LOCAL HISTORIC LANDMARK
DESIGNATION REPORT

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant
451 Jordan Place, Charlotte, Mecklenburg County, North Carolina



Prepared for the Charlotte-Mecklenburg Historic Landmarks Commission
by Heather Fearnbach, Fearnbach History Services, Inc.
3334 Nottingham Road
Winston-Salem, NC 27104

April 2021

1. **Name and location of property:** The Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant is located at 451 Jordan Place in Charlotte, North Carolina, 28205.

2. **Name and address of the current owner of the property:**
   Chadbourn Mill Owner LLC
   4445 Willard Avenue, Suite 900
   Chevy Chase, Maryland, 20815
   Charlotte contact: Erik Johnson
   (704) 488-4188
   erik@whitepointpartners.com

3. **Representative photographs of the property:** This report contains representative photographs of the property.

4. **A map depicting the location of the property:** This report contains an aerial view of the two-acre tax parcel.

5. **Current tax parcel reference and deed to the property:** tax parcel 08306707; Deed Book 33722, page 147

6. **A brief historical sketch of the property:** This report contains a history of the property written by Heather Fearnbach.

7. **A brief architectural description of the property:** This report contains an architectural description of the property written by Heather Fearnbach.

8. Documentation of why and in what ways the property meets the criteria for designation set forth in N. C. Gen. Stat. 160A-400.5:

   a. **Special significance in terms of its history, architecture, and/or cultural importance:** The Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant possesses special industrial and architectural significance in Charlotte and Mecklenburg County based upon the following consideration:

   1. The Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant was associated with two of Charlotte's largest and longest-operating hosiery producers. The enterprises' contributions to the local economy as manufacturers, employers, consumers of local goods and services, and taxpayers were enormous from late 1929, when Larkwood Silk Hosiery Mills' plant commenced operations, until Chadbourn Inc. ceased production in 1978.
   2. The two-story 1929 redbrick mill enlarged in 1935 with a matching addition designed by architect George N. Rhodes is also architecturally significant at the local level as one of the few extant early-twentieth-century Charlotte industrial buildings featuring Art Deco stylistic elements such as a full-height cast-stone stepped primary entrance bay and cast-stone pilasters, lintels, and cornices framing large windows.

b. Integrity of design, setting, workmanship, materials, feeling, and/or association: The architectural description in this report illustrates that the plant meets this criterion.

9. Ad Valorem Tax Appraisal: Designation would allow the owner to apply for an automatic deferral of 50% of the Ad Valorem taxes on all or any portion of the property which becomes a designated "historic landmark." The current appraised value of the property is $4,236,100.

10. Portion of the property recommended for designation: The interior and exterior of the mill, boiler house, and smokestack, as well as the associated approximately two-acre parcel as shown on the boundary map.

11. Submittal date of this report: April 2021

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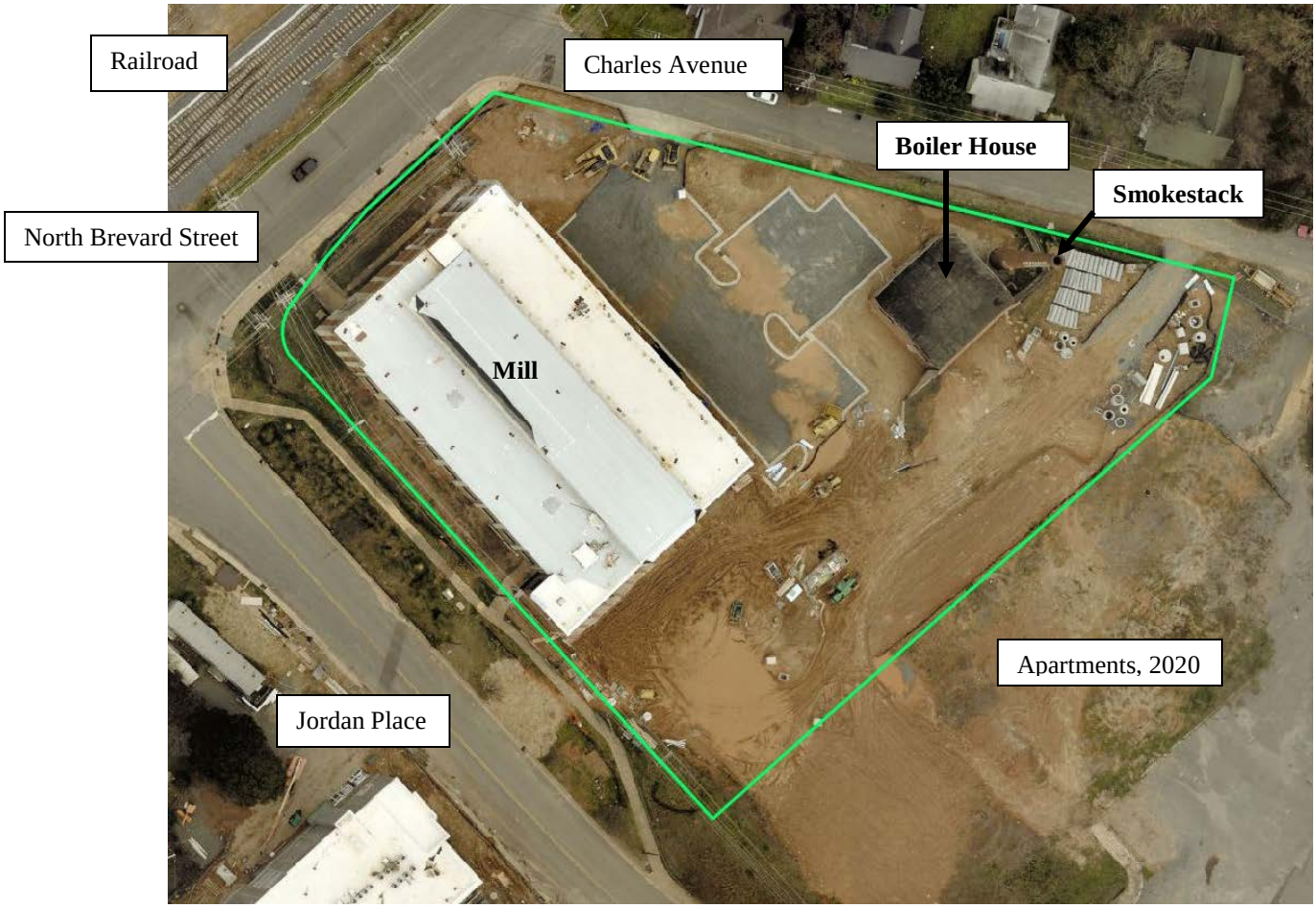


Southwest oblique
(all photographs taken by Heather Fearnbach on November 9, 2020)

Statement of Significance

The Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant possesses special industrial significance due to its lengthy association with two of Charlotte's largest hosiery producers. The enterprises' contributions to the local economy as manufacturers, employers, consumers of local goods and services, and taxpayers were enormous from late 1929, when Larkwood Silk Hosiery Mills commenced operations, until Chadbourn Inc. ceased production at its Charlotte plant in 1978. After purchasing Larkwood Silk Hosiery Mills in February 1945, Burlington-based Chadbourn Hosiery Mills moved its administrative offices to Charlotte. The concern initiated a 1955 merger with New York-based Gotham Hosiery Company and the resulting entity, Chadbourn-Gotham Hosiery Mills, Inc., was also headquartered in Charlotte. The North Brevard Street mill was enlarged in 1946, 1949, and 1962. Chadbourn-Gotham Inc. was one of the United States' leading hosiery producers, with an annual capacity of ninety-million-dozen ladies seamless stretch stockings, in 1965. Three years later, the company bought two neighboring Charlotte plants—Hudson Hosiery Company and Nebel Knitting Mill—resulting in a 2,500-person Mecklenburg County workforce.

The two-story redbrick 1929 Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant enlarged in 1935 with a matching east addition designed by architect George N. Rhodes mill possesses special local architectural significance as one of the few extant early-twentieth-century Charlotte industrial buildings featuring Art Deco stylistic elements such as a full-height cast-stone stepped primary entrance bay and cast-stone pilasters, lintels, and cornices framing large windows. The 1935 addition erected by Wadesboro Construction Company almost doubled the building's size. The interior is characterized by a predominantly open plan and an exposed structural system comprising fire-resistant reinforced-concrete columns, beams, and slabs; steel posts and beams; brick walls; poured-concrete floors; and wide-board roof decking. The freestanding one-story, flat-roofed, redbrick, 1949 boiler house retains original window and door openings. The tall, tapered round, redbrick, 1949 smokestack north of the boiler house is emblazoned with white brick capital letters spelling "Chadbourn" on its south side. Although the previous owner demolished the 1946, 1949, and 1962 additions in 2018, the 1929 mill, 1935 addition, and 1949 boiler house and smokestack maintain sufficient integrity of design, setting, workmanship, materials, feeling, and association to effectively convey the property's industrial and architectural significance.



Location Map, 2020 aerial from Mecklenburg County GIS
https://polaris3g.mecklenburgcountync.gov

1" = 100' scale N

Setting

Located north of Charlotte's commercial center, the Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant occupies an irregularly shaped two-acre tax parcel on North Brevard Street's east side adjacent to a railroad corridor. The plant is rotated approximately thirty degrees from true cardinal direction alignment. However, for the purposes of this document the narrative is written as if the building has true north-south orientation. The North Brevard Street façade will thus be referred to as the west elevation.

The plant spans the entire west end of the block bounded by North Brevard Street to the west, Charles Avenue to the north, Jordan Place to the south, and North Davidson Street to the east. Three-story apartment buildings are currently being erected on the east portion of the block, a 4.25-acre tract that was once a portion of the hosiery mill complex. Similar apartment buildings completed in 2020 front Jordan Place to the south.

The mill is at a higher elevation than North Brevard Street and Jordan Place, resulting in sloped west and south lawns. Grass sod and small deciduous trees were planted in 2020 between the building and the concrete municipal sidewalks that border the streets. At the building's southeast corner, a rough-face-concrete-block retaining wall topped with a black-anodized-aluminum railing extends to the south entrance to the asphalt-paved parking lot that wraps around the east and north elevations. The one-story brick boiler house and round smokestack are northeast of the plant at a lower elevation than the Charles Avenue parking lot entrance to the east. In 2020, a dumpster enclosure with concrete-capped variegated-redbrick walls and a double-leaf corrugated-steel door on its south elevation was erected southeast of the boiler house. A larger matching dumpster enclosure with two double-leaf doors on its east side was built at the parking lot's west end. As Charles Avenue to the north is at a higher grade, formed-concrete retaining walls with black-anodized-aluminum railings line the parking lot's north edge.



Southwest oblique

Much of the surrounding area once contained industrial buildings close to the railroad corridor and modest mill workers houses like those that remain on the north side of Charles Avenue. North Charlotte's revitalization has been facilitated by the extension of Charlotte Area Transit System's Blue Line, an elevated light rail that parallels the Norfolk Southern railroad tracks. The mill site affords a clear view of downtown Charlotte skyscrapers.

Site Evolution

Historic photographs, renderings, and Sanborn maps illustrate the plant's growth. These sources, newspaper articles, and Chadbourn Gotham Inc.'s annual reports provide valuable information regarding building and addition construction and demolition. Although the owner did not seek rehabilitation tax credits, the renovation is being executed in compliance with the Secretary of the Interior's standards. Cline Design, an architectural firm with Charlotte and Raleigh offices, rendered the rehabilitation plans.



West Elevation

<u>Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant</u>, 1929, 1935, 1949, 1952, 2020

Description

The following description begins with the plant's west elevation and moves counter-clockwise.

Exterior

The building's reinforced-concrete post and beam superstructure is readily apparent on the west, north, and south elevations, where slightly projecting concrete pilasters and lintels frame each bay, creating a paneled effect. Most bays originally contained large multi-pane sash with redbrick kneewalls, but all sash were removed, likely by the 1960s, and the openings filled with redbrick, or, in a few instances, translucent glass block. Historically appropriate multi-pane black-anodized-aluminum sash were installed in many openings in 2020. Molded concrete cornices span most of the north and south elevations. Concrete coping with aluminum caps tops the parapets.

The nine-bay west elevation is the most architecturally distinctive. The second bay from the east end, which historically contained the primary entrance, features full-height Art Deco-style formed-concrete stepped pilasters that rise to a stepped parapet with a central recessed panel. A pediment with curved shoulders and wide pilasters surround the aluminum-frame door and multi-pane transom installed in 2020.[1] A matching door, sidelights, and wider transom were inserted in what was originally a window

[1] A double-leaf door with a square-panel base and six-pane upper section and a fourteen-pane transom originally filled the opening. An Art-Deco-style sconce was mounted in the pediment's center beneath a multi-pane steel sash. All had been removed and a double-leaf flat-panel steel door, translucent-glass-block transom and window, and replacement light installed by 2016.

opening in the fourth bay from the north end. The flat-roofed brick penthouse for the interior elevator adjacent to that bay rises above the roof. Flat black-anodized-aluminum canopies shelter both doors. Multi-pane black-anodized-aluminum sash fill the window openings above both entrances and each story of the first and second bays from the north end. Concrete steps lead to the south entrance and the walkway with a rough-face-concrete-block-veneered foundation that extends to the north entrance. Black-anodized-aluminum railings flank the stair and edge the walkway.



South Elevation

The south elevation encompasses four narrow brick-enclosed west bays, all of which originally contained tall sash, and nine wider bays filled with multi-pane black-anodized-aluminum sash installed in 2020. The west three bays' flat parapet is taller than the remainder of the south wall.

Multi-pane black-anodized-aluminum sash illuminate the redbrick 1949 stair tower that projects from the building's southeast corner. A flat concrete canopy tops two recessed single-leaf black-anodized-aluminum-frame doors on the tower's west elevation. The tower's south wall is blind; the single-bay east elevation contains a wide window on each story.

Most of the mill's east wall was removed and portions filled with concrete block in conjunction with the construction of the 1949 addition that was demolished by the previous owner in 2018. The nine-bay steel-frame east wall erected in 2020 is sheathed with stucco panels installed in a manner that emulates the 1929 mill and 1935 addition's concrete superstructure. Multi-pane black-anodized-aluminum sash and brick kneewalls fill all bays with the exception of the two southernmost first-story bays, which contain full-height multi-pane black-anodized-aluminum storefronts. The south storefront includes a double-leaf door. A flat black-anodized-aluminum canopy spans both storefronts. The tall flat parapet that rises above the central three bays disguises the long, wide, low-gable-roofed monitor

that illuminates the second floor. Continuous bands of multi-pane black-anodized-aluminum sash fill the monitor's north and south walls.

Multi-pane black-anodized-aluminum sash have replaced brick fill on one or both stories of the thirteen-bay north elevation. The west bay's flat parapet is taller than the remainder of the north parapet.



Northeast oblique

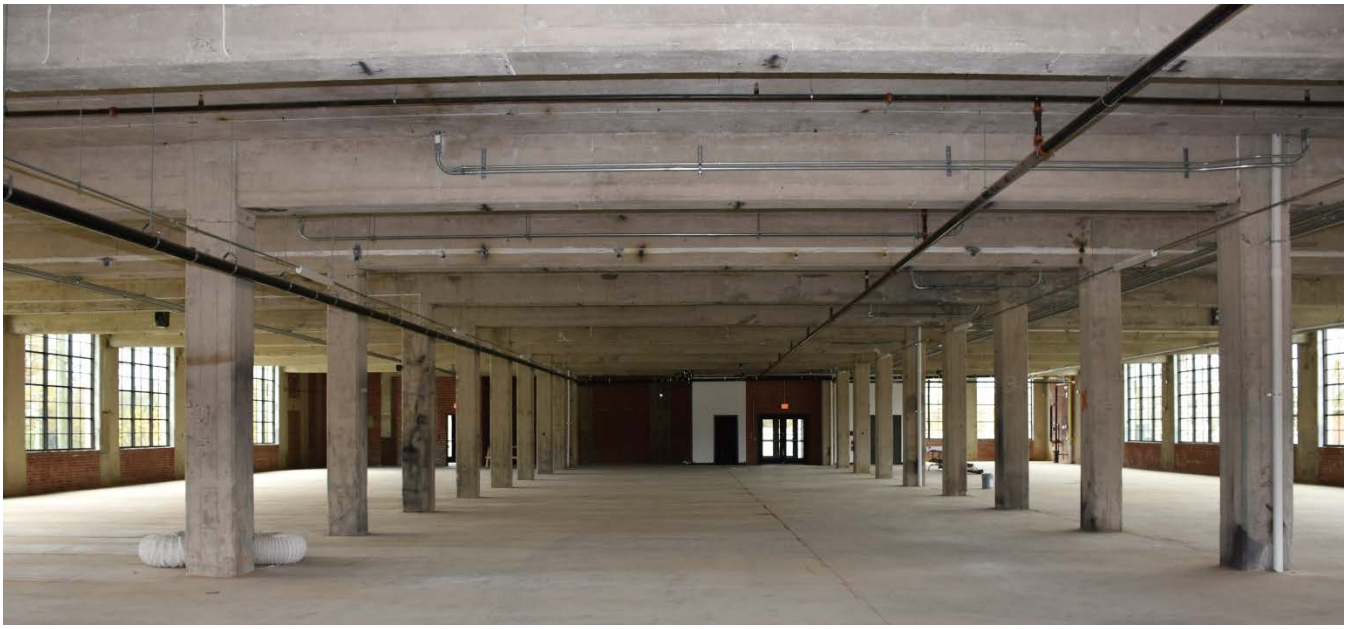
Interior

The interior is characterized by a predominantly open plan and an exposed structural system comprising fire-resistant reinforced-concrete columns, beams, and slabs; steel posts and beams; brick walls; poured-concrete floors; and wide-board roof decking. These elements were designed to minimize vibration and carry a heavy load.

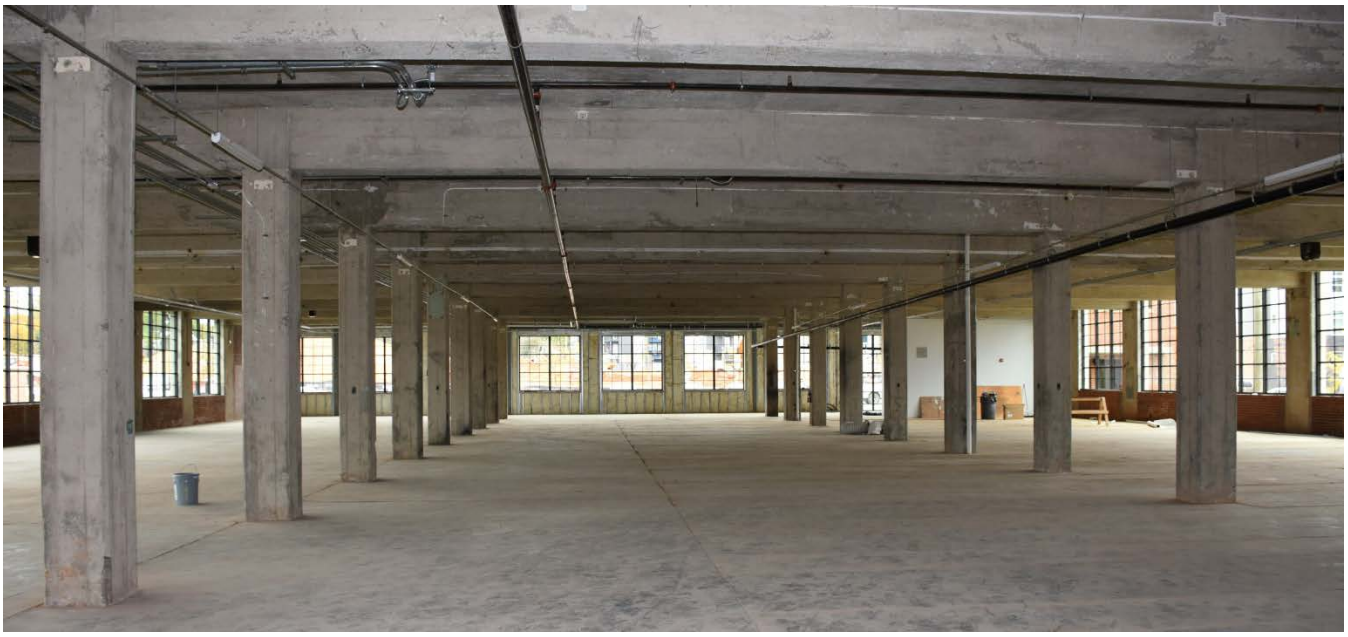
The first floor will be renovated when a tenant is secured. Sprinkler system and plumbing pipes hang from the ceiling. Surface-mounted electrical conduit has been installed. The only currently finished area is the entrance vestibule at the southeast corner, which has gypsum-board-sheathed interior walls and a polished concrete floor. The vestibule provides access to the elevator installed in 2020 as well as the 1949 southeast stair tower, where reinforced-concrete steps with tubular steel railings rise to the second floor. At the building's southwest corner, the south entrance on the west elevation opens into the 1929 stair tower, which also contains a reinforced-concrete stair with tubular steel railings. The brick 1952 elevator shaft adjacent to the north entrance on the west elevation also serves as an entrance vestibule. Much of its hardware supplied by Monarch Elevator and Machine Company remains, but the carriage is fixed in place.

