-1834) (New York: City of New York, 1993); Ladies' Mile Historic District (LP-1609) (New York: City of New York, 1989); The Century Building (LP-1536) (New York: City of New York, 1986); Tribeca West Historic District (LP-1713) (New York: City of New York, 1991); Upper East Side Historic District (LP-1051) (New York: City of New York, 1981); Upper West Side/Central Park West Historic District (LP-1647) (New York: City of New York, 1990).

Shire & Kaufman

210 Eleventh Avenue (1910-11)

Edward I. Shire (1874-1973) was born in New York City and educated at City College (1889-93), Columbia University (1896), and the Ecole des Beaux-Arts (1898-1900). He also received training at the Hebrew Technical Institute, started in the 1880s to give technical training to boys of limited means, and where he served as a Board Member in 1924. Shire started his own firm in 1900 and is responsible for the design of 121 East 73rd Street (1906-08), and the facades of 126 East 70th Street (1927) and 126 East 74th Street (1925-26), all in the Upper East Side Historic District. Shire is also the designer of 53 West 91st Street (1907-08), an alteration in the Expanded Carnegie Historic District. In 1929, the New York Times commented on Shire's design for the Cone Export Building at 40 Worth Street in Manhattan, citing the building as "one of the most attractive business structures of its size in the city" and that while the building is essentially a loft building, it is "equal in design and construction to a high-grade office building." Shire continued designing throughout the 1930s and 40s. In 1935, he served as a consultant on a project to convert three private houses at 38-42 East 52nd Street, designed by Stanford White and Clinton & Russell, into small apartment units and stores. In 1941, Shire was associated with Bloch & Hesse on a project for alterations to a 20-story factory building at 202 Greene Street in Brooklyn. Over the course of his career, Shire's work apparently included residential, commercial, industrial, religious, educational, recreational, and health facilities, as well as public and mortuary structures and interior design. He lived to be 99 years old.

Not much is known about Lewis R. Kaufman, Shire's one time partner in the architectural firm of Shire & Kaufman; very little is also known about the firm. In 1909, the firm is cited as architects of three four-story brick lofts and stores at 2174 Third Avenue in Manhattan, and in 1910, they are noted as architects of a 12-story brick and terra-cotta loft building at Sixth Avenue and West 32nd Street. The Zinn Building at 210 Eleventh Avenue, also attributed to the firm, was constructed in 1910-11. The last listing for the firm in New York City Directories is 1914, although Kaufman continued working at least through the 1930s. In 1937, Kaufman and William P. Katz, Inc. are noted as architects of the Home of the New York Guild for the Jewish Blind in Yonkers, New York.

"Break Ground Tomorrow for Jewish Blind Home," New York Times (June 9, 1937) 47.

"The Building Department: List of Plans Filed for New Structures in Manhattan and Bronx," *New York Times* (September 15, 1909) 14.

"Building Plans Filed: Manhattan Alterations New York Times (April 30, 1941) 36.

"Dr. E.S. Barney Honored," New York Times (December 8, 1912) 17.

"Houses Remodeled in East 52d Street," New York Times (September 1, 1935) RE1.

Landmarks Preservation Commission. *Expanded Carnegie Hill Historic District (LP-1834)* (New York: City of New York, 1993); *Upper East Side Historic District (LP-1051)* (New York: City of New York, 1981).

"Modern Broadway Building Planned for Wholesale Dry Goods Trades," *New York Times* (January 27, 1929) RE12.

"New Loft Buildings," New York Time (May 8, 1910) 11.

New York City Directories.

Obituary, New York Times (April 26, 1973) 46.

"Technical Training at Hebrew Institute," *New York Times* (April 6, 1924) X12.

James Ward, *Architects in Practice in New York City*, 1900-1940 (Union, NJ: J&D Associates, 1989) 41, 70-71.

Uris, Harris H.

