1. Name and location of the property: The property known as the Nebel Knitting Mill (former) is located at 101 West Worthington Avenue at Camden Road in Charlotte, NC.

2. Name, address, and telephone number of the present owner of the property: The owner of the property is:

   Old Spaghetti Warehouse, Inc.
   6120 Aldwick Drive
   Garland, Texas 75045

   Telephone: (214) 226-6000

   Tax Parcel Number: 121-022-03

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 maps which depict the location of the property.
5. **Current Deed Book Reference to the property:** The most recent deed to this property is listed in Mecklenburg County Deed Book 6321 at page 24. The Tax Parcel Number of the property is 121-022-03.

6. **A brief historical sketch of the property:** This report contains a brief historical sketch of the property prepared by Suzanne S. Pickens and Richard L. Mattson, Ph.D., Historic Preservation Services.

7. **A brief architectural description of the property:** This report contains a brief architectural description of the property prepared by Suzanne S. Pickens and Richard L. Mattson, Ph.D., Historic Preservation Services.
8. Documentation of why and in what ways the property meets criteria for designation set forth in NCG.S. 160A-400.5:

a. Special significance in terms of its history, architecture, and/or cultural importance: The Commission judges that the property known as the Nebel Knitting Mill (former) does possess special significance in terms of Charlotte-Mecklenburg. The Commission bases its judgment on the following consideration:
1) the Nebel Knitting Mill (former) is the most intact hosiery mill yet identified in Charlotte;
2) the Nebel Knitting Mill (former) is architecturally significant as an intact and finely, yet subtly ornamented example of industrial architecture constructed in the late 1920s;
3) the building was designed by Richard C. Biberstein, noted Charlotte mill engineer and architect;
4) the Nebel Knitting Mill (former) is significant as a tangible reminder of the importance of the full fashioned silk hosiery industry to the diversification and, in some cases, the survival of the textile industry in North Carolina during the post-World War I slump in the industry and the effects of the Great Depression on textile production; and
5) the building is important for its association with the Nebel Knitting Company and its founder, William Nebel, a pioneer in bringing the hosiery industry to the South, to North Carolina, and to Charlotte and Mecklenburg County in particular.

b. Integrity of design, setting, workmanship, materials, feeling, and/or association: The Commission contends that the architectural description by Historic Preservation Services included in this report demonstrates that the Nebel Knitting Mill (former) meets this criterion.

9. Ad Valorem Tax Appraisal: The Commission is aware that 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 improvements is $902,400. The current appraised value of the 1.769 acres is $96,500. The total appraised value of the property is $998,700. The property is zoned I-2.

Date of Preparation of this Report: 26 November 1990

Prepared by: Dr. Dan L. Morrill in conjunction with Nora M. Black
Charlotte-Mecklenburg Historic Landmarks Commission
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NOTE: The following architectural and historical reports, combined on the form entitled "National Register of Historic Places Registration Form," were prepared by Historic Preservation Services under the auspices of Old Spaghetti Warehouse, Inc. The Charlotte-Mecklenburg Historic Landmarks Commission is not responsible for errors.

A Physical Description

Constructed in 1927 and expanded in 1929, the (former) Nebel Knitting Mill, manufacturer of ladies fine quality, full-fashioned hosiery until 1968, is the most intact hosiery mill in Charlotte. Vacant since the fall of 1989, the mill complex stands at 101 West Worthington Avenue, on a parcel bounded by West Worthington, Camden Road, Hawkins Street, and a service alley. In addition to the 1927-1929 mill, the complex includes a 1946 expansion--a separate building attached to the 1927 section by a covered truck passageway, now bricked in. This 1946 building, with distinctive Art Moderne elements of style, has been detached from the 1927-1929 mill during the mill's adaptive rehabilitation, and is not being proposed for nomination to the National Register.