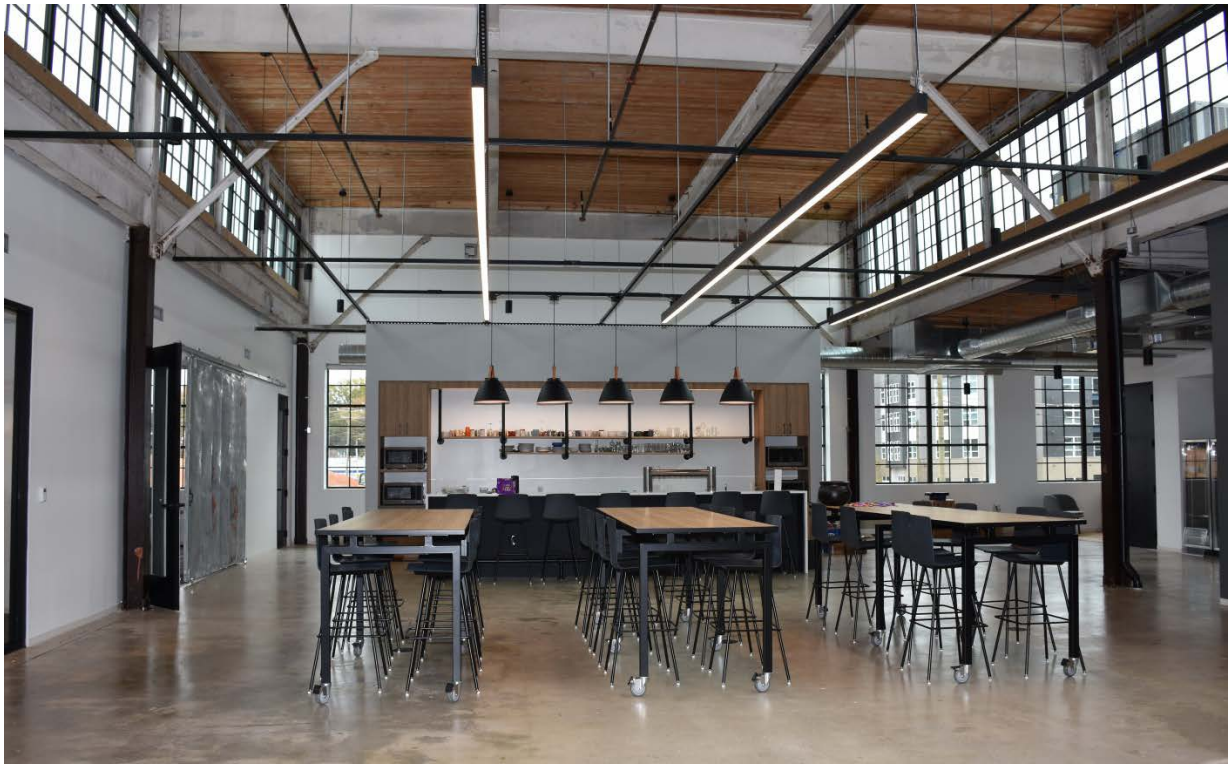
The second floor has been sensitively rehabilitated per the tenant's specifications, maintaining original finishes and expansive open areas. The central section, open to the roof monitor that illuminates it,

contains a kitchen at the east end, a dining and gathering area, and employee worktables with low fabric dividers. On the perimeter, full- and partial-height metal-frame glass and gypsum-board partition walls were erected to create meeting rooms and private work spaces. These enclosures have acoustical-tile ceilings with fluorescent light panels. Employee workstations fill long open areas adjacent to the north and south walls. The concrete floor has been polished and commercial-grade carpeting installed in some locations as a sound dampening measure. Restrooms abut the west elevation. Sprinkler system pipes, HVAC ductwork, and linear fluorescent lighting are suspended from the wide-board roof decking, which has a natural finish. Surface-mounted electrical conduit has been installed.

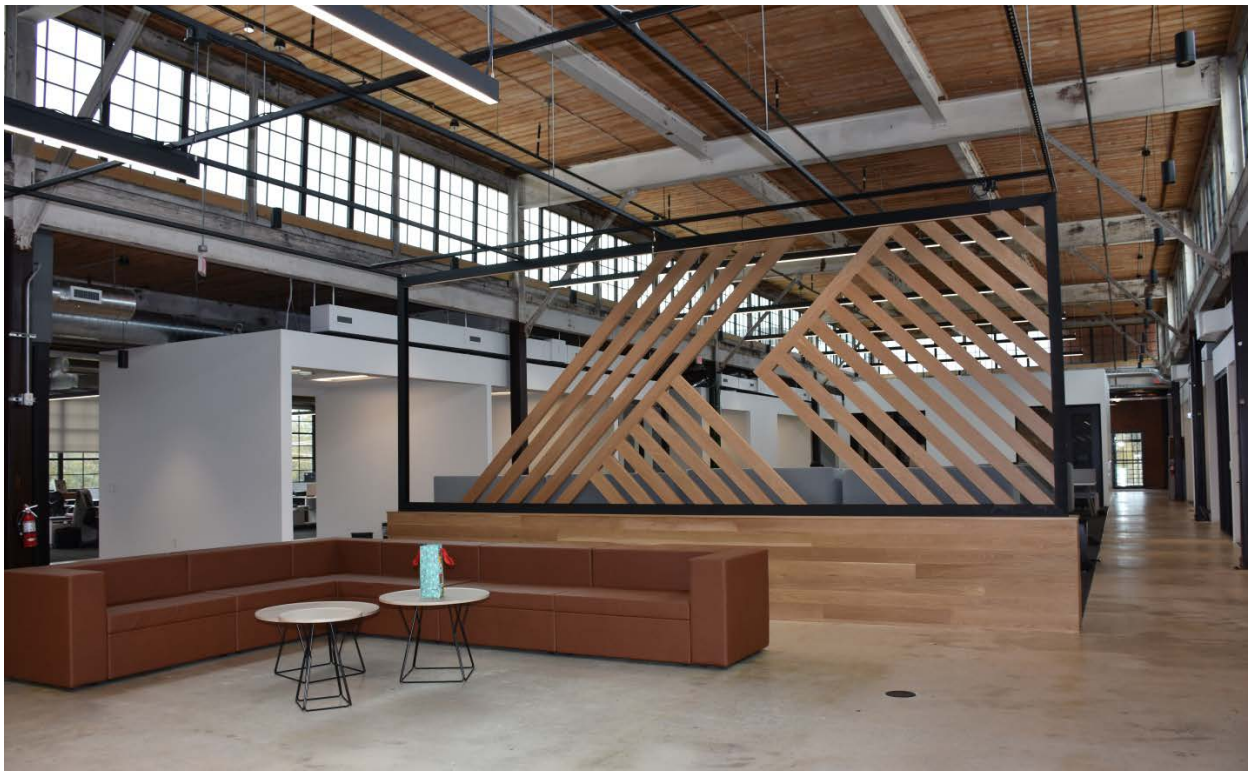


First floor, looking west (above) and east (below)





Second floor, looking east (above) and southwest (below)





Southwest oblique

Boiler House, 1949, 2020, and Smokestack, 1949

The freestanding boiler house and smokestack designed by the Charlotte architectural firm Biberstein and Bowles were constructed in conjunction with 1949 plant improvements.[2] The one-story, flat-roofed, five-to-one common-bond redbrick, one-room boiler house stands northeast of the mill. Aluminum coping caps flat parapets. The formed-concrete east elevation is blind. In 2020, historically appropriate multi-pane black-anodized-aluminum sash were installed in two high, wide openings with concrete sills on the south elevation and one tall opening on the north elevation. Two roll-up multi-pane black-anodized-aluminum doors were mounted inside the openings on the west elevation, replacing roll-up metal doors. The north elevation includes a tall roll-up corrugated-metal west door and a sliding metal east door. The interior is open with the exception of the small brick restroom at the northeast corner. Steel beams support the corrugated metal roof deck.

The tall, tapered round, redbrick smokestack north of the boiler house is emblazoned with white brick capital letters spelling "Chadbourn" on its south side. A small segmental-arched steel door covers the ash cleanout opening at the smokestack's west base. The stack has a corbelled top.

[2] "Larkwood Hosiery Mills," Box 7, Folders 1-5; "Chadbourn Hosiery Mills," Box 4, Folder 16, Box 13, Folder 1, Biberstein, Bowles, Meacham, and Reed Records (MS0148), J. Murrey Atkins Library Special Collections, University of North Carolina at Charlotte.

Integrity Statement

The Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant possesses the seven qualities of historic integrity—location, setting, feeling, association, design, materials, and workmanship—required for Local Historic Landmark designation. The plant maintains integrity of location, setting, feeling, and association, as it stands on its historic site within the industrial corridor adjacent to the railroad. The plant's two-acre parcel, which spans the entire west end of the block bounded by North Brevard Street to the west, Charles Avenue to the north, Jordan Place to the south, and North Davidson Street to the east, is of sufficient size to express the site's industrial character. The three-story apartment buildings currently being erected on the east portion of the block, a 4.25-acre tract that was once a portion of the hosiery mill complex, and the similar apartment buildings completed in 2020 front Jordan Place to the south, are functionally and stylistically incongruous. However, the buildings are typical of the high-density residential development that is proliferating throughout North Charlotte's formerly industrial corridor in conjunction with the extension of Charlotte Area Transit System's Blue Line, an elevated light rail that parallels the Norfolk Southern railroad tracks. The apartment buildings are situated in a manner that does not directly encroach upon the residual Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant tract.

The mill, boiler house, and smokestack also display their original design, materials, and workmanship. The two-story redbrick 1929 mill features Art Deco stylistic elements such as a full-height cast-stone stepped primary entrance bay and cast-stone pilasters, lintels, and cornices framing large windows. The matching 1935 addition designed by architect George N. Rhodes and erected by Wadesboro Construction Company almost doubled the building's size. The interior is characterized by a predominantly open plan and an exposed structural system comprising fire-resistant reinforced-concrete columns, beams, and slabs; steel posts and beams; brick walls; poured-concrete floors; and wide-board roof decking. The freestanding one-story, flat-roofed, redbrick, 1949 boiler house retains original window and door openings. The tall, tapered round, redbrick, 1949 smokestack north of the boiler house is emblazoned with white brick capital letters spelling "Chadbourn" on its south side. Although the previous owner's demolition of the 1946, 1949, and 1962 additions diminished the plant's overall integrity, the 1929 mill, 1935 addition, and 1949 boiler house and smokestack effectively convey the property's industrial significance.

Historical Background and Hosiery Industry Context

The dawn of the twentieth century heralded the beginning of an era of sweeping social and economic change. In the industrial sector, North Carolina hosiery production burgeoned during the century's first decades. Early manufacturers included Randleman Hosiery Mill in Randolph County, incorporated in 1893, and Durham Hosiery Mills and Golden Belt Hosiery Company, also in Durham, both established in 1895.[3] By 1914, seventy-four North Carolina knitting plants employed approximately eight thousand workers who produced almost nine million dollars-worth of stockings. Most hosiery mills were located in central North Carolina cities with strong textile manufacturing traditions such as Burlington, High Point, Asheboro, Winston-Salem, and Hickory. Furniture factories—which often manufactured spindles, bobbins, and shuttles for textile mills in addition to

[3] L. Barron Mills Jr., *Randolph County: A Brief History* (Raleigh: Office of Archives and History, 2008), 89; Jean Bradley Anderson, *Durham County: A History of Durham County, North Carolina* (Durham: Duke University Press, 1990), 213.

inexpensive furnishings marketed to mill workers—abounded in the same municipalities, as well as in Thomasville, Lexington, Salisbury, and Statesville.[4]

Mecklenburg County's first hosiery mills were in Charlotte. Morehead Jones and Kenneth S. Tanner established Defiance Sock Mills in January 1915 and purchased land on which to build a two-story brick mill in September. The concern, which manufactured men's and women's hosiery, employed around fifty people by 1917. Contractor R. N. Hunter erected a dye house for the plant in June 1918. Although steadily increasing product demand necessitated the 1920 construction of an $18,000 addition by contractor R. L. Goode, the company ceased operation in1922.[5]

Defiance Sock Mills was Charlotte's sole hosiery manufacturer until March 1917, when local entrepreneurs J. H. Cutter, George B. Hiss, and R. J. Walker organized Charlotte Knitting Company. The business purchased Charlotte Trouser Company's two-story brick factory on South Boulevard near Kingston Avenue, installed approximately one hundred knitting machines, and began producing men's socks in June. The plant was enlarged and updated in 1922 and 150 employees produced men's socks and women's full-fashioned silk hosiery by spring 1923. In January of that year, Charles L. Okey moved from Chicago to Charlotte and assumed the company's presidency. Okey, who with D. F. Crawford of Chicago owned Okey and Crawford, a hosiery and knit apparel sales agency, had in December 1921 collaborated with J. Henry McEwen to purchase a majority interest in Charlotte Knitting Company. Okey and Crawford encouraged William Nebel, the owner of Atlas Silk Hosiery Company in Patterson, New Jersey, to establish a Charlotte business. The resulting entity, Nebel Knitting Company, incorporated in May 1923, initially operated from a building at 1812 South Boulevard where sixty workers manufactured full-fashioned women's hosiery by 1925.[6] Nebel Knitting Company erected a two-story brick mill in the 100 block of West Worthington Avenue in 1927 and expanded the plant east toward Camden Road with a two-story brick addition in 1929. Charlotte textile mill architect and engineer Richard C. Biberstein designed the mill and addition.[7] Okey and Crawford invested in Nebel Knitting Company and marketed its products. The men also represented Hudson Silk Hosiery Mills Company, which moved from Union City, New Jersey, to Charlotte in spring 1926, initially hiring 125 operatives for its full-fashioned plant on South Boulevard. The concern began erecting a second mill in the 700 block of Brevard Street in July 1928 and employed a total of approximately 380 workers at both locations within a year.[8]

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[4] Brent D. Glass, *The Textile Industry in North Carolina: A History* (Raleigh: North Carolina Department of Cultural Resources, Division of Archives and History, 1992), 44.

[5] "Textile Notes from North Carolina," *Times-Dispatch* (Richmond, VA), September 26, 1915, section 2, p. 2; This is the City for Knitting Mills," *CO*, May 30, 1916, p. 6; "Defiance Sock Mills Employ High Class of Skilled Labor," *CN*, industrial edition, February 21, 1917, p. 32; "Will Build Three Handsome Res.," *CN*, June 16, 1918, p. 2; "Building Plans in City Listed," *CN*, March 31, 1920, p. 2; Mattson, Alexander and Associates, Inc., "Defiance Sock Mills," Survey and Research Report, Charlotte-Mecklenburg Historic Landmarks Commission, October 15, 2011

[6] "Hosiery Plant to Locate Here," *CO*, March 18, 1917, p. 6;"Charlotte Knitting Company New Industry," *CO*, August 12, 1917, p. 28; "Knitting Company Bought by McEwen," *CN*, December 17, 1921, p. 3; "Knitting Mill Will Enlarge," *CN*, December 15, 1922, p. 2; "Stocking Plant Organized Here," *CO*, May 5, 1923, p. 15; Davison Publishing Company, .*Davison's Textile Blue Book: United States and Canada*. New York: Davison 1925, 739; "Charlotte Knitting Co. In Big Expansion," *CO*, December 9, 1928, section 4, p. 1.

[7] Suzanne S. Pickens and Richard L. Mattson, "Nebel Knitting Mill," Survey and Research Report, Charlotte-Mecklenburg Historic Landmarks Commission, November 26, 1990.

[8] "Hudson Silk Hosiery Mills Co.," *CO*, May 2, 1926, section 4, p. 2; "Hosiery Mill Permit Boosts Total of City Inspector's Office," *CO*, July 3, 1928, section 2, p. 1; "Hudson Plant Well Equipped," CO, November 22, 1930, *CO*, Carolinas Progress Edition, p. 93.

Charlotte's rapidly growing hosiery industry reflected statewide trends in the late 1920s. North Carolina was second only to Pennsylvania in the number of hosiery mills operating in 1927, when 117 plants in thirty-five counties employed approximately 15,500 workers and produced hosiery valued at almost $53 million. Alamance County contained the largest number of hosiery mills (26), followed by Guilford County (15), Catawba County (10), Burke and Durham counties (8 each), and Forsyth and Randolph counties (5 each).[9] Burlington, with thirty-two hosiery mills, was North Carolina's hosiery manufacturing center in 1931, followed by High Point, with sixteen hosiery plants.[10]

Charlotte hosiery manufacturing increased in late 1929, when Larkwood Silk Hosiery Mills, headed by president William Sachsenmaier, who resided in Atlantic City, New Jersey; and treasurer Elwood W. Sachsenmaier, vice president Robert H. Moeller, and secretary Frank H. Hoffman of Charlotte, opened a north Charlotte plant where approximately one hundred workers operated thirty-three knitting and twenty-three sewing machines. The two-story redbrick mill, which features Art Deco elements such as a full-height cast-stone stepped primary entrance bay and cast-stone pilasters, sills, and lintels framing large multi-pane steel windows, fronts North Brevard Street and the railroad corridor. The full-fashioned women's hosiery producer's signature brands included the nationally popular "Larkwood" and "Larkette" lines, which had a reinforced foot that increased durability. Retailers marketing the products included Charlotte department store J. B. Ivey and Company. In 1930, Larkwood Silk Hosiery Mills and four other Charlotte hosiery manufacturers—Charlotte Knitting Company, Ellis Silk Company, Hudson Silk Hosiery Company, and Nebel Knitting Company—enjoyed strong product demand. Hudson Silk Hosiery Company was the largest concern, with approximately four hundred employees, followed by Nebel Knitting Company (three hundred workers), and Charlotte Knitting Company (150 operatives).[11] All five companies took advantage of lower land prices, unfettered expansion opportunities, and railroad proximity when locating their plants outside of downtown.