521 West 26th Street (1913-14)

Harris H. Uris (ca. 1872-1945) was born in Latvia and immigrated to the United States ca. 1892. He soon found work in an iron foundry, and eventually established his own company producing architectural metal work. The Harris H. Uris metal works specialized in fabricating structural and architectural iron. An article in the *Real Estate Record and Builders Guide* from 1905 notes that firm's more prominent commissions, including work for the 71st Regimental Armory (1904-06, Russell & Clinton), the Harlem Hospital (ca. 1903, Horgan & Slattery), the Colonial and the Yorkville Theaters (1905, George Keister), Public School 81 in Queens (ca. 1903, C.B.J. Snyder), and an office building at 30-32 Pine Street in Manhattan, designed by Warren & Wetmore (1902). The company also provided architectural iron work for at least seven of the city's first subway stations.

By the 1920s, Uris had expanded the scope of his company's operations and entered into the speculative building business with his sons, Harold and Percy. The firm's real estate ventures initially focused on residential construction—their early projects included residential hotels such as the Buckingham (1925) and the St. Moritz (1930-32), as well as apartment buildings at 1 University Place (1929), 2 Sutton Place (1937), and 930 Fifth Avenue (1939). Harris H. Uris ended his active involvement in the family real estate business in the 1940s, at a time when his sons were shifting the focus of the business to developing large commercial structures.

Obituary, New York Times (May 8, 1945) 19.

"The New Iron Works of Harris H. Uris," *Real Estate Record and Builders Guide* 75 (January 14, 1905) 83.

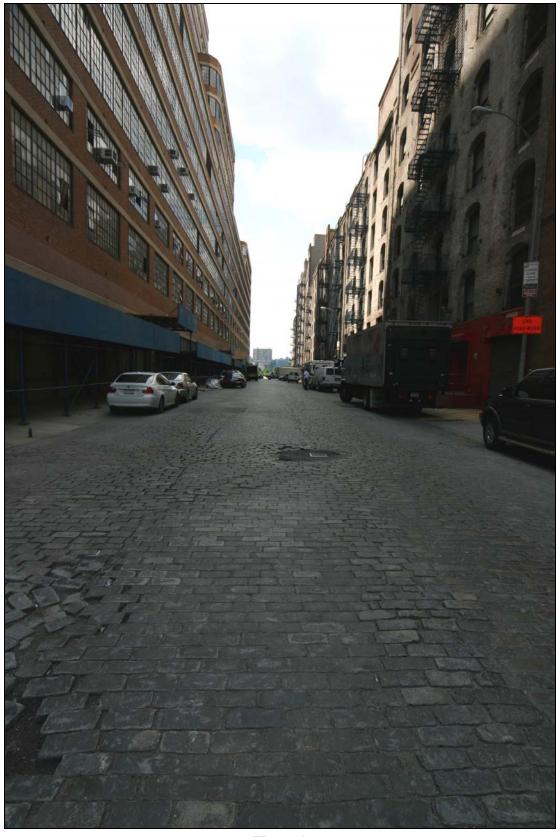


Figure 1
Granite Belgian Block Paving
West 27th Street, between Eleventh and Twelfth Avenues
Photo: Christopher D. Brazee



Figure 2 507-509 West 25th Street (aka the High Line) Photo: Christopher D. Brazee



Figure 3
511 West 25th Street
Francisco & Jacobus, 1915-17
Photo: Christopher D. Brazee



Figure 4
539-541 West 25th Street
Schickel & Ditmars, 1900-01
Photo: Christopher D. Brazee



Figure 5 521-537 West 25th Street Schickel & Ditmars, 1900-01 Photo: Christopher D. Brazee



Figure 6 543 West 25th Street Kossar & Garry Architects, LLP, 2006-07 Photo: Christopher D. Brazee



Figure 7
547 West 25th Street
Photo: Christopher D. Brazee



Figure 8
555 West 25th Street
George B. Cornell, 1891
Photo: Christopher D. Brazee



Figure 9 513 West 26th Street Abraham Ratner, 1921 Photo: Christopher D. Brazee



Figure 10 515 West 26th Street Rouse & Goldstone, 1911 Photo: Christopher D. Brazee



Figure 11 521 West 26th Street Harris H. Uris, 1913-14 Photo: Christopher D. Brazee



Figure 12: 525 West 26th Street Paul C. Hunter, 1904-05 Photo: Christopher D. Brazee