Noted Charlotte textile mill architect and engineer Richard C. Biberstein designed the 1927-1929 Nebel mill. Extant architectural specifications for the 1929 section indicate that Biberstein and William Nebel, founder of the Nebel Knitting Company, intended this section to match the 1927 buildings in materials and detailing (Biberstein Collection). Integrated as one two-story building approximately 204 feet across the facade and 182 feet deep, and sharing similar materials and decorative elements, the 1927-1929 mill includes an open square with an approximately 9,000 square-foot courtyard in the center. Since the knitting of fine, full-fashioned, silk and synthetic hosiery required superior eyesight and good light, it is likely the mill was designed with this configuration to allow for maximum natural light during the day shifts. Notes by the architect indicate that William Nebel specified that the mill should be wide enough for two knitting machines; the layout of the mill, then, gave each knitter a large window to light his machine.

The 1927 section is five bays wide; the 1929 portion is ten bays wide. Both sections have subtle polychrome, wire-cut facing brick, and concrete and steel construction. The 1927 portion has a stepped-parapet roofline with concrete coping, while the mill's 1929 part has a simple, crenellated roofline with the crenellation most defined above the entrances and along the stair tower at the southeast corner. Fenestration in both sections consists of large multi-paned steel frame windows, some of which have been bricked in on the first story. The bays are defined by projecting brick pilasters with stone caps. A water table of curved cast-concrete runs beneath each window bay. The rear elevation features the same windows and pilasters. The first story bay on the southeast end of the rear (southwest) elevation is of glass block. Restrained decorative elements include: simple door surrounds of single rows of headers with concrete corner blocks; diamond-shaped concrete panels; date stones set in both the 1927 and 1929 sections; stone and concrete window sills; stone pediments above the main entrances in both
sections engraved with "NEBEL KNITTING CO.;" and decorative copper canopies sheltering the two doorways in the 1929 portion.

**Historical Background**

The Nebel Knitting Company was established in Charlotte in 1923 by William Nebel (1887-1971), a native of Germany and third-generation hosiery knitter. Nebel emigrated to the United States in 1905, and worked in several textile concerns in New York and New Jersey before moving to Charlotte to launch his own company. A full-fledged knitter since the age of twelve, Nebel was an innovator in hosiery styles, colors, and patterns, and held at least sixteen structural and design patents (Nebel Knitting Company Collection).

The Nebel Knitting Company prospered and expanded its production during the 1920s. From the first operation, with two sets of machinery located on the second floor of a small building on East Kingston Street, Nebel, in 1925, moved to a building at 1822-24 South Boulevard, in the industrial sector of Charlotte's Dilworth neighborhood. This building still stands, though substantially altered and adaptively reused for shops and a restaurant. In 1927, further expansion of the business led to the construction of a new and larger Nebel Knitting Mill, near the middle of the 100 block of West Worthington Avenue. In 1929, this facility was more than doubled in size, creating the main plant that dominates the southwest corner of West Worthington and Camden Road.

William Nebel commissioned Richard C. Biberstein, noted Charlotte architect and engineer, to design both sections of the 1927-1929 mill complex (Nebel Knitting Company Collection). Biberstein (1859-1931) specialized in mill architecture and was reputed to have designed more cotton mills in the Carolina Piedmont than any other individual (Huffman 1984). Biberstein studied mechanical engineering at Worcester (Massachusetts) Polytechnic Institute between 1879 and 1882. He moved to Charlotte in 1887, and worked as a draftsman-engineer for the Charlotte Machine Company before gaining employment with Stuart W. Cramer in 1902. Cramer's engineering firm designed and built many mills in this region, including the 1903 Highland Park No. 3 (National Register 1989). About 1905, Biberstein went into business for himself as a mill engineer and architect with offices in the Piedmont Building on Tryon Street. His career blossomed with the textile industry in this region. Among the mills Biberstein designed were the Lancaster (South Carolina) Cotton Mill, the Boger and Crawford Mill in Lincoln County, the Mooresville Cotton Mills, the Union Cotton Mill in Mount Holly, the Hudson Cotton Mills and the Dixon Mills in Gaston County, and the Larkwood Hosiery Mill in North Charlotte. Biberstein also designed other mills for Nebel, including one in Jacksonville, Florida (Huffman 1984).