During the early 1930s, the textile industry faced challenges exacerbated by the Great Depression's onset. More efficient equipment and mechanization that transformed manufacturing operations led to employee layoffs. Job loss, decreased pay, and poor working conditions made unions more appealing. These factors set the stage for demonstrations across the South. In July 1932, approximately 360 workers from High Point's sixteen hosiery mills fought wage reductions by organizing a walk-out. Their protest inspired almost 15,000 North Carolina cotton, furniture, and hosiery mill laborers to do the same within a week. Demonstrators were quickly pacified, but other strikes followed. Two years later, around 65,000 North Carolinians were among approximately 400,000 laborers who forced plant closures throughout the southern United States during the three-week General Textile Strike of September 1934. Many mill owners fired known union members and sympathizers. Union efforts

[9] Marvin Shirley, "Of 672 Mills In County, State Has 117, Is Second to Pennsylvania With 277," *Charlotte Observer*(hereafter abbreviated *CO)*, November 23, 1930; Robert Menzies, "Stockings Miss North Carolina Buys From Chicago Probably Made at Home," *News and Observer* (Raleigh; hereafter abbreviated *NO*), October 24, 1937; "Migration," *NO*, January 29, 1939; C. H. McGregor, *The Hosiery Manufacturing Industry in North Carolina and Its Marketing Problems*, Research Paper 15, Graduate School of Business Administration, University of North Carolina at Chapel Hill, June 1965, 6-7.

[10] Jacquelyn Dowd Hall, James Leloudis, Robert Korstad, Mary Murphy, Lu Ann Jones and Christopher B. Daly, *Like a Family: The Making of the Southern Cotton Mill World* (New York: W.W. Norton and Company, 1987), 255.

[11] "The Larkwood Silk Hosiery Mill Makes the Famous 'Larkwood Vamp Toe' Hose," *CO*, February 24, 1930, pp. 6 and 8; "Larkwood Hosiery Mills Increase Production," *Charlotte News* (hereafter abbreviated CN), June 29, 1931, pp. 1 and 3 B; *Davison's Textile Blue Book*, 1930, 683.

were not in vain, however, as the Roosevelt administration's social and economic reform programs eventually resulted in the institution of a forty-hour work week and increased worker pay.[12]

Larkwood Silk Hosiery Mills' workforce numbered 155 by June 1933, when 75 employees joined Hudson Hosiery mill operatives in a strike for unionization. Larkwood Silk Hosiery Mills fired seven employees who were American Federation of Full-Fashioned Hosiery Workers members, but asserted that employees were free to join a company-sponsored union. The strike resulted in a several-day plant closure, but did not achieve policy change.[13]

Most sizable North Carolina hosiery manufacturers weathered the strikes and economic downturn during the Great Depression, maintaining and in some cases increasing production. Larkwood Silk Hosiery Mills employees operated 62 knitting, 21 sewing, and 15 looping machines in early 1935. The 8,820-square-foot rear addition designed by architect George N. Rhodes and erected by Wadesboro Construction Company that year almost doubled the building's size and dramatically increased production capacity. The expansion was finished in September 1935 at an approximate cost of $350,000, including twenty-four knitting machines and other equipment valued at about $150,000. The concern hired new workers, resulting in a three-hundred-person labor force by May 1937. Many employees joined company-sponsored basketball, baseball, and bowling teams and enjoyed playing tennis on courts east of the mill.[14]

In 1936, North Carolina's 187 hosiery mills (of the South's 239) housed 2,028 full-fashioned hosiery machines. By the late 1930s, more new hosiery mills were being established in the state than any other type of industrial plant. In 1938, entrepreneurs erected forty-four new plants and expanded thirty-eight existing hosiery mills, resulting in a total of 249 hosiery mills (75 full-fashioned and 174 seamless) by 1939. North Carolina manufactured approximately twenty-six percent of the nation's hosiery that year, almost doubling the state's 1929 product.[15]

North Carolinians rose to the challenges of World War II in the early 1940s. Larkwood Silk Hosiery Mills employees were among the approximately 20,836 Mecklenburg County residents who served in the military.[16] Those remaining at home were occupied with the war effort in a variety of ways, from rationing and participating in bond and salvage drives to filling vacant positions at mills and factories that accelerated production to meet the needs of servicemen and women. Worker demographics changed as industrial jobs rose by seventy-five percent in the South over the course of World War II, with traditionally underemployed groups such as women, African Americans, and the elderly receiving

[12] Hall, et al., *Like a Family*, 202-208, 217; Margaret Crawford, *Building the Workingman's Paradise: The Design of American Company Towns* (London and New York: Verso, 1995), 194-195; "Hosiery Mills to Open Today," *Asheville Citizen-Times*, July 28, 1932, p. 2.

[13] "Charlotte Has Two Mill Strikes," *Statesville Record and Landmark*, June 16, 1933, p. 9.

[14] "Annex Will Be Built on Local Plant at Once," *CO*, January 4, 1935, section 2, p. 1; "Begin Work on Larkwood Mill Building Here," *CN*, January 24, 1935, p. 20; "Start Building Hosiery Mill Near Oakhurst," *CO*, January 29, 1935, section 2, p. 1; "Fast Progress on Plant for Hosiery Work," *CN*, March 15, 1935, p. 7; "Hosiery Mill's Building Ready," *CO*, September 24, 1935, section 2, p. 1; *Davison's Textile Blue Book*, 1935, 540; "Larkwood Mill Major Industry in Charlotte," *CN*, May 25, 1937, p. 32.

[15] Guilford County Incorporation Book N, p. 70; *E.S.C. Quarterly*, Winter-Spring 1953, 17; Marvin Shirley, "Of 672 Mills In County, State Has 117, Is Second to Pennsylvania With 277," *CO*, November 23, 1930; Robert Menzies, "Stockings Miss North Carolina Buys From Chicago Probably Made at Home," *NO*, October 24, 1937; "Migration," *NO*, January 29, 1939; McGregor, *The Hosiery Manufacturing Industry in North Carolina*, 6-7.

[16] Spencer B. King Jr., S*elective Service in North Carolina in World War II* (Chapel Hill: University of North Carolina Press, 1949), 322.

invaluable education, training, and experience. Output soared after May 1943, when President Franklin D. Roosevelt established the Office of War Mobilization to coordinate a diverse array of support endeavors including manufacturing, scientific research, and agricultural production.[17]

In May 1940, Larkwood Silk Hosiery Mills and Hudson Silk Hosiery Company introduced nylon stockings woven with DuPont yarn, becoming the first Charlotte manufacturers to do so. Although World War II silk importation and nylon rationing presented stocking production challenges, North Carolina hosiery mills adapted by utilizing more cotton, wool, and synthetic fibers in items produced for retail and military markets. Many mill employees contributed a portion of their wages to defense savings bonds, the Red Cross, and other initiatives supporting the war effort.[18] Military orders fueled production at North Carolina hosiery mills through the mid-1940s. Larkwood Silk Hosiery Mills was one of seven Charlotte manufacturers of full-fashioned women's hosiery in 1944. Nebel Knitting Company produced both full-fashioned and seamless stockings, while Oakhurst Knitting Company offered only seamless hosiery.[19]



Southwest oblique from *Charlotte, North Carolina: Focal Point of the Carolinas*, 1948

Burlington-based Chadbourn Hosiery Mills purchased Larkwood Silk Hosiery Mills in February 1945 and moved its headquarters to Charlotte. Former Larkwood executives Elwood W. Sachsenmaier, Robert H. Moeller, and Frank H. Hoffman remained associated with the merged firm. Chadbourn Hosiery Mills was the successor to Rufus D. Wilson's namesake Burlington hosiery mill, established in 1936. Charlotte resident J. Chadbourn Boles had assumed the company's presidency following

[17] Marilyn M. Harper, et. al., *World War II and the American Home Front* (Washington, D. C.: The National Historic Landmarks Program, October 2007), 3, 13-16.

[18] "Nylon Points are Explained," *CO*, May 10, 1940, section 2, p. 4; "They're Fighting Two Battles on one Beachhead," *Daily Times-News* (Burlington; hereafter abbreviated *DTN)*, June 6, 1945, p. 9.

[19] *Davison's Textile Blue Book*, 1944, 490-491.

Wilson's September 1938 death at the age of forty-one. Boles had formerly served as a trust officer at North Carolina Bank and Trust Company in Greensboro and American Trust Company in Charlotte. On July 31, 1944, he changed Rufus D. Wilson, Inc.'s name to Chadbourn Hosiery Mills in his mother's honor.[20]

As production at the Burlington plant tripled during the mid-1940s, Chadbourn Hosiery Mills opened knitting mills in Shenandoah, Virginia (1943) and Siler City, North Carolina (1944), as well as a New York City sales office (1944). Chadbourn Hosiery Mills purchased Full-Knit Hosiery Mill, with Burlington and Shelby factories that produced men's socks, in September 1945, and the following year acquired and updated Best Manufacturing Company, a yarn throwing plant in Gainesville, Georgia. The concern also acquired a plant in Midland, North Carolina (near Albemarle). The company announced an almost two-million-dollar improvement campaign at the Charlotte, Midland, and Siler City plants in June 1946. Contractor C. M. Guest and Son enlarged the Charlotte mill in 1946, facilitating equipment replacement as the company transitioned to using nylon rather than rayon yarns and doubled capacity.[21] The concern further expanded and updated the Charlotte complex in 1949 with a sizable Art Moderne-style addition and a boiler house designed by Charlotte architects Biberstein and Bowles. The addition housed administrative and manufacturing departments and a cafeteria, locker rooms, and showers. The $750,000 modernization program also included air conditioning and automated knitting machine installation. At that time, the Charlotte plant employed approximately 300 of the company's 1,500 workers. The Burlington labor force included 91 employees at the full-fashioned hosiery plant and 275 operatives at Full-Knit Hosiery Mill.[22]

In 1950, twenty Charlotte knitting mills manufactured a diverse array of goods, ranging from full-fashioned and seamless hosiery to socks, fabric, undergarments, polo shirts, and storage bags. Knitting plants increased production in the early 1950s, when many companies benefited from sizable defense contracts during the Korean War. Mill owners expanded their operations and facilities during that period, reflecting North Carolina's standing as one of the industry's largest centers. Chadbourn Hosiery Mills purchased Owen Osborne Hosiery Mills, a Gainesville, Georgia full-fashioned hosiery mill with around 255 employees, in September 1950. The company began manufacturing boxes for its products in an existing one-story building at the corner of Fourth and Caldwell Streets in Charlotte in 1952. Also that year, Biberstein, Bowles, and Meacham designed the freight elevator shaft and penthouse erected at the North Brevard Street plant by Frank Connor Construction Company of Charlotte.[23]

North Carolina's 255 seamless, 126 full-fashioned, and 381 knitting mills generated approximately forty percent of the nation's hosiery in 1951. Two years later, most of Mecklenburg County's hosiery

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[20] "Effective July 31, 1944," *DTN*, July 15, 1944, p. 10; "Burlington Hosiery Manufacturer," *DTN*, February 22, 1945, p. 5; "Chadbourn Mills Buys Full-Knit Hosiery Mill," *DTN*, September 27, 1945, p. 9;

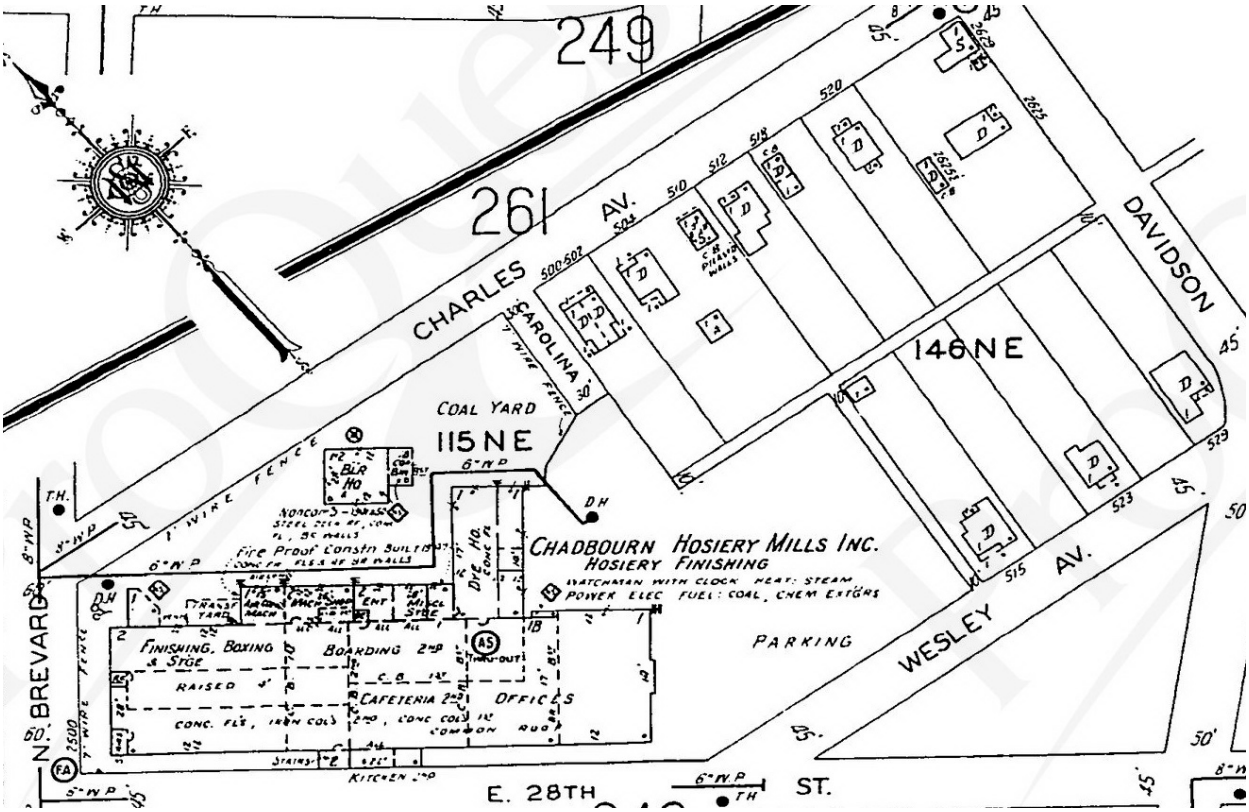
[21] "Chadbourn Mills Buys Full-Knit Hosiery Mill," *DTN*, September 27, 1945, p. 9; "Timetable Necessary if Santa Claus Has Nylons for Ladies," *Daily News* (Pampas, Texas), November 15, 1945, p. 12; "Chadbourn Hosiery Mill Buys Industry at Gainesville, Ga.," *DTN*, March 2, 1946, p. 3; "Big Expansion Program is Announced Today By Chadbourn Hosiery Mills," *DTN*, June 18, 1946, p. 9.

[22] "Chadbourn Operates Two Plants Here," *DTN*, Centennial Edition, May 9, 1949, p. 114; "Mill Expands," *Statesville Daily Record*, September 14, 1949, p. 9; Hazel M. Trotter, "Chadbourn Mill Starts $750,000 Expansion," *CO*, September 14, 1949, pp. 1 and 2.

[23] *Davison's Textile Blue Book*, 1950, 592-593; "Chadbourn Buys Hosiery Plant," *Gastonia Gazette*, September 14, 1950, p. 10; "Chadbourn Opens Package Plant," *CN*, December 12, 1952, p. 21; "Chadbourn Hosiery Mills," Box 4, Folder 16, Biberstein, Bowles, Meacham, and Reed Records, J. Murrey Atkins Library Special Collections, University of North Carolina at Charlotte.

production remained in Charlotte, where the aggregate labor force of nine full-fashioned hosiery mills was around 2,560 workers and four other knit products plants had approximately 160 operatives.[24]

Chadbourn Hosiery Mills owned seven manufacturing sites in three states by 1953. A. T. Glenn managed the full-fashioned hosiery dying and finishing plant in Charlotte. That facility employed 355 of the concern's 1,025 North Carolina workers, including administrative staff. The full-fashioned hosiery mills in Siler City and Burlington each had approximately 140 workers, while 225 employees generated men's and boys' socks at the Burlington Full-Knit Hosiery Mill plant. The company closed the Burlington full-fashioned hosiery mill on September 1, 1953, transferring the equipment to its Shenandoah, Virginia, plant and offering workers jobs at other mills.[25] Chadbourn Hosiery Mills initiated a 1955 merger with New York-based Gotham Hosiery Company, established in 1913. The resulting entity, Chadbourn Gotham, Inc., was headquartered in Charlotte. Also in 1955, the concern purchased Shannon Hosiery Mills, which had a Columbus, Georgia, plant, and established Patentex, Inc. to pursue patents and issue licenses to other manufacturers. Chadbourn Gotham's sales offices in Charlotte, Chicago, Los Angeles, Montreal, New York, and San Francisco marketed full-fashioned and seamless hosiery, socks, and undergarments manufactured at plants in North Carolina (4), Virginia (3), Georgia (2), Reading, Pennsylvania, and Saint Hyacinthe, Quebec, Canada.[26]



Sanborn Map Company, "Charlotte, North Carolina," 1953, Volume 2, Sheet 253

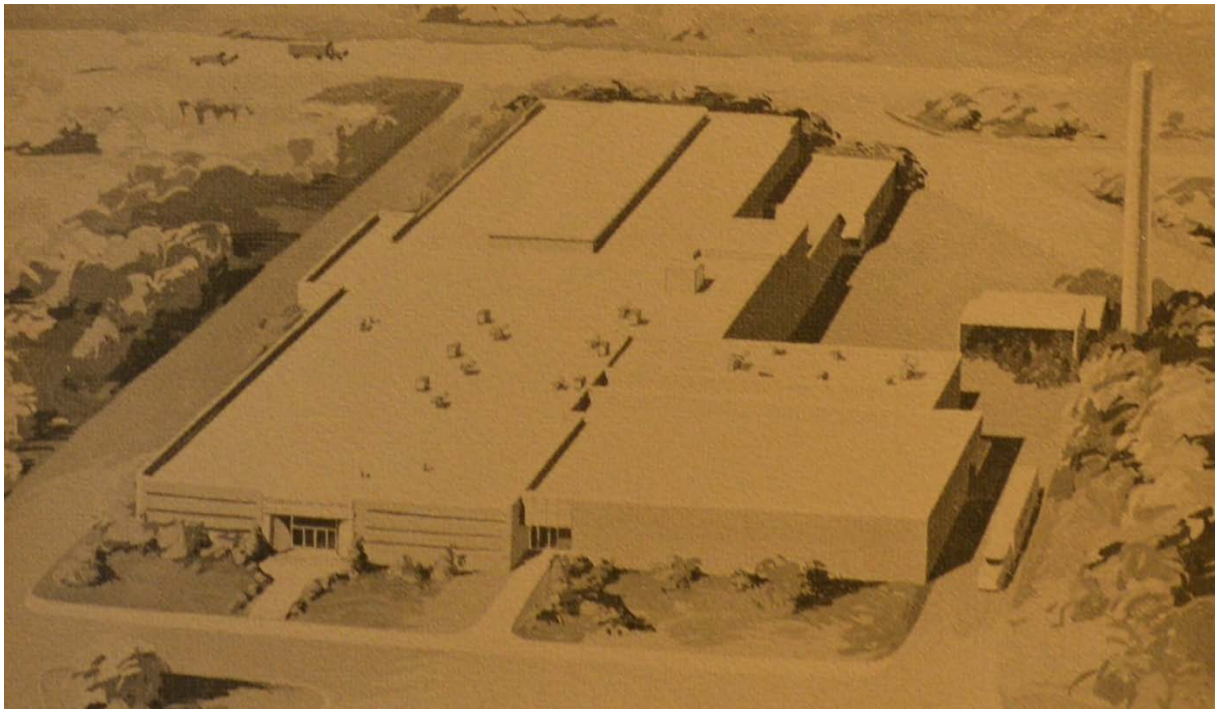
[24] *E.S.C. Quarterly*, Winter-Spring 1953, 3-5, 38-39.

[25] Ibid.; "Chadbourn Plant No. 1 Will Move to Virginia," *DTN*, June 23, 1953, p. B1.