Figure 13: 533 West 26th Street Tobias Goldstone, 1946 Photo: Christopher D. Brazee



Figure 14 537 West 26th Street Charles H. Caldwell, 1912-14 Photo: Christopher D. Brazee



Figure 15 549 West 26th Street Charles H. Caldwell, 1900-01 Photo: Christopher D. Brazee



Figure 16 508 West 26th Street Parker & Shaffer Photo: Christopher D. Brazee



Figure 17
518 West 26th Street
William Higginson, 1909-10
Photo: Christopher D. Brazee



Figure 18 601 West 26th Street Russell G. and Walter M. Cory, Yasuo Matsui, associate, 1930-31 Photo: Christopher D. Brazee



Figure 19 510 West 27th Street W.W. Pearse, 1909-10 Photo: Christopher D. Brazee



Figure 20 536 West 27th Street Charles H. Caldwell, 1906-07 Photo: Christopher D. Brazee



Figure 21 544 West 27th Street Charles H. Caldwell, 1901-02 Photo: Christopher D. Brazee



Figure 22 550-556 West 27th Street (Vacant Lot) Photo: Christopher D. Brazee



Figure 23 548 West 28th Street William Higginson, 1899-1900 Photo: Christopher D. Brazee

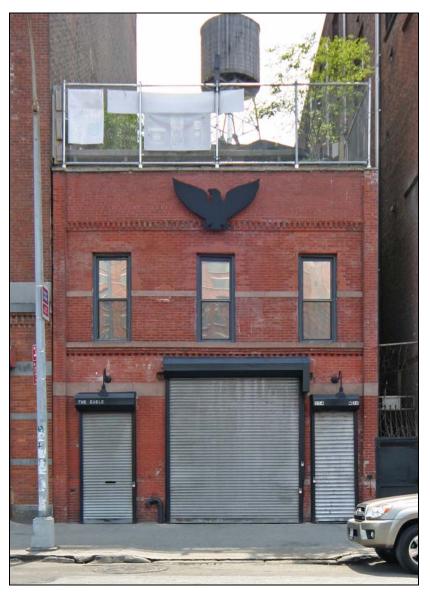


Figure 24 554 West 28th Street John Brandt, 1885 Photo: Christopher D. Brazee



Figure 25
259 Tenth Avenue
Cass Gilbert, 1927-28
Photo: Christopher D. Brazee



Figure 26
210 Eleventh Avenue
Shire & Kaufman, 1910-11
Photo: Christopher D. Brazee



Figure 27
239 Eleventh Avenue
Maurice Alvin Long (Architect) and Francis Lee Stuart (Engineer), 1912-13
Photo: Christopher D. Brazee



Figure 28 260 Eleventh Avenue Clinton & Russell, 1911-12 Photo: Christopher D. Brazee

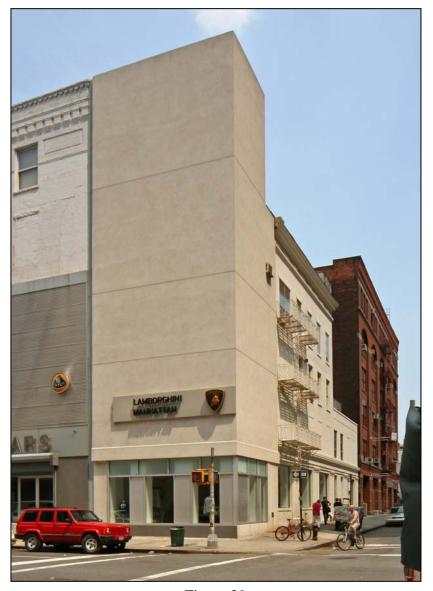


Figure 29 262 Eleventh Avenue John H. Friend, 1890 Photo: Christopher D. Brazee



Figure 30 270 Eleventh Avenue Otto M. Beck Photo: Christopher D. Brazee



Figure 31
261 Eleventh Avenue
George B. Mallory and Otto M. Beck, 1890-91, 1910-11, 1912-14
Photo: Christopher D. Brazee