When R. C. Biberstein died in 1931, his architecture firm, which still exists under the name Biberstein, Bowles, Meacham and Reed, was taken over by his son, Herman V. Biberstein (1893-1966. It was H. V. Biberstein who designed the final expansion of the Nebel Knitting Mill, an Art Moderne wing completed at a cost of about $150,000 in 1946 (Charlotte News, December 12, 1945). This addition, which is not included in the present nomination, was designed essentially as a separate building, attached to the 1927 portion by a covered
passageway for trucks. Subsequently, this truck passage was walled in. As part of the renovation in progress, the roof and walls that joined the two sections of the mill have been removed.

The largest and most productive hosiery concern in Mecklenburg County, the Nebel Knitting Mill, by World War II, employed approximately 350 workers at thirty-eight machines for producing nylon full-fashioned stockings. During the 1940s, the company began an aggressive national advertising campaign, including layouts in fashion magazines such as *Vogue* and *Seventeen*. The company also followed the lead of other large textile concerns of the Carolinas and maintained an office in the Empire State Building. A 1953 newspaper article on the Nebel Mill stated that the factory's production ranked it "among the largest hosiery mills in the Southeast." The article proclaimed that "Nebel and nylons are two words often spoken by the nation's retail merchants" (*The Charlotte News*, November 14, 1953). By 1968, the Nebel company employed almost 600 operatives and produced approximately two million dozen pairs of hosiery annually (*Knitting Industry* 1968). The Nebel Knitting Mill remained in operation until 1968, when it was acquired by Chadbourn, Inc., a Charlotte-based hosiery and apparel manufacturer. The building was last used by the Mecklenburg Manufacturing Company, producers of children's knitwear (*Van Hecke* 1989). This firm closed its doors in 1989. The property is currently owned by Old Spaghetti Warehouse, Inc. of Garland, Texas. This company is renovating the 1927-1929 building for use as a restaurant. The 1946 addition stands vacant, and plans for this building are currently undecided.

**Historical Overview**

Completed between 1927 and 1929, the (former) Nebel Knitting Mill is significant as a tangible reminder of Charlotte's hosiery manufacturing, which rose to prominence during the post-World War I period. The growth of knit-goods manufacturing in the 1920s and early 1930s reflected the diversification of the textile industry, which ventured into new areas of production in efforts to survive the postwar decline in production, as well as to meet the growing demand for women's full-fashioned hose (Hall, et al. 1987, 237-288; *Manufacturers Record* 1926, 49-50; 1929, 80-81). By 1931, there were thirty-two hosiery mills in Burlington, North Carolina, and sixteen plants in High Point (Hall, et al. 1987, 255). The status of Charlotte as a textile center and the boom town of the Carolinas in the 1920s made it an attractive location for full-fashioned hosiery mills. The city contained five hosiery mills by the early 1930s, concentrated along the Southern Railroad corridor in Dilworth's industrial section: Larkwood Hosiery Mill; Hudson Silk Hosiery Mill; Charlotte Knitting Mill; Okey Hosiery Mill; and the Nebel Knitting Mill (*Charlotte City Directory* 1935). The Nebel mill, which had expanded and relocated to its present site directly north of the Southern Railroad tracks in 1927-1929, was the largest of this group.

The demand for form-fitting hose brought unprecedented income to hosiery employees, whose real earnings rose about thirty-five percent between 1923 and 1929. The vast majority of hosiery
workers were highly skilled, and the labor was physically easier and cleaner than most work in
the cotton mills. Hosiery mills produced none of the cotton dust that caused brown lung nor the
cotton lint that led to the derogatory nickname "linthead." As employees with comparatively
high wages and prestige, hosiery operatives rarely lived in mill villages; and typical of the
hosiery companies in Charlotte and the region, the Nebel mill did not include an affiliated
village. Rather, its workers dwelled in a variety of neighborhoods, commuting to work by
automobile or by the trolley, which ran down South Boulevard, near the cluster of hosiery mills
there (Nebel Knitting Company Collection).

Even during the Depression, the region's hosiery concerns continued to operate at a steady pace,
forming an oasis of prosperity in the sluggish textile industry" (Hall, et. al. 1987, 255; McGregor
1965, 6-7). The Nebel mill, indeed, ran steadily throughout the 1930s, and according to William
Nebel, his firm never experienced a year with a financial loss (Nebel Knitting Company
Collection).

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