[26] "Charlotte Mill Plans Merger," *Statesville Record and Landmark*, July 27, 1955, p. 8; "Mill Merger Is Approved," *Gastonia Gazette*, April 21, 1955, p. 4; "Chadbourn-Gotham Hosiery Merger OKed," *Robesonian*, September 20, 1955, p. 4; Chadbourn Gotham Inc., "1956 Annual Report," Wilson Library, University of North Carolina at Chapel Hill; *Davison's Textile Blue Book*, 1959, 441.

Women's fashion shifts dramatically impacted hosiery production during the late 1950s. As full-fashioned hosiery declined in popularity, the associated job of sewing seams became obsolete and concerns laid off many of their full-fashioned knitters. State-wide statistics reflect this trend. Although almost half (49.4 percent) of the nation's hosiery mills were located in North Carolina in 1958, the state's full-fashioned hosiery mills decreased sixty-one percent in number (from 414 to 159 plants) by 1963.[27]

Chadbourn Gotham Inc.'s production remained stable, however, and in 1958 the concern acquired Winder, Georgia-based Carwood Manufacturing Company, established by W. Clair Harris in 1927 to produce men's and boys' work clothes and sportswear. At the time of the merger, Carwood Manufacturing Company had 1,900 employees and seven northeast Georgia factories. Davenport Hosiery Mills of Chattanooga, Tennessee, became a subsidiary of Chadbourn Gotham in July 1960. In 1962, the company enlarged its Charlotte plant to increase hosiery finishing capacity and acquired Opal Strumpfwerke, then Germany's second-largest hosiery manufacturer. Chadbourn Gotham remained one of the United States' leading hosiery producers, with an annual capacity of ninety-million-dozen ladies seamless stretch stockings. The concern also enjoyed success with its lingerie, leisure, and sleep wear lines. In 1965, Chadbourn Gotham purchased two neighboring Charlotte plants—Hudson Hosiery Company and Nebel Knitting Mill—resulting in a 2,500-person Mecklenburg County workforce.[28]



Chadbourn Gotham Inc.'s Charlotte plant rendering from "1961 Annual Report," p. 5
Wilson Library, University of North Carolina at Chapel Hill

[27] McGregor, *The Hosiery Manufacturing Industry in North Carolina*, 7, 23.

[28] Chadbourn Gotham Inc., "1958 Annual Report," Wilson Library, University of North Carolina at Chapel Hill; "Chadbourn Buys German Firm," *DTN*, September 5, 1962, p. 9; *Davison's Textile Blue Book*, 1965, 15-68.

Fashion trends again influenced the hosiery industry in the late 1960s as more women began wearing pants and therefore purchased short stockings, which were much less labor-intensive to produce than pantyhose, or dispensed with hosiery altogether. Chadbourn Gotham persevered, albeit with management and organizational changes, until the late 1970s. Chief executive officer and board chairman J. Chadbourn Boles, who began his career at Chadbourn Hosiery Mills in 1938, retired on his sixty-fifth birthday, September 1, 1970. That year, Chadbourn Inc. absorbed Standard Knitting Mills, Inc., as a subsidiary corporation. In 1973, Fort Payne, Alabama-based W. B. Davis Hosiery Sales, Inc. purchased Chadbourn Inc. and its subsidiary firms including Carwood Manufacturing Company. Duck Head Apparel Company subsequently acquired Carwood Manufacturing Company. The late 1970s were a challenging period for the American textile industry, as foreign manufacturers flooded the market with less expensive products. Due to intense competition within the domestic hosiery industry, rapidly changing technology, and globalization that negatively impacted the market for American textiles, Chadbourn Inc. closed its Charlotte plant in 1978. The building was then utilized by a textile salvage company.[29]

Textile Mill Architecture

Many of North Carolina's nineteenth-century textile producers adapted existing frame buildings to serve as their first mills. Such structures, which usually had rough-sawn wood floors and wood-shingle roofs, often resembled large residential or agricultural buildings as they were typically located in rural settings along the rivers and streams that generated their power. Edwin Michael Holt and William A. Carrigan's frame 1837 mill on Alamance Creek, was one of the piedmont's earliest sizable textile mills.[30] In the first purpose-built industrial buildings erected in the United States, engineers and architects strove to accommodate machinery in a manner that allowed for efficient access to power sources as well as maximum utilization of natural light and ventilation. By the mid-nineteenth century, "slow-burn" masonry construction, with load-bearing brick walls, exposed heavy-timber framing, thick plank floors, gabled roofs, large operable windows and transoms, and metal fire doors predominated.[31]

During the late nineteenth century, steam and electric power availability encouraged factory movement to urban areas in close proximity to railroad lines and sizable potential employee pools. Mill and factory design evolved from a process whereby owners worked with builders who erected edifices based on mutually understood norms to a field dominated by professionally-trained engineers who rendered plans for industrial buildings and supervised their execution. Although the construction of durable, economical structures was the primary objective, variegated, patterned, and corbelled brick and cast-stone accents were employed as an inexpensive means to increase aesthetic interest. Expressed pilasters, stringcourses, water tables, window sills, arched door and window lintels, and exterior stair towers enhanced visual appeal while serving important structural functions. Stair towers were often the most ornate elements of an industrial complex, featuring complex roofs and decorative masonry.[32]

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[29] "65th Birthday," *Rocky Mount Telegram*, September 2, 1970, p. 25; "Chadbourn Sale Set," *Statesville Record and Landmark*, July 11, 1973, p. 2; "Agreement is Reached," *Statesville Record and Landmark*, August 1, 1974, p. 22.

[30] Betsy Hunter Bradley, *The Works: The Industrial Architecture of the United States* (Oxford: Oxford University Press, 1999), 16-17; Glass, *Textile Industry*,16-17; Laura A. W. Phillips, "Alamance Mill Village Historic District," National Register of Historic Places nomination, 2007.

[31] Sara E. Wermiel, "Heavy Timber Framing in Late-Nineteenth-Century Commercial and Industrial Buildings," *APT Bulletin: Journal of Preservation Technology*, Volume 35, No. 1, 2004, 56.

[32] Bradley, *The Works*, 15-21, 230-234; Glass, *Textile Industry*, 38.

Standards imposed by machinery manufacturers and insurance companies also guided industrial architecture's evolution during the late nineteenth century. In order to minimize fire risk, stairwells, which could serve as conduits for fire movement between floors, were located in projecting stair towers. Brick interior walls and galvanized-sheet-metal-clad, solid-core-wood doors, known as kalamein doors, separated the mill sections where fires might start or spread rapidly. These heavy doors would automatically close in the case of a fire, as the heat would melt a soft metal link in the door's counterweight assembly and the door would slide shut on the sloped metal track. As an additional precaution, water reservoirs and elevated water tanks supplied automatic sprinkler systems in many industrial complexes. In order to achieve sufficient altitude to pressurize the sprinkler system, tanks needed to be at least twenty-five feet higher than sprinkler heads and were thus typically housed on the upper floor of stair towers or mounted on freestanding steel frames.[33]

During the twentieth century's first decades, architects and engineers continued to plan manufacturing complexes that were similar in appearance to earlier industrial buildings. However, new materials, technology, and forms manifested efficiency, modernity, and economic progress. Mill and factory designers specified steel and reinforced-concrete columns, posts, and beams in conjunction with brick, concrete, terra cotta block, or tile curtain walls that provided structural bracing but did not carry any weight. Bands of steel-frame multipane windows and roof monitors provided workers with abundant light and ventilation. Steel truss roof systems spanned open interiors that accommodated sizable equipment and allowed for flexibility as manufacturing needs changed.[34]

Although structural systems for some late-nineteenth-century industrial buildings included cast-iron or wrought-iron columns or steel posts and beams, high cost greatly limited the materials' use until the early twentieth century. The ability to withstand the weight and vibrations of heavy machinery without failing contributed to the widespread use of structural-steel construction by the 1910s, as did the ease of fabricating framing systems from standard factory-generated parts. Typical elements include I-, T-, H-, and box-shaped beams and posts; round columns; reinforcing plates; and angles, which serve as braces, tension members, struts, or lintels. Steel components could be riveted together, creating strong connections, and tended to be smaller and lighter than heavy-timber or iron framing members. This allowed for wider and taller buildings with more square footage for equipment. The popularity of flat roofs and sizable roof monitors also resulted in structural-steel framing prevalence. In order to reduce oxidation and achieve fire resistance, steel members were coated with intumescent paint; sprayed with a thin mixture of cement, sand, and water called gunite; or encased in concrete.[35]

Concrete construction technology also improved during the early twentieth century. Engineer Claude A. P. Turner patented a structural system comprised of concrete mushroom columns and formed-concrete floors in 1908 after utilizing it in his plans for Minneapolis's 1906 Johnson-Bovey Building. He then designed the first American bridge supported by the columns, which carried Lafayette Avenue over the Soo Line in St. Paul, Minnesota. The Cameron Avenue Bridge over Falling Branch Creek in Winston-Salem, completed in 1920, possesses statewide engineering significance as North Carolina's only such structure employing reinforced-concrete mushroom columns to carry a concrete slab span. The technology was often used in mill construction, appearing in North Carolina factories such as

[33] Glass, *Textile Industry*, 38; John A. Collins Jr., "Extinguishing Textile Mill Fires," *Textile World*, March 4, 1922, p. 81.

[34] Bradley, *The Works*, 144-147.

[35] Ibid.

those erected in Winston-Salem by R. J. Reynolds Tobacco Company beginning in 1915 and the six-story knitting mill that P. H. Hanes Knitting Company built in 1921.[36]

Albert Kahn was one of only a few American architects who specialized in industrial building design during the early twentieth century. In many of his commissions, traditional load-bearing walls were replaced with curtain walls containing large steel-frame windows, and monitor roofs provided illumination and ventilation. His office supplied factory plans to hundreds of American industrialists including automobile manufacturers Packard, Chrysler, Ford, and General Motors, as well as for international clients. At the Packard Motor Car Company Forge Shop (1910) in Detroit, Kahn used a steel structural frame to support a traveling crane mounted to the roof trusses and glass curtain walls to allow for maximum light and air circulation. He minimized the exterior walls' bay articulation by specifying narrow steel columns of about the same size as steel window sashes. Kahn's firm continued to employ bands of steel windows in conjunction with masonry or concrete screens to conceal steel structural framing in edifices such as the Industrial Works (circa 1915) in Bay City, Michigan. The firm's design for the Dodge Half-Ton Truck Plant in Detroit, completed in 1937, was a much more sophisticated building with tall glazed curtain walls reminiscent of Walter Gropius's Bauhaus School (1926) in Dessau, Germany.[37] Gropius's streamlined design for the 1911 Fagus Factory in Germany, which features steel-frame multipane curtain walls, was also internationally influential.[38]

Modernist architectural principles such as simplicity, efficiency, affordability, and intrinsic material expression were inherently applicable to industrial buildings. Industrial architecture continued to reflect these tenets as the twentieth century progressed. Building materials and labor were in short supply during World War II, but when construction resumed after the war's end, steel and reinforced-concrete industrial edifices with masonry (brick, tile, or concrete) curtain walls predominated. Fire-resistant corrugated metal and asbestos panels were often used as warehouse sheathing. Windows decreased in size and number in the 1960s as central air conditioning became prevalent. Artificial lighting replaced natural light sources.

North Carolina Mill Engineers and Architects

North Carolina industrialists benefited from the contributions of resident engineers who disseminated specifications dictating best practices in mill layout and design. South Carolina native Daniel A. Tompkins, sent by the Pittsburgh-based Westinghouse Engine Company to Charlotte in the early 1880s

[36] As construction drawings for the Cameron Avenue Bridge have not been located, the engineer is unknown. However, R. J. Reynolds Tobacco Company commissioned the bridge's construction as part of its development of the surrounding neighborhood for its employees. J. E. Sirrine and Company, architects and engineers of many of the company's structures, specified mushroom columns for buildings erected during that period. A. S. Macolmson, "The Mushroom System of Reinforced Concrete Building Construction," *Engineering-Contracting*, September 4, 1907, p. 137; Lichtenstein Consulting Engineers, Inc., "Bridge ID No. 330373," North Carolina Department of Transportation Historic Bridge Inventory Report, 2003; Nannie M. Tilley, *The R. J. Reynolds Tobacco Company* (Chapel Hill: University of North Carolina Press, 1985), 307; *Manufacturers' Record*, August 26, 1915 and October 14, 1915.

[37] "Art: Industrial Architect," *Time*, August 8, 1938; Bradley, *The Works*, 248, 248-258.

[38] Gropius, the highly influential founder of the German design school known as the Bauhaus, which operated from 1919 until 1933, taught at Harvard's Graduate School of Design beginning in 1937. Bradley, *The Works*, 250; Henry-Russell Hitchcock Jr. and Philip Johnson, *The International Style: Architecture since 1922* (New York, W. W. Norton & Company, 1932, 20; Historic New England "Gropius House," http://www.historicnewengland.org/visit/homes/gropius.htm (accessed in November 2020).

to sell and coordinate the installation of the company's equipment in the region, became a driving force in the southern textile industry. Tompkins partnered with Charlotte grain merchant R. M. Miller in 1883 to establish D. A. Tompkins Company, an engineering firm. The company rendered plans for over one hundred mills and other industrial buildings featuring fire-resistant load-bearing brick exterior walls, heavy-timber framing, wood floors and roof decking, and metal-clad kalamein doors. Early Charlotte commissions include Ada, Alpha, and Victor Mills, all completed in 1899, as well as Highland Park Mill No. 1's 1891 and 1895 buildings and the 1892 Atherton Mill. Tompkins disseminated specifications dictating best practices in mill layout and design; advocated for the textile industry; sold and installed mill equipment produced by D. A. Tompkins Company's machine shop and other vendors; and held stock and/or executive board positions in myriad concerns including Alpha Cotton Mill and one of its successor entities, Calvine Manufacturing Company.[39]

Thomasville, North Carolina, native Stuart Warren Cramer, who began his career with the D. A. Tompkins Company, was another highly-influential mill engineer. Cramer set up his own Charlotte firm in 1895, and by 1915 had designed almost one-third of the new mills erected in the South during that period. In addition to preparing plans for mills, Cramer equipped facilities with textile production machinery of all types, some of which he invented. His salesmen, based in Charlotte and Atlanta offices, travelled throughout the country. Cramer's innovations in textile mill climate control garnered him international recognition, and he is credited with conceiving the term "air conditioning." Cramer often served his clients as a business advisor as well as a designer. For example, he installed an air-conditioning system at Loray Mill in Gastonia in 1908 and became the company's president four years later. Cramer established and led the American Cotton Manufacturers Association and the National Council of American Textile Manufacturers. He invested in textile concerns including Highland Park Manufacturing Company in Charlotte and Mayes Manufacturing Company in the Gaston County community of Mayesworth, which became known as Cramerton in 1922. The mill complexes and the associated housing that Cramer designed at those and other locations featured efficient layouts that demonstrated his integrated work flow concepts.[40] Cramer's designs for the 1904 Highland Park Mill No. 3 and the 1912 addition to Highland Park Mill No. 1 manifest features such as large roof monitors typically seen in his designs.

George N. Rhodes, architect

Although the architect of the 1929 Larkwood Silk Hosiery Mills plant has not been identified, Charlotte architect George N. Rhodes designed the matching 1935 east addition erected by Wadesboro Construction Company that almost doubled the building's size. Rhodes, born in 1904, had a short but

[39] D. A. Tompkins, *Cotton Mill, Commercial Features* (Charlotte: D. A. Tompkins, 1899), 46; Thomas W. Hanchett, *Sorting Out the New South City: Race, Class, and Urban Development in Charlotte, 1875-1975* (Chapel Hill: University of North Carolina Press, 1998), 50; William H. Huffman and Lisa A. Stamper, "Alpha Cotton Mill," Local Historic Landmark Designation Report, Charlotte-Mecklenburg Historic Properties Commission, 1984; Sarah A. Woodard and Sherry Joines Wyatt, "Industry, Transportation and Education: The New South Development of Charlotte and Mecklenburg County," report prepared for the Charlotte-Mecklenburg Historic Landmarks Commission and the North Carolina Historic Preservation Office, September 2001, 9-10.

[40] Hanchett, *Sorting Out the New South City,* 107; *Charlotte Observer*, June 22, 1912, p. 10; "Mr. Cramer is made president of Loray," *Evening Chronicle* (Charlotte), December 26, 1912, p. 6; Thomas S. Morgan, "Stuart Warren Cramer" in William Powell, ed., *Dictionary of North Carolina Biography, Vol. 1* (Chapel Hill: University of North Carolina Press, 1989), 455; Catherine Westergaard, "Stuart W. Cramer," *North Carolina Architects and Builders: A Biographical Dictionary*, http://ncarchitects.lib.ncsu.edu/people/P000275 (accessed in November 2020); Mattson, Alexander and Associates, Inc., "Loray Mill Historic District," National Register of Historic Places Nomination, 2001, Section 8, pages 36-37.

prolific career. After graduating from North Carolina State College, he gained experience working with Charlotte architect Willard G. Rogers, assisting with the projects including the Haywood County Courthouse.[41] Rogers had worked in the Charlotte office of influential mill engineer Stuart W. Cramer (1900-1905) and partnered with Charles Christian Hook in firm of Hook and Rogers (1905-1916) before starting his own practice in 1916.[42]

By spring 1932, Rhodes was receiving independent commissions for buildings throughout North Carolina. His projects that year included Graham L. Davis's residence on Queens Road in Charlotte, R. O. Huffman's home in Morganton, and Albert Garrus and Ben Tons' silk hosiery mill in Valdese.[43] In 1933, he designed Central School in Kings Mountain, Alexander Street School (for African American students) in Charlotte; and a Queens College building in Charlotte.[44] Commissions the following year included J. A. Hardison's Wadesboro residence, Frank Hoffman's Charlotte home, the Kings Mountain municipal center (a federal Civil Works Administration-funded project encompassing a building with an auditorium and conference rooms, a Boy Scout building, and a wading pool), an addition to Bryson City School, and three Cleveland County educational buildings (a school in Dover Mill; a school for African American students in Shelby; and a Shelby High School addition).[45]

In January 1935, Rhodes established a partnership firm with fellow North Carolina State College alumnus Charles W. Connelly, who had in 1934 been licensed to practice architecture in North Carolina. The men had previously collaborated on residential, educational, and industrial projects in Anson and Cleveland Counties. In March 1935, the firm began preparing plans for the Carolinas fairgrounds in Charlotte that would encompass exhibit, concession, and other buildings as well as a dirt race track. The site had not yet been determined. In early May, the firm was selected to design ten Cleveland County public schools to be erected utilizing approximately $100,000 of federal Public Works Administration funds. However, Rhodes suffered a heart attack and died on Lewis S. White's yacht off the Norfolk, Virginia, coast on May 25, 1935.[46]

Biberstein, Bowles, Meacham, and Reed

The Charlotte firm Biberstein, Bowles, Meacham and Reed had a significant impact on Southern industrial development, designing hundreds of structures throughout the region. Industrialists throughout North Carolina, South Carolina, Tennessee, and Virginia began engaging Richard C. Biberstein and his son Herman Von Biberstein to design mills in the 1920s and continued to solicit the

[41] "Architects for Courthouse in Waynesville," *CN*, September 3, 1931, p. 5.

[42] Catherine W. Bishir, "Willard G. Rogers," *North Carolina Architects and Builders: A Biographical Dictionary*, 2016, https://ncarchitects.lib.ncsu.edu/people/P000246 (accessed in December 2020).

[43] "Will Build Residence for Graham L. Davis," *CN*, September 18, 1932, p. 5; "Will Get Bids on Larkwood's Plant Addition," *CN*, January 13, 1935, p. 16; "Receiving Offers for Residence Construction," *CN*, April 21, 1932, p. 20; "Work Is Started on Hosiery Mill," *CN*, October 11, 1932, p. 16.

[44] "Kings Mountain Schools Open for New Year," *CN*, September 15, 1933, p. 5; "School Buildings Proposed To Be Built In City and County By Federal Loan," *CN*, December 10, 1933, section 2, p. 1; "Building at College Nears Completion," *CN*, September 10, 1933, p. 28; "Advertisement Bids Wanted," *CN*, March 7, 1934, p. 15.

[45] "Plans Residence," *CN*, September 21, 1934, p. 18; "Constructing Two Eastover Residences," *CN*, April 8, 1934, p. 32; " Rhodes Memorial Center Architect," *CN*, February 18, 1934, p. 36; "Building Work For Carolinas is Announced," *CL*, May 20, 1934, p. 11; "New Construction for Two Carolinas Gains," *CN*, July 11, 1934, p. 16; "McDevitt Gets Building Job," *CN*, August 3, 1934, p. 10.

[46] "Will Get Bids on Larkwood's Plant Addition," *CN*, January 13, 1935, p. 16; "Fast Progress in Plans for Carolinas Fair," *CN*, March 13, 1935, p. 6; "Charlotte Architects Work on Shelby Plans," *CN*, May 12, 1935, p. 8; "George N. Rhodes," *CO*, May 27, 1935, p. 6.

firm's services through the 1980s. Biberstein and Bowles' Charlotte commissions include plans for the sizable Art Moderne-style addition, boiler house, and smokestack erected in 1949 and the 1952 freight elevator at Chadbourn Hosiery Mills' North Brevard Street plan.[47]

Richard C. Biberstein of Fredericksburg, Texas, born in 1859, attained a mechanical engineering degree from the Worcester (Massachusetts) Polytechnic Institute in 1882. He found employment at U. S. Electric Lighting Company in Newark, New Jersey, and Atlas Engine Works in Indianapolis before moving to Charlotte in 1887 to undertake a draftsman position at industrialist John Wilkes's Mecklenburg Iron Works. H. S. Chadwick offered him a similar job at the Charlotte Machine Company, which manufactured mill equipment, in 1897. Biberstein accepted the offer and remained on staff until 1902, when he became influential mill engineer Stuart W. Cramer's employee, thus garnering valuable experience that prepared him to launch an independent firm specializing in mill design three years later.[48]

Richard C. Biberstein's son Herman Von Biberstein matriculated at North Carolina State University and began working with his father after completing a civil engineering degree in 1914. Architect William Andrew Bowles became a partner in 1930. Following the senior Biberstein's 1931 death, the practice bore Bowles's name until around 1940, when H. V. Biberstein's name also appears on plan sheets. Biberstein and Bowles operated as principals until Louis Hunter Meacham achieved partnership in 1948. Biberstein, Bowles, and Meacham subsequently elevated Charles Harmon Reed to full partnership between 1956 and 1959. Mechanical engineer William Ernest Stowe Jr. became a principal by 1962.[49]

Charlotte's Late-Nineteenth- and Early-Twentieth-Century Textile Mills

In the 1850s, the Atlanta and Charlotte Air Line, North Carolina Central, North Carolina State, and Charlotte and South Carolina Railroads connected Charlotte to the region's major markets, facilitating the transport of raw materials and manufactured goods. By the late nineteenth century, myriad factories erected near the railroads' main and spur lines generated large quantities of building supplies, chemicals, equipment and machinery, pharmaceuticals, processed food, and textiles. In order to take advantage of lower land prices and allow for unfettered expansion, many Charlotte industrialists located plants on the municipality's outskirts rather than in its downtown core. From the late-nineteenth through the mid-nineteenth-century, numerous mills and factories were erected near railroads and highways. Although many have been demolished, a significant number of historic resources survive. In 2001, architectural historians Sarah A. Woodard and Sherry Joines Wyatt completed a survey of Charlotte's industrial and educational buildings erected through 1945. They documented fifty-four industrial complexes: seventeen textile mills, one mill village, eight plants constructed for textile-related businesses, nine warehouses, thirteen miscellaneous manufacturing

[47] "Larkwood Hosiery Mills," Box 7, Folders 1-5; "Chadbourn Hosiery Mills," Box 4, Folder 16, Box 13, Folder 1, Biberstein, Bowles, Meacham, and Reed Records, J. Murrey Atkins Library Special Collections, University of North Carolina at Charlotte.

[48] Thomas W. Hanchett, William H. Huffman, and Catherine W. Bishir, "Richard C. Biberstein," *North Carolina Architects and Builders: A Biographical Dictionary*, 2009, https://ncarchitects.lib.ncsu.edu/people/P000383 (accessed in November 2020); "Biberstein, Bowles, Meacham, and Reed: Biographical/Historical Note," Biberstein, Bowles, Meacham, and Reed Records, J. Murrey Atkins Library Special Collections, University of North Carolina at Charlotte.

[49] "Biberstein, Bowles, and Meacham: Biographical Note," Guide to the Biberstein, Bowles, and Meacham Records, 1944-1954, MC 00222, North Carolina State University, Raleigh.

plants, and six factories utilized to generate food, beverages, and ice.[50] Richard Mattson and Frances Alexander's Route 4 area update of the Charlotte architectural survey executed in 2014 delineated industrial building status.

Most extant late-nineteenth and early-twentieth-century Charlotte manufacturing plants are similar in appearance as well as their outlying location adjacent to railroad lines. Character-defining features include heavy-timber interior structural systems, load-bearing brick exterior walls, low-pitched gable roofs, segmental-arched and rectangular window openings, segmental- and round-arched door openings, and decorative entrance, stair, and restroom towers. The 1892 Atherton Mill at 2108 South Boulevard, built by Tompkins to serve as a model factory, has been rehabilitated for residential and commercial use, as have the 1904 Highland Park Mill No. 3 (NR 1988) at 2901 North Davidson Street designed by Stuart W. Cramer and the 1905 Mecklenburg Mill (NR 1990) at 3327 North Davidson Street. In 1916, Johnston Manufacturing Company commissioned Richard C. Biberstein to design an addition to the 1913 Johnston Mill (NR 1990) plant at 3315 North Davidson Street and contractor S. Oates to erect it. Operation ceased in March 1975 and the complex remains vacant.[51] Highland Park Mill No. 3, Mecklenburg Mill, and Johnston Mill contribute to the North Charlotte Historic District. The rehabilitation of Highland Park Mill No. 1 (NR 2017), which encompasses 1891 and 1895 mills designed by D. A. Tompkins Company and a 1912 addition planned by architect Stuart W. Cramer, was completed in 2020. The building at 1115 North Brevard Street, now called Optimist Hall, houses offices, retail concerns, and restaurants.

In all of these buildings, large multipane windows and transoms illuminate the interiors, where hardwood floors and substantial wood posts and beams prevail. Exposed rafter ends support deep eaves. The one-story Atherton Mill, now condominiums, anchors the South End neighborhood. The plant's tall square, red-brick smokestack, embellished with narrow, recessed, round-arched panels beneath the corbelled cap, is identical to that of Highland Park Mill No. 1. The expansive, L-shaped, one- and two-story-on-basement Highland Park Mill No. 3 in North Charlotte features a four-stage entrance and stair tower distinguished by a crenellated parapet, corbelled cornice, bull's-eye windows, and corbelled, segmental-arched window and door openings. As at Highland Park Mill No. 1, roof monitors provided supplementary light and ventilation. The two-story Mecklenburg Mill, enlarged by a one-story south wing between 1905 and 1911, serves as The Lofts at NODA Mills. In contrast with the other buildings in this sample, Mecklenburg Mill's double-hung windows are paired beneath segmental-arched transoms. The two-story, flat-roofed stair tower at the east elevation's center originally had a third level. The neighboring two-story 1913 Johnston Mill, expanded several times, retains entrance, stair, and restrooms towers from each construction phase. The 1930 addition's entrance tower is the most distinctive, characterized by Art Deco elements such as a stepped door opening, geometric motifs at the top of the pilasters, and a cast-stone parapet cap.

The two-story redbrick 1929 Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant enlarged in 1935 with a matching east addition designed by architect George N. Rhodes mill possesses special local architectural significance as one of the few extant early-twentieth-century Charlotte industrial buildings featuring Art Deco stylistic elements such as a full-height cast-stone stepped primary entrance bay and cast-stone pilasters, lintels, and cornices framing large windows. The 1935 addition

[50] Woodard and Wyatt, "Industry, Transportation and Education, 39-41.

[51] The construction of Highland Park Mill No. 3 and Mecklenburg Mill began in 1903. "Will Begin Laying Brick Monday," *CN*, August 15, 1903, p. 5; "Mills Under Construction," *CN*, August 26, 1903, p. 7; "New Mill for N. Charlotte," *CN*, June 19, 1916, p. 2; "Cotton Plant is Closed," *Citizen-Times* (Asheville), March 14, 1975, p. 10.

erected by Wadesboro Construction Company almost doubled the building's size. The interior is characterized by a predominantly open plan and an exposed structural system comprising fire-resistant reinforced-concrete columns, beams, and slabs; steel posts and beams; brick walls; poured-concrete floors; and wide-board roof decking. These elements supported heavy equipment and minimized vibration. High ceilings and open floor plans accommodated sizable equipment. The freestanding one-story, flat-roofed, redbrick, 1949 boiler house retains original window and door openings. The tall, tapered round, redbrick, 1949 smokestack north of the boiler house is emblazoned with white brick capital letters spelling "Chadbourn" on its south side. The boiler house and smokestack were detached in order to reduce the potential for fire to spread. Although the previous owner demolished the 1946, 1949, and 1962 additions in 2018, the 1929 mill, 1935 addition, 1949 boiler house, and 1949 smokestack maintain sufficient integrity of design, setting, workmanship, materials, feeling, and association to effectively convey the property's industrial and architectural significance.

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Designation Parameters

Property owner Chadbourn Mill Owner, LLC is seeking local historic landmark designation for the mill's entire exterior and interior as well as the boiler house and smokestack in order to recognize the property's historical significance. Character-defining features are enumerated below.

Mill Exterior

Reinforced-concrete post and beam superstructure with slightly projecting concrete pilasters and lintels framing each bay, creating a paneled effect on the north, west, and south elevations
Redbrick kneewalls
Molded concrete cornices spanning most of the north and south elevations
Concrete coping on parapets
Full-height Art Deco-style formed-concrete surround on west elevation
Window and door openings

Mill Interior

Exposed fire-resistant reinforced-concrete columns, beams, and slabs, and steel beams
Wide-board roof decking
Unpainted brick walls
Concrete floor
1952 Monarch elevator components

Boiler House

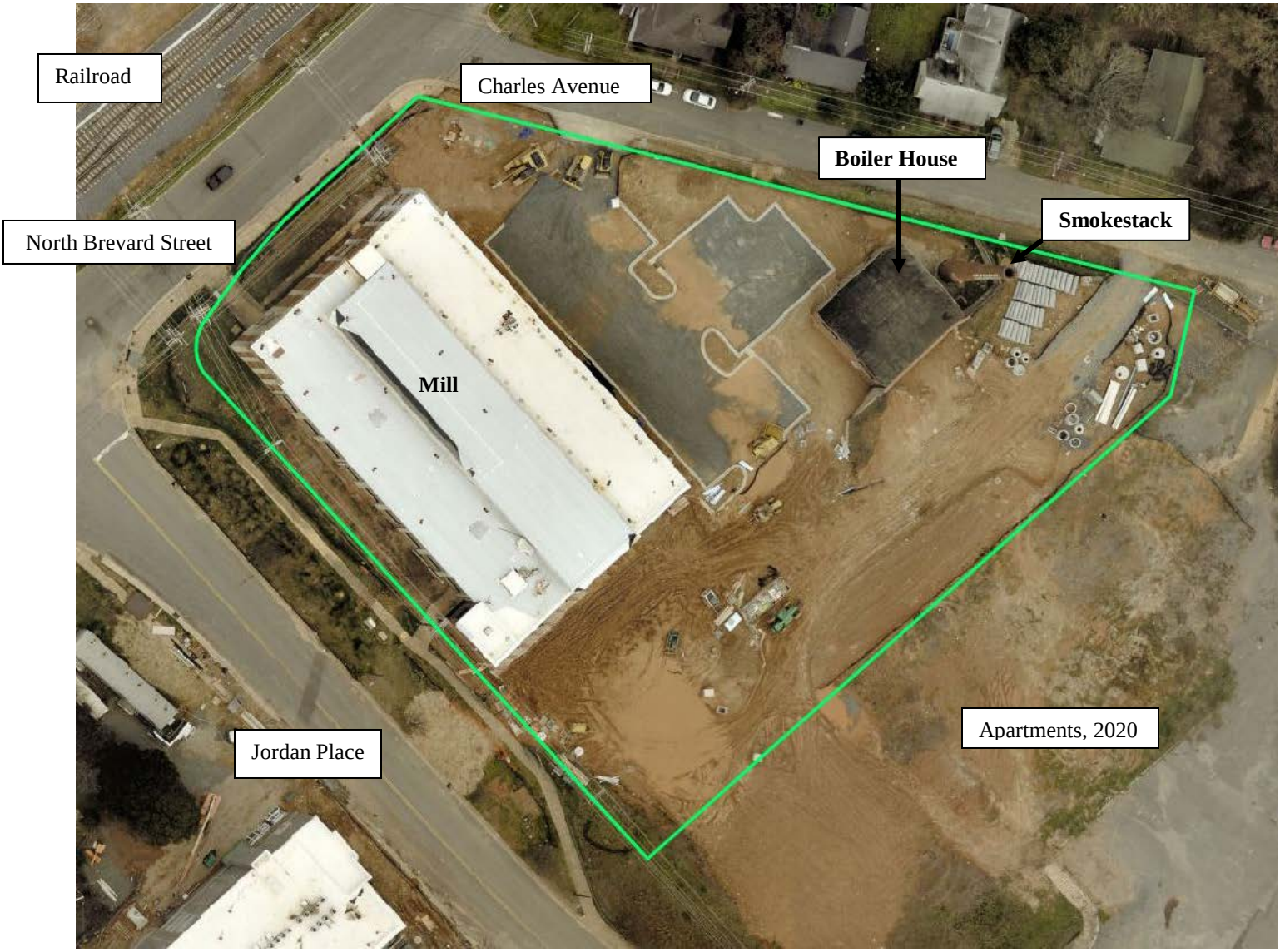
Redbrick and formed-concrete walls
Window and door openings
Unpainted brick walls
Concrete floor
Steel beams
Corrugated-metal roof deck

Smokestack

Freestanding tall, tapered round, redbrick smokestack emblazoned with white brick capital letters spelling "Chadbourn" on its south side
Segmental-arched steel door at the ash cleanout opening at the smokestack's west base
Stack corbelling

Local Historic Landmark Boundary Map and Boundary Description and Justification

The local historic landmark boundary encompasses two-acre Mecklenburg County tax parcel #08306707, as indicated by the green line on the map below.



2020 aerial from Mecklenburg County GIS
https://polaris3g.mecklenburgcountync.gov

1" = 100' scale N

CHARLOTTE.

FINAL APPROVAL

PROJECT NUMBER:

ENGINEERING PCSO / DETENTION / DRAINAGE PLAN
EROSION CONTROL
URBAN FORESTRY TREE ORDINANCE
CDOT
PLANNING UMUDD / MUDD / PED / TOD

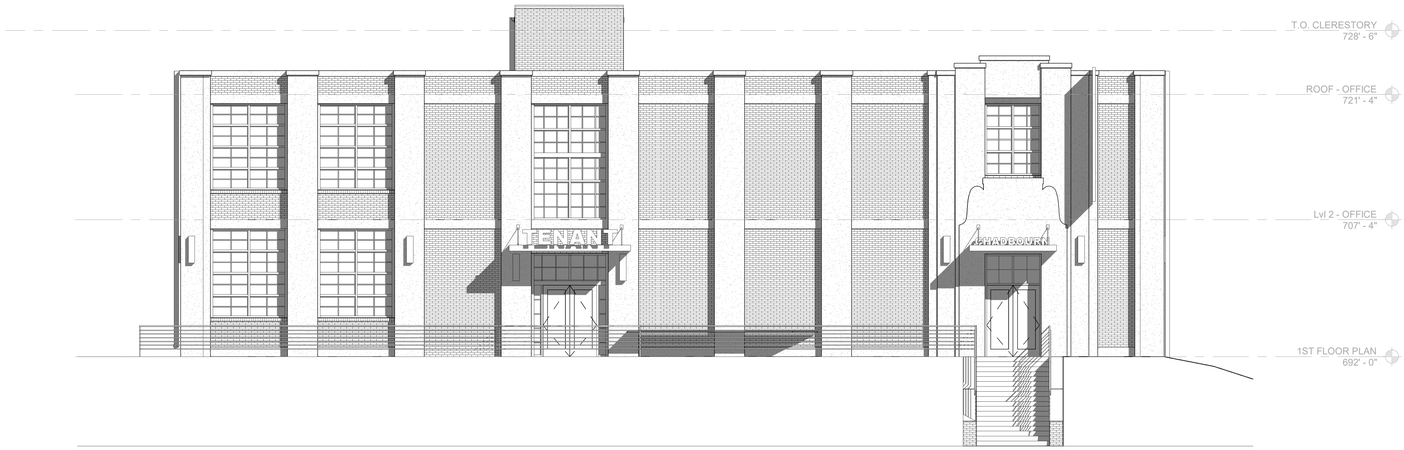
APPROVED Kirsty Sanchez

NOTE: THIS PLAN APPROVAL DOES NOT INCLUDE CHARLOTTE WATER. FOR MORE INFORMATION, PLEASE CALL 704-336-5499 OR VISIT http://charlottewater.org

NOTE: THIS PLAN APPROVAL DOES NOT INCLUDE COMMERCIAL ZONING. ALL BUILDING PERMITS AND ZONING APPROVALS CAN BE OBTAINED AT MECKLENBURG COUNTY CODE ENFORCEMENT. PLEASE CALL CTAC AT 704-314-CODE(2633) FOR MORE INFORMATION.

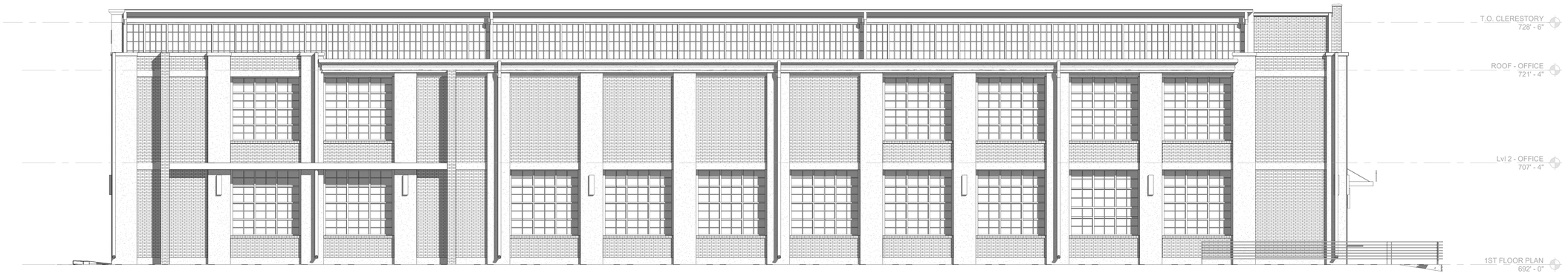
NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT http://charlottenc.gov/ld

LILES CONSTRUCTION ISSUED - FIELD SET



West Elevation 2

1/8" = 1'-0"



North Elevation 1

1/8" = 1'-0"

MECKLENBURG COUNTY
CODE ENFORCEMENT

The Design In These Construction Documents Have Been Reviewed For Compliance With The State Building Code. It Is The Responsibility Of The Contractor To Construct This Project With Good Engineering Practice And In Compliance With The North Carolina State Building Code.

CLINE DESIGN

CHARLOTTE.

FINAL APPROVAL

PROJECT NUMBER:

ENGINEERING PCSO / DETENTION / DRAINAGE PLAN
EROSION CONTROL
URBAN FORESTRY TREE ORDINANCE
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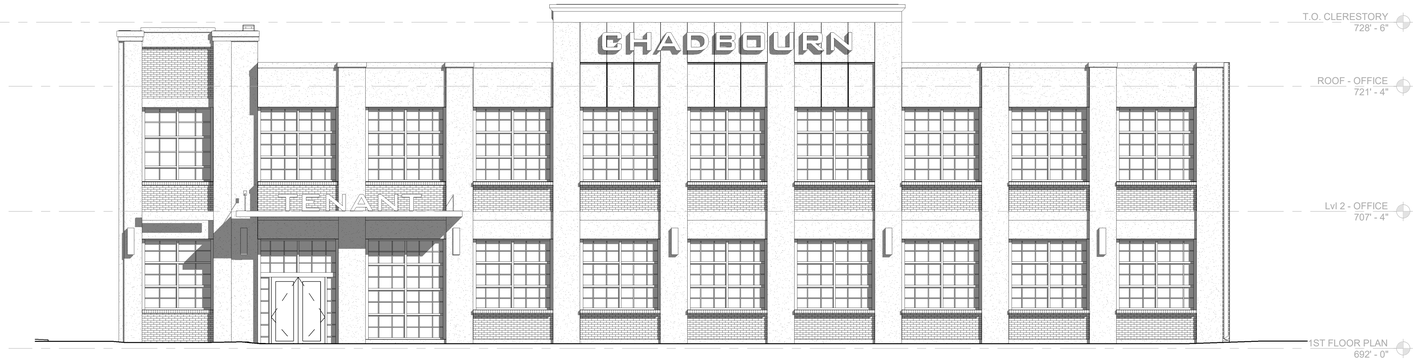
APPROVED Kirsty Sanchez

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LILES CONSTRUCTION ISSUED - FIELD SET



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South Elevation 1

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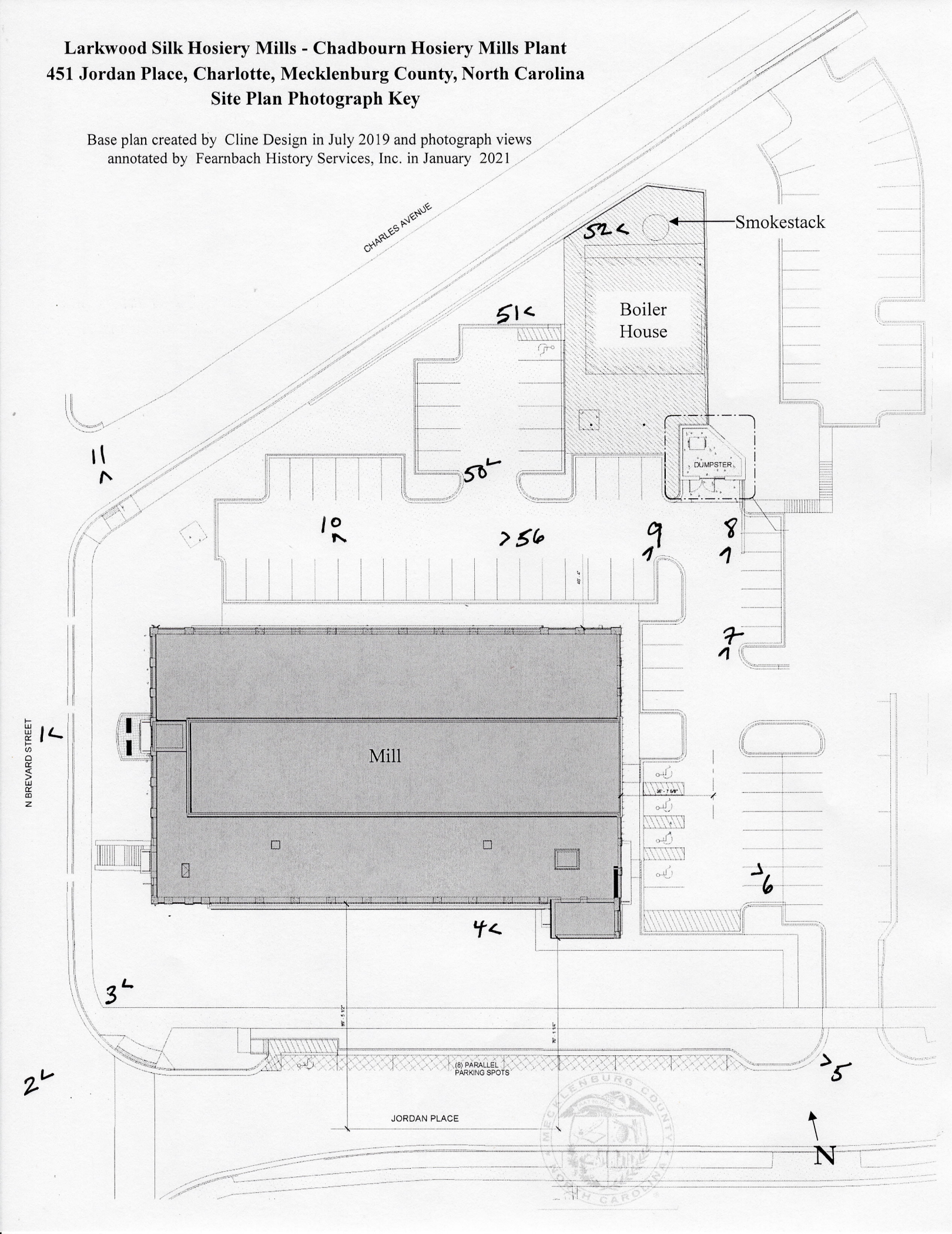
MECKLENBURG COUNTY
CODE ENFORCEMENT

The Design In These Construction Documents Have Been Reviewed For Compliance With The State Building Code. It Is The Responsibility Of The Contractor To Construct This Project With Good Engineering Practice And In Compliance With The North Carolina State Building Code.

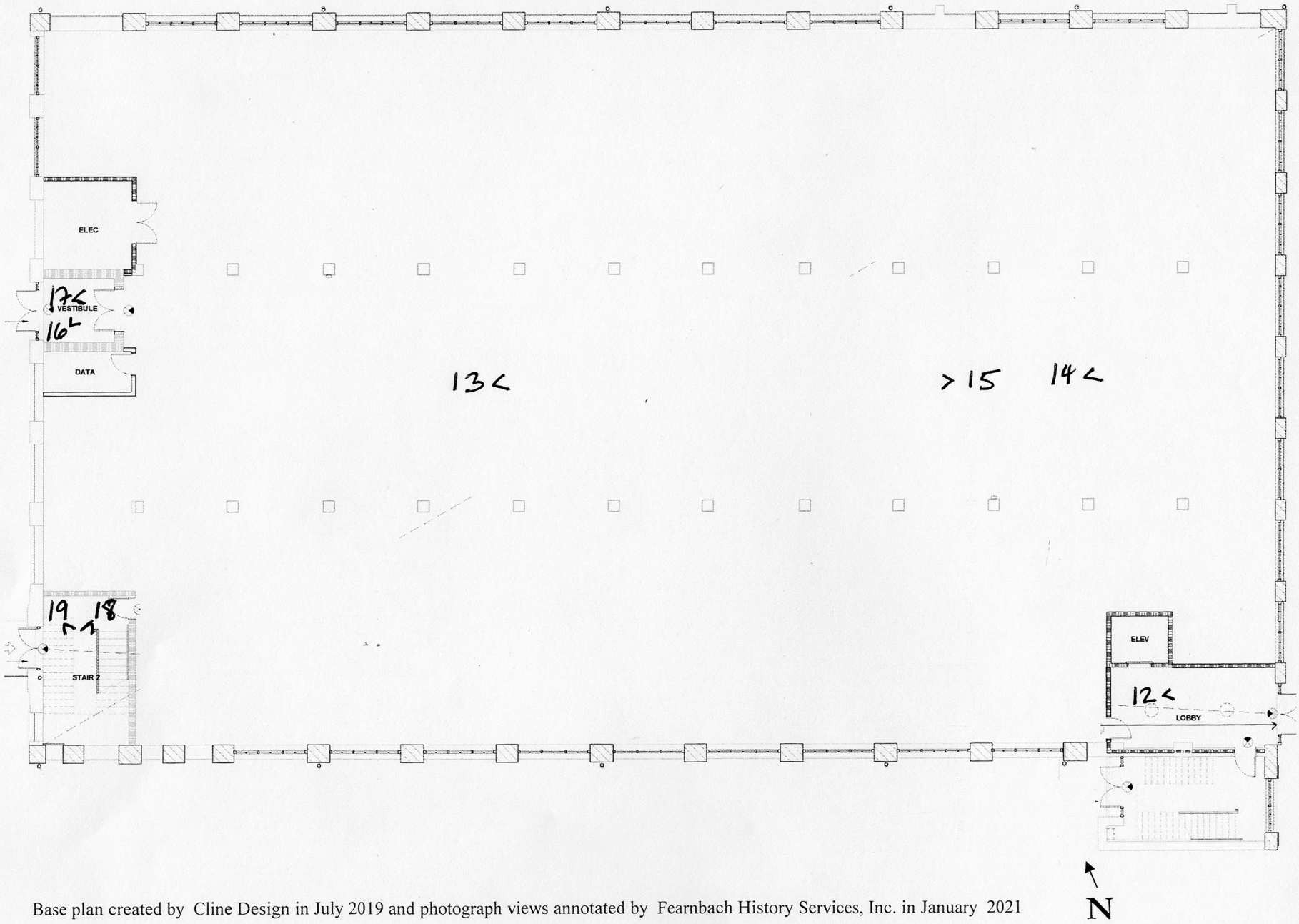
CLINE DESIGN

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant
451 Jordan Place, Charlotte, Mecklenburg County, North Carolina
Site Plan Photograph Key

Base plan created by Cline Design in July 2019 and photograph views annotated by Fearnbach History Services, Inc. in January 2021

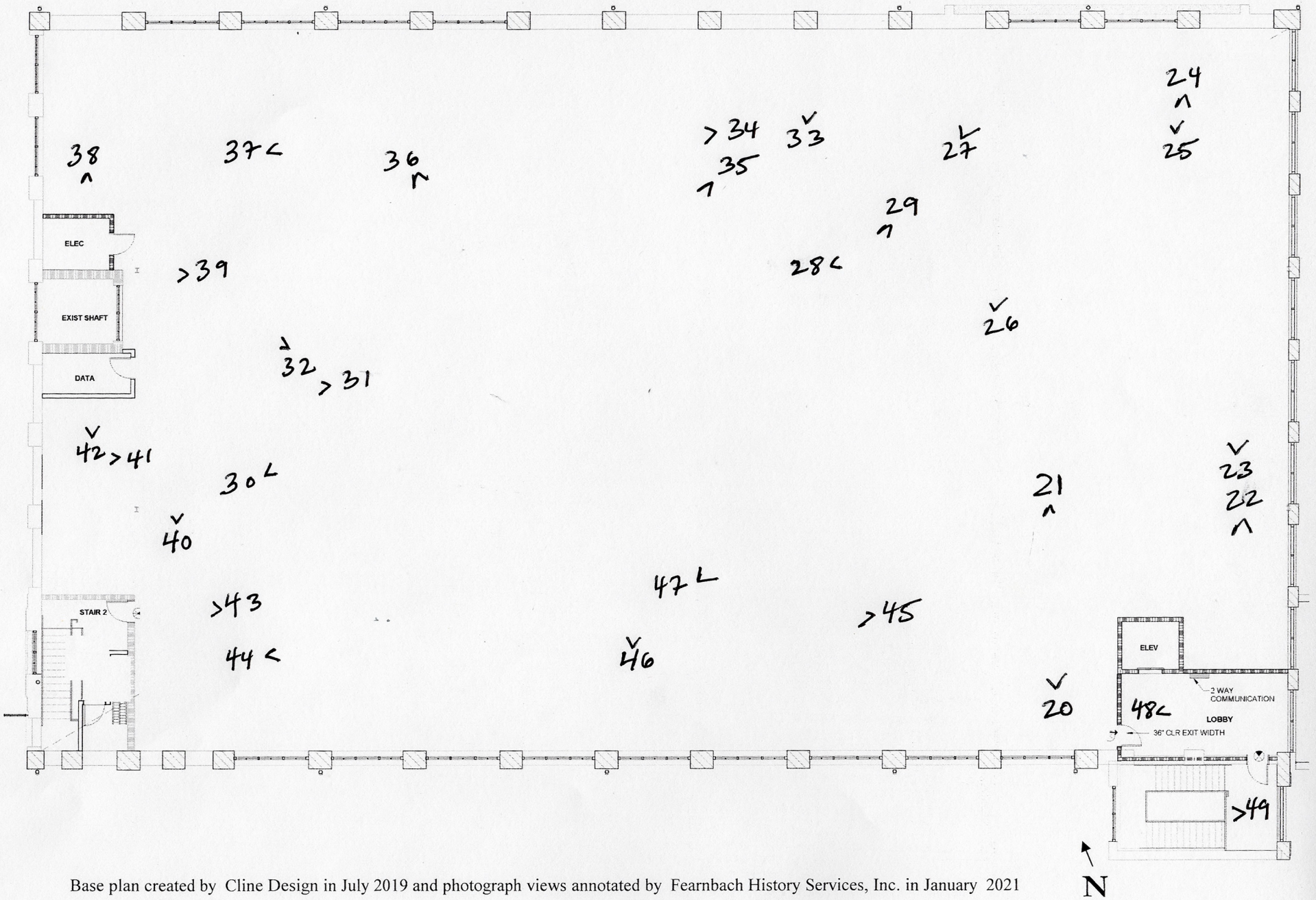


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451 Jordan Place, Charlotte, Mecklenburg County, North Carolina
First Floor Plan Photograph Key



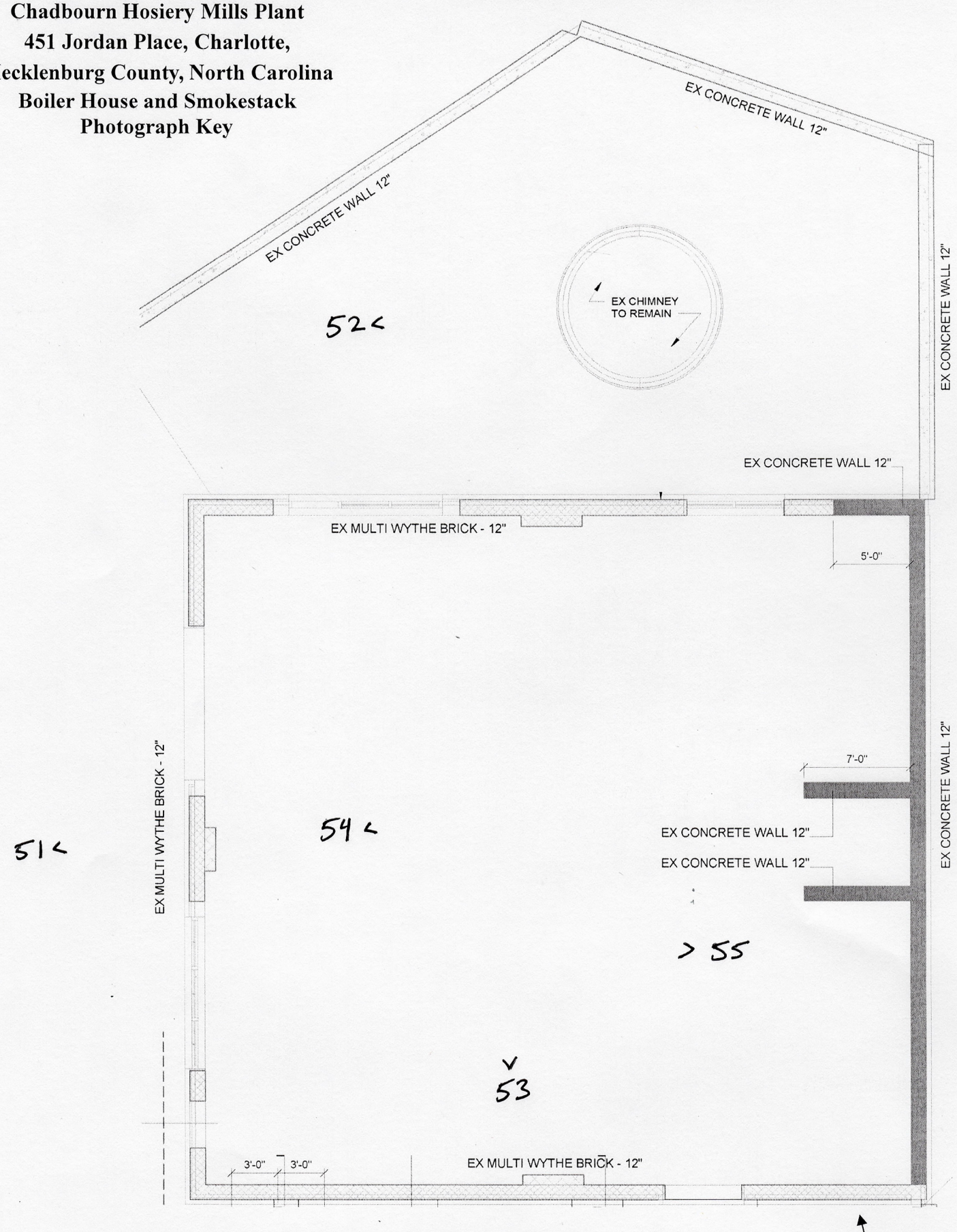
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Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant
451 Jordan Place, Charlotte, Mecklenburg County, North Carolina
Second Floor Plan Photograph Key



Base plan created by Cline Design in July 2019 and photograph views annotated by Fearnbach History Services, Inc. in January 2021

Larkwood Silk Hosiery Mills -
Chadbourn Hosiery Mills Plant
451 Jordan Place, Charlotte,
Mecklenburg County, North Carolina
Boiler House and Smokestack
Photograph Key



Base plan created by Cline Design in June 2018 and photograph views annotated by Fearnbach History Services, Inc. in January 2021

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, 451 Jordan Place, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, November 9, 2020



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Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, 451 Jordan Place, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, November 9, 2020



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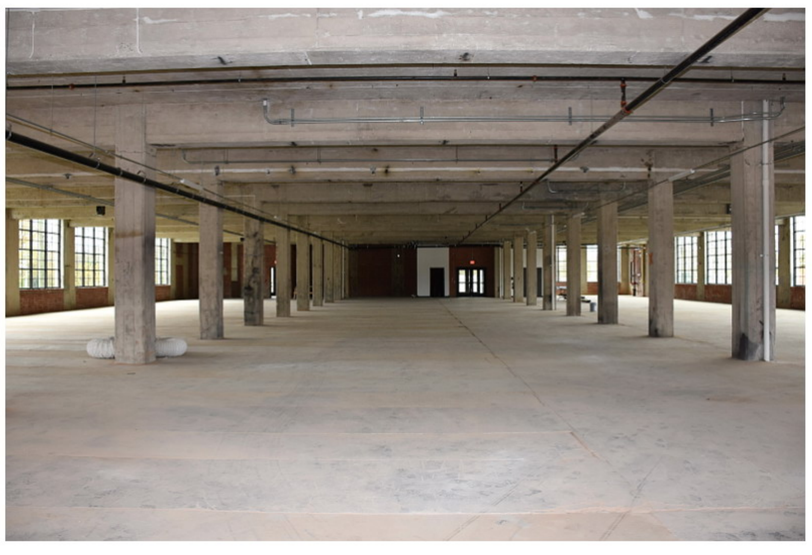
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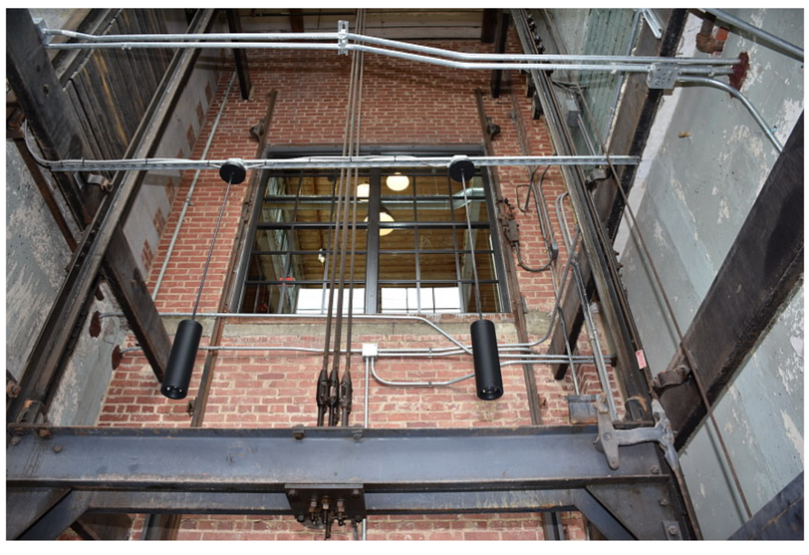
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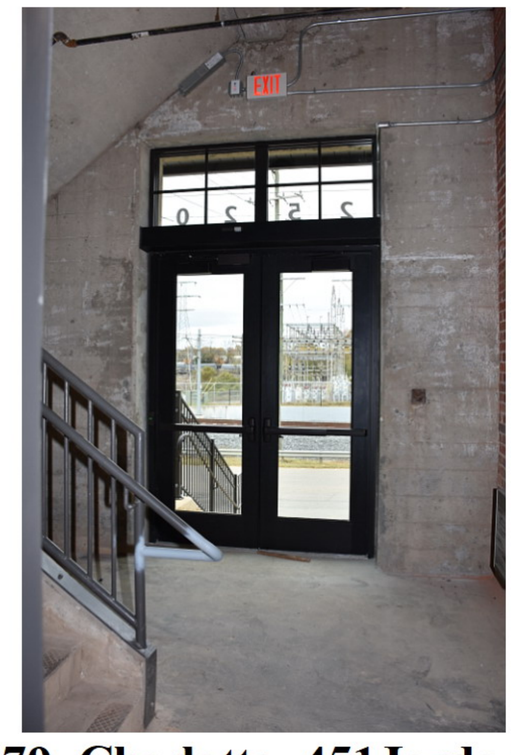
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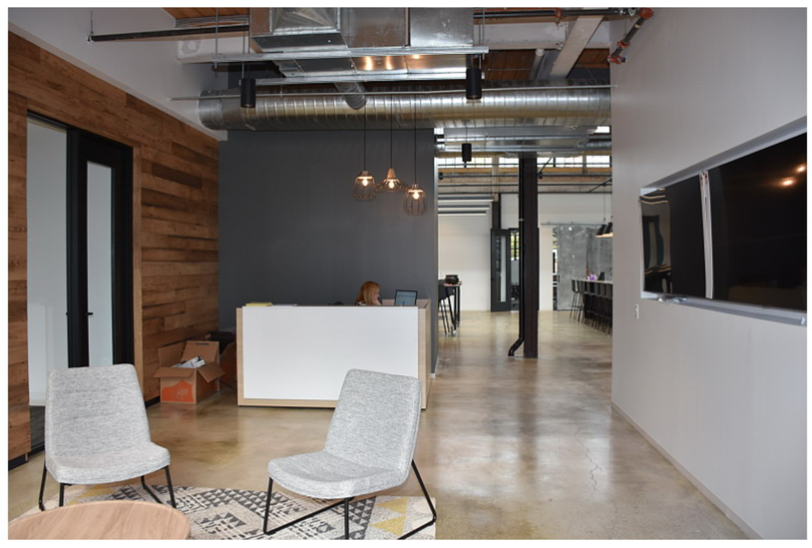


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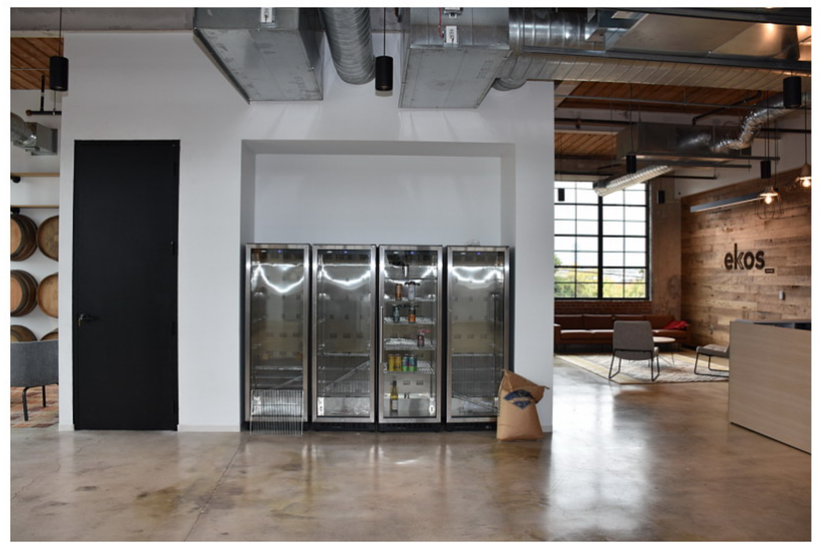
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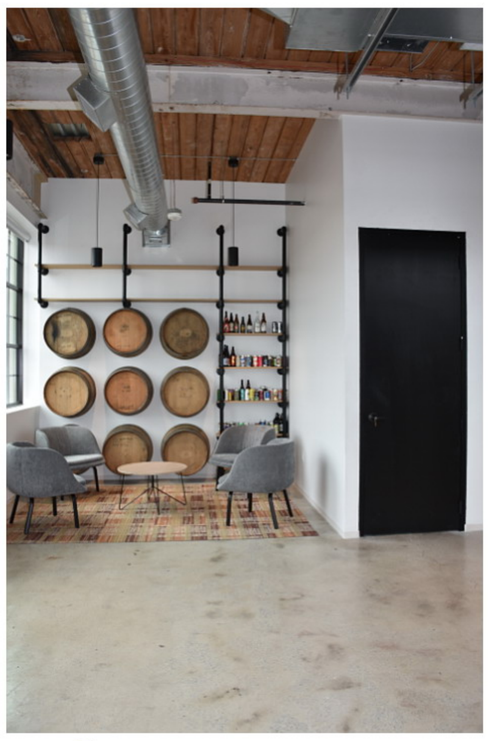
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_19



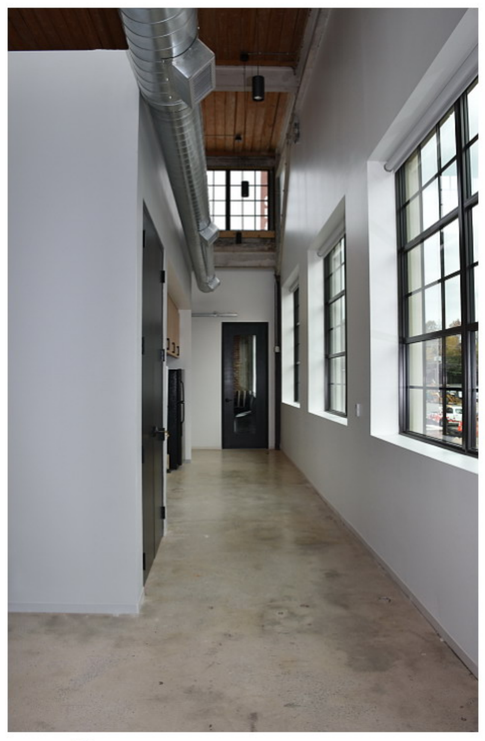
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_20



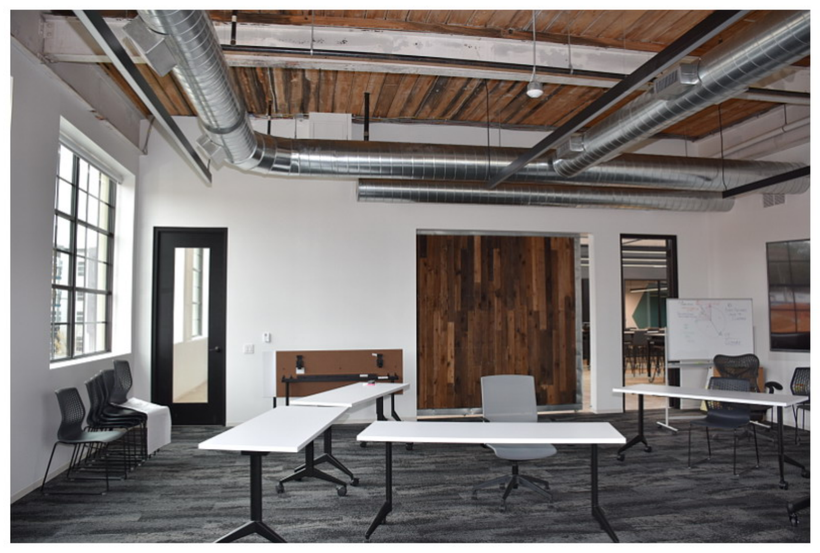
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_21



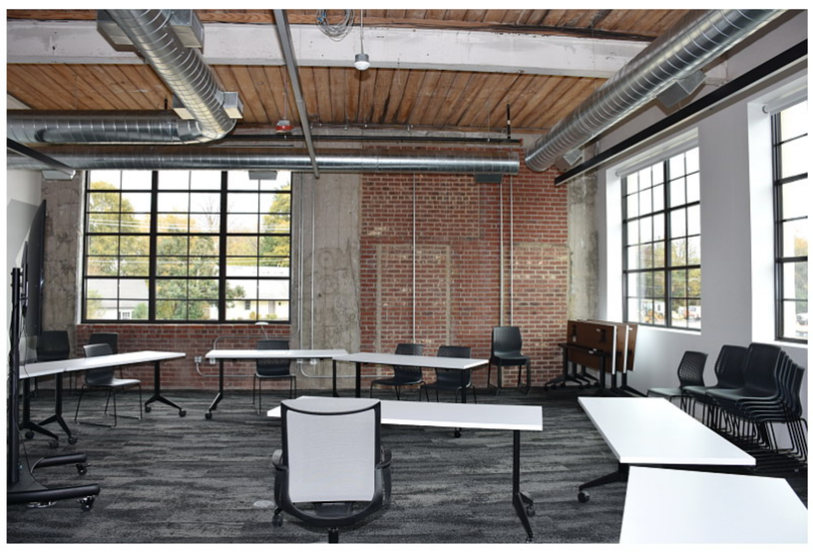
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_22



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_23



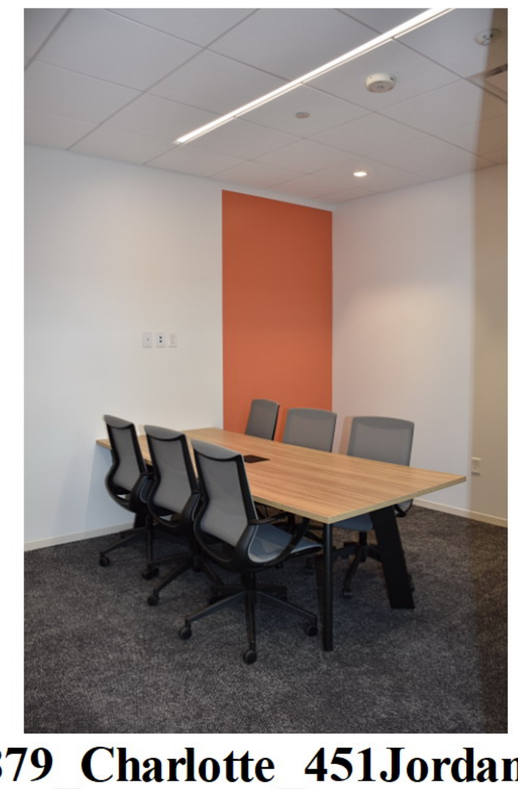
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_24



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_25

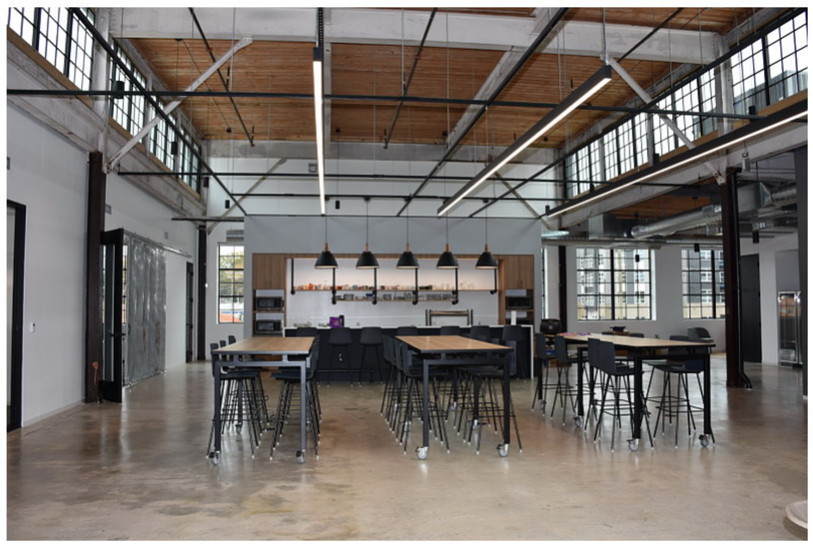


MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_26

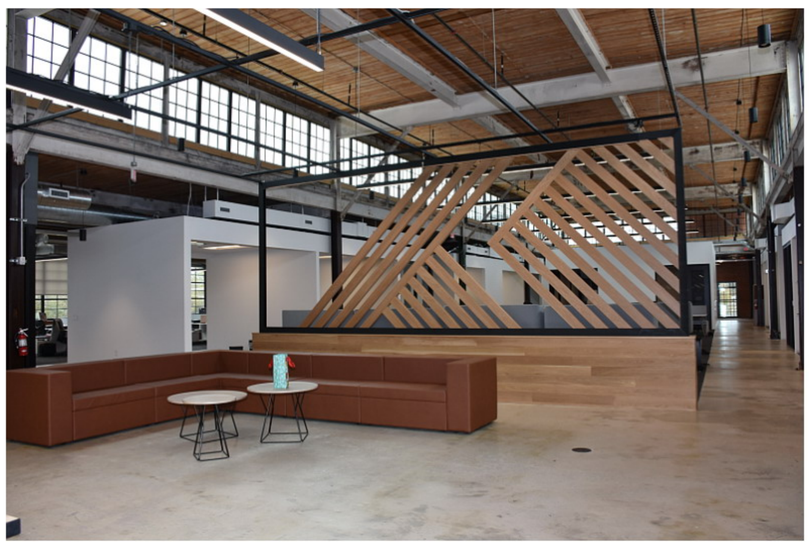


MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_27

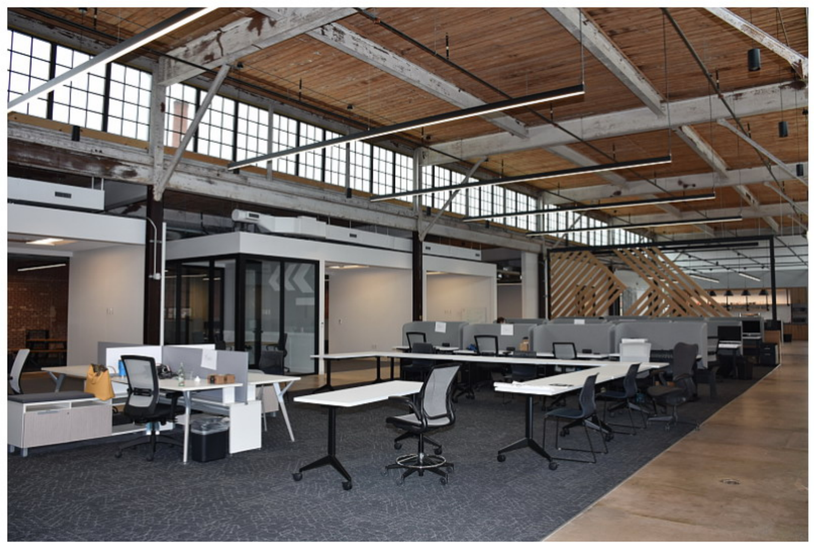
Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, 451 Jordan Place, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, November 9, 2020



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_28



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_29



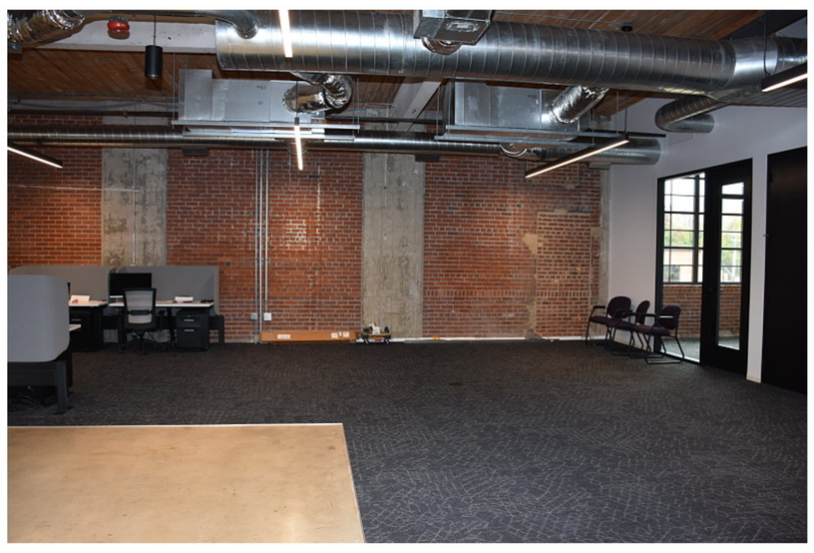
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_30



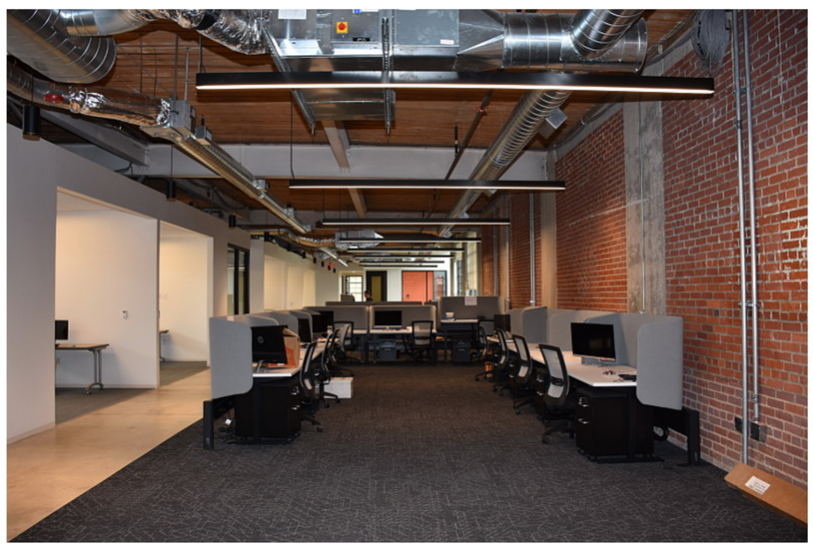
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_31



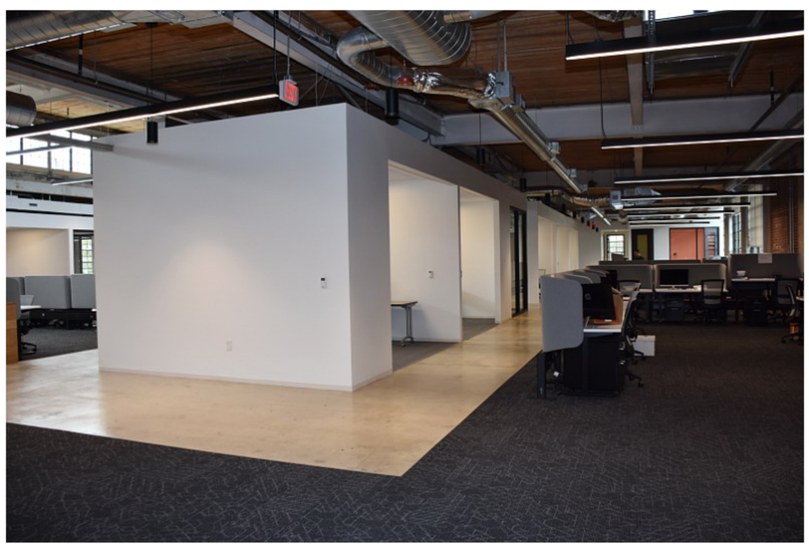
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_32



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_33



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_34

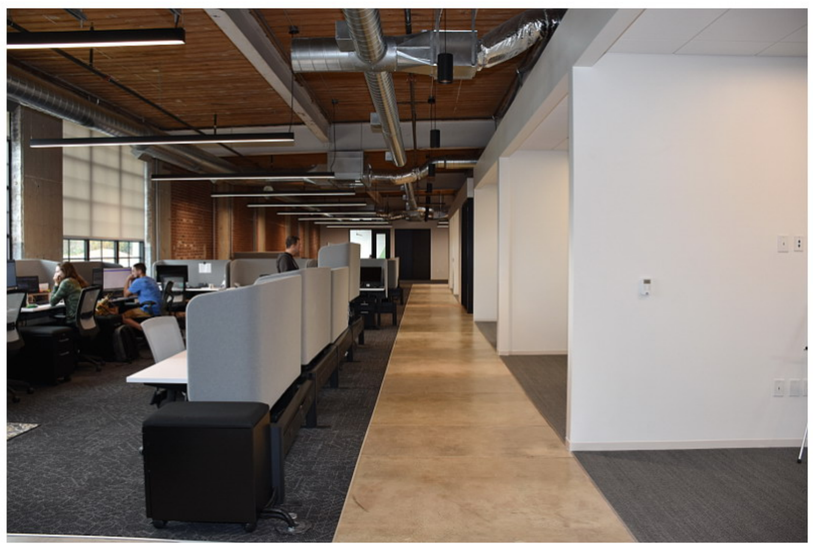


MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_35



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_36

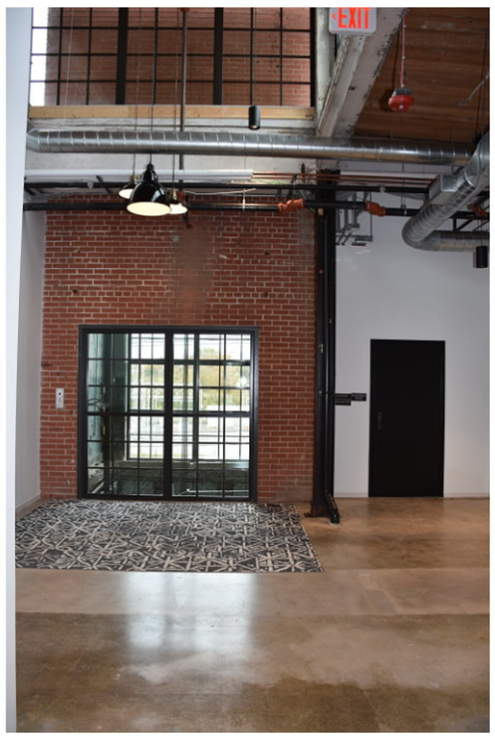
Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, 451 Jordan Place, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, November 9, 2020



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_37



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_38



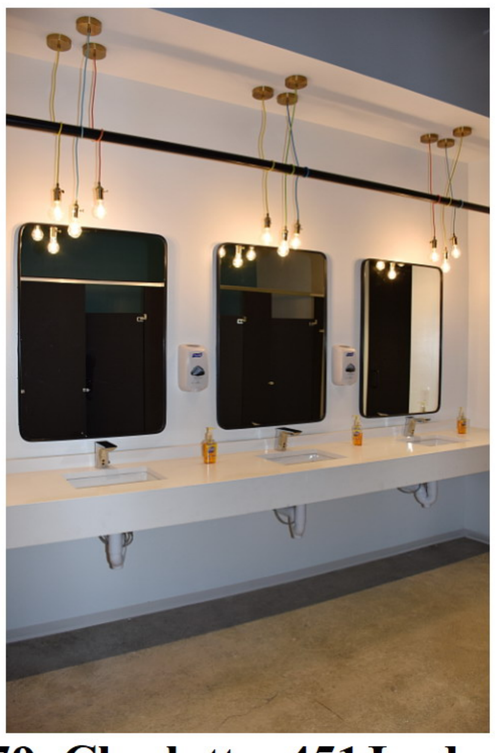
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_39



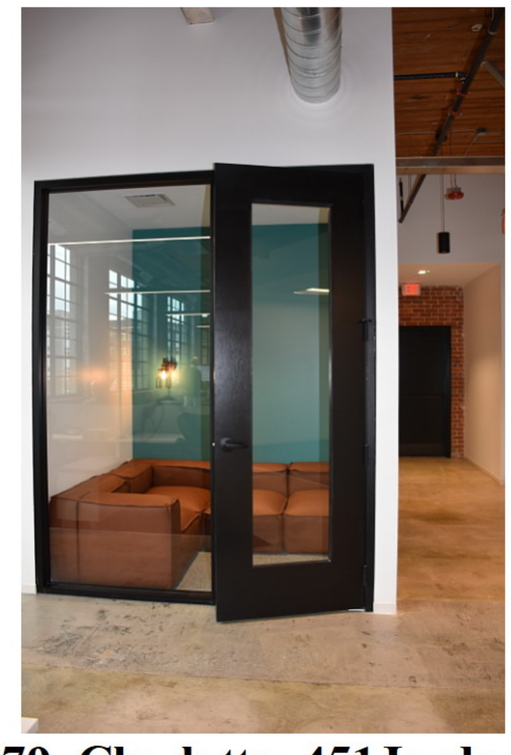
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_40



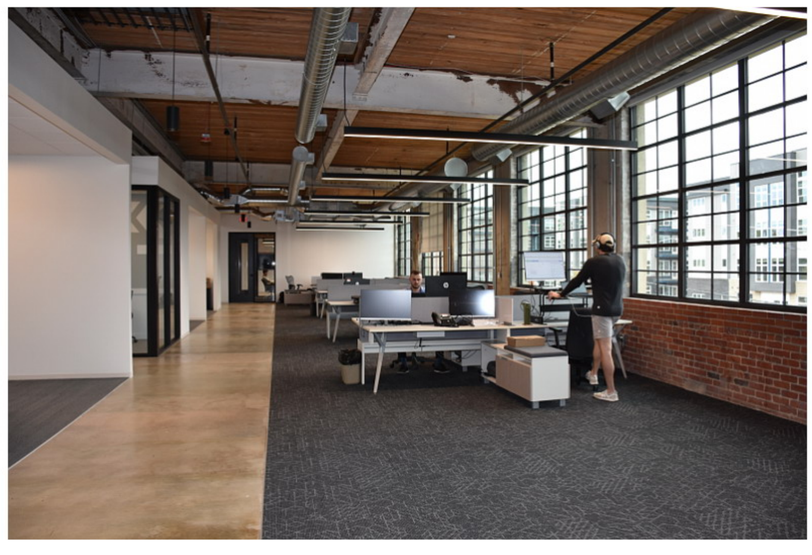
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_41



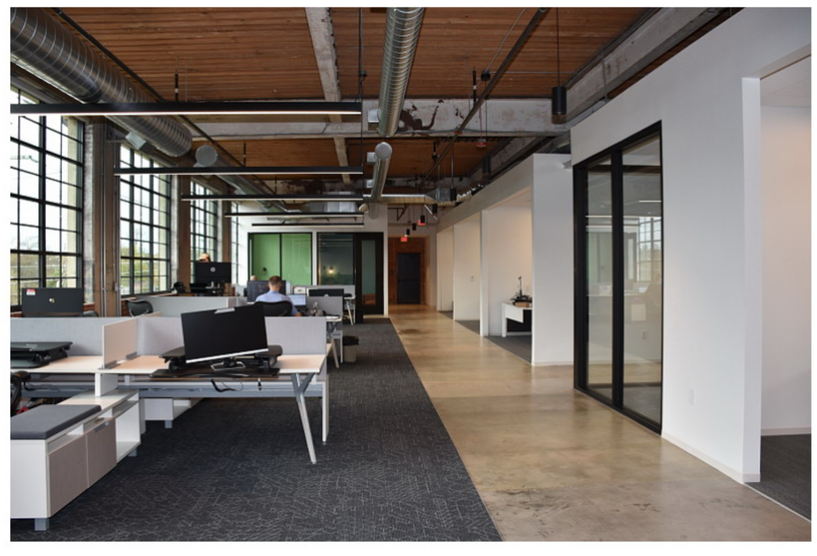
MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_42



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_43

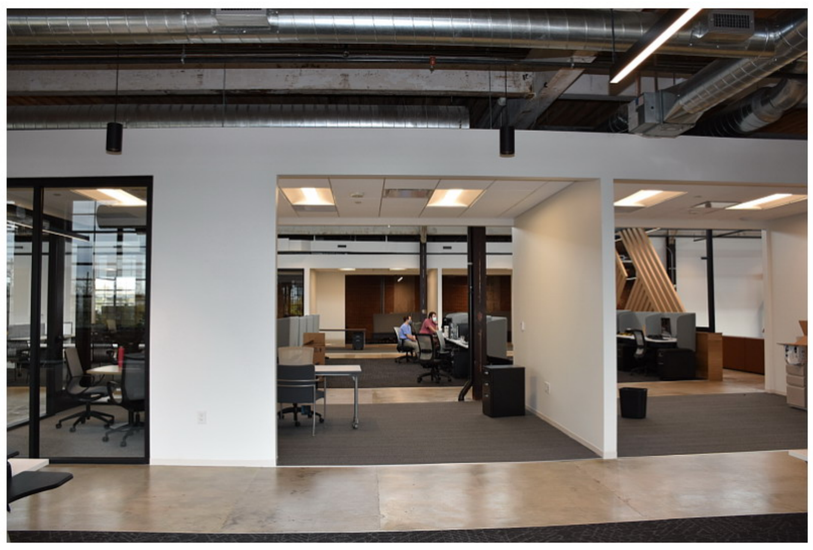


MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_44



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_45

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, 451 Jordan Place, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, November 9, 2020



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_46



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_47



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_48



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_49



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_50



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_51



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_52



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_53



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_54

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, 451 Jordan Place, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, November 9, 2020



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_55



MK2879_Charlotte_451JordanPlace_ 11-9-2020_hf_56

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, July 16, 2016



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_001



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_004



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_008



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_013



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_023



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_024



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_031



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_038



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_039

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, July 16, 2016



MK2879_Charlotte_451JordanPlace_7-6-2016_hf_040



MK2879_Charlotte_451JordanPlace_7-6-2016_hf_042



MK2879_Charlotte_451JordanPlace_7-6-2016_hf_043



MK2879_Charlotte_451JordanPlace_7-6-2016_hf_044



MK2879_Charlotte_451JordanPlace_7-6-2016_hf_046



MK2879_Charlotte_451JordanPlace_BoilerHouse_7-6-2016_hf_07



MK2879_Charlotte_451JordanPlace_BoilerHouse_7-6-2016_hf_08

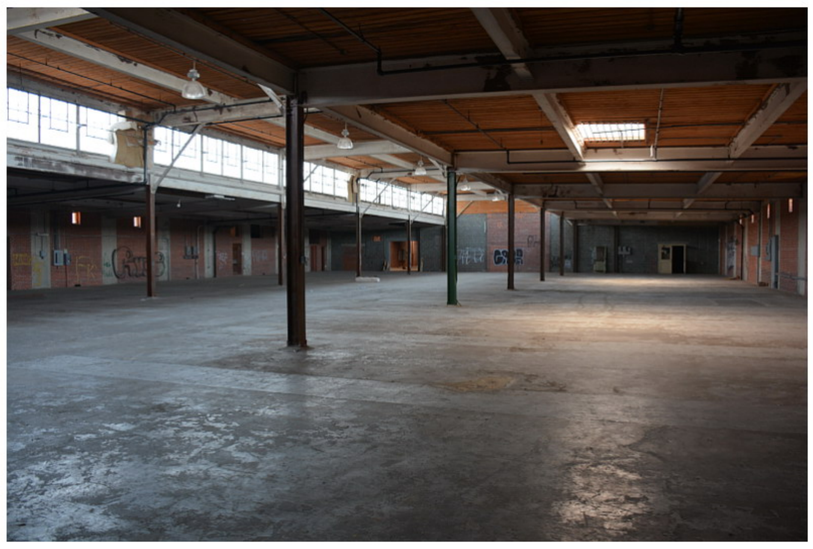


MK2879_Charlotte_451JordanPlace_BoilerHouse_7-6-2016_hf_11

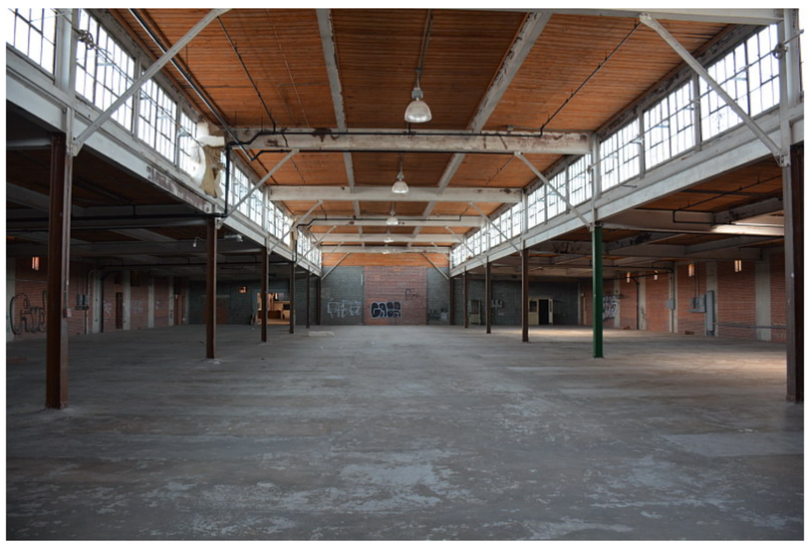


MK2879_Charlotte_451JordanPlace_BoilerHouse_7-6-2016_hf_13

Larkwood Silk Hosiery Milla - Chadbourn Hosiery Mills Plant, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, July 16, 2016



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_111



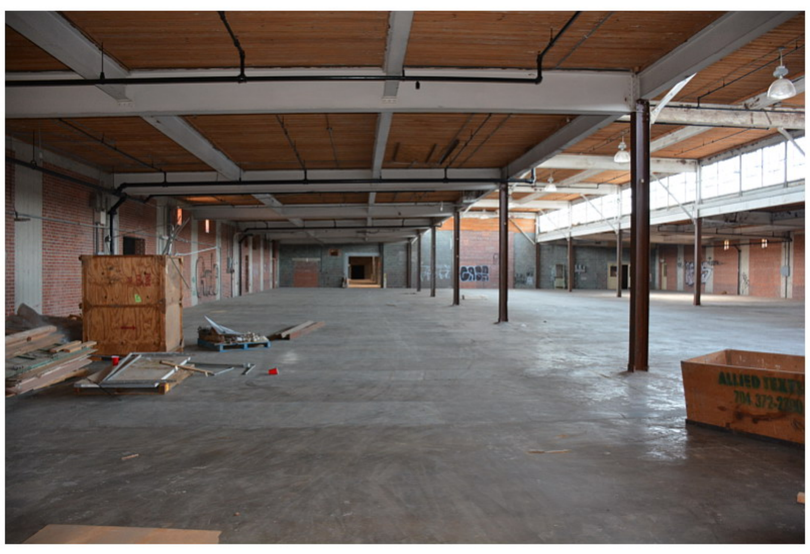
MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_112



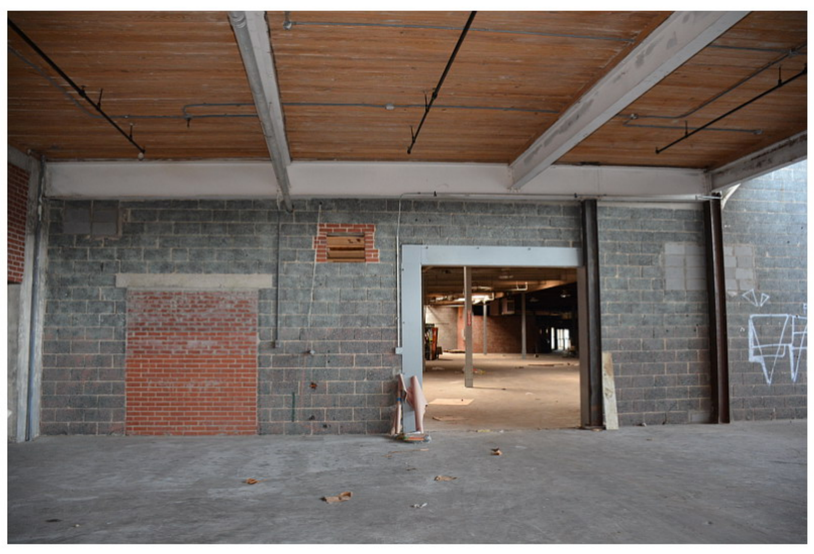
MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_113



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_114



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_115



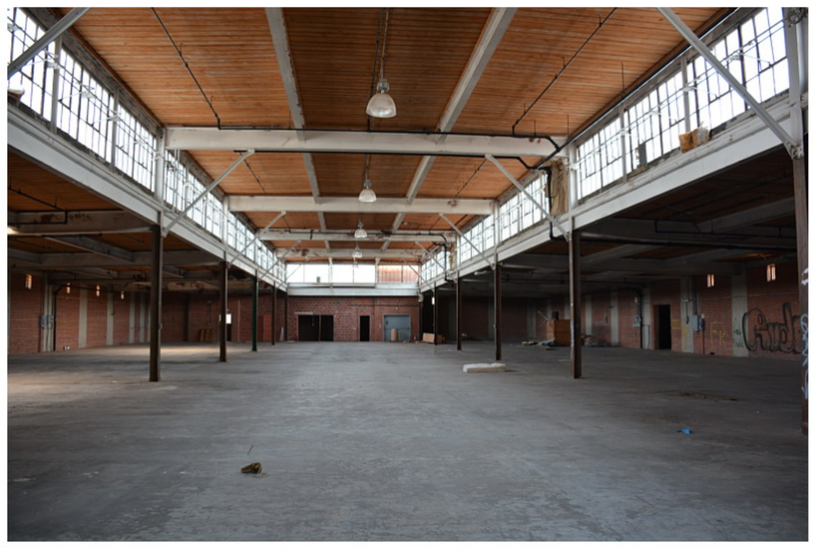
MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_116



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_117



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_118



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_129

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, July 16, 2016



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_135



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_140



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_141



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_143



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_145



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_171



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_176



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_181



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_186

Larkwood Silk Hosiery Mills - Chadbourn Hosiery Mills Plant, Charlotte, Mecklenburg County
Heather Fearnbach, photographer, July 16, 2016



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_197



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_200



MK2879_Charlotte_451JordanPlace_ 7-6-2016_hf_202