## City of Madison Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (1)

Name of Building or Site

Common Name

Historic Name (if applicable)

Wisconsin Wagon Company Factory

Wisconsin Wagon Company Factory

Location

Street Address

Aldermanic District

602 Railroad Street

Six

Classification

Type of Property (building, monument, park, etc.)

Building

Zoning District

Present Use

HIS-TL M1, Third Lake Ridge Historic District

Offices

Current Owner of Property (available at City Assessor's Office)

Name(s)

Madison Gas & Electric Company, Mr. Jim Montgomery, Facilities Manager

Street Address

Telephone Number

P.O. Box 1231

Madison, WI 53701

252-7000

Legal Description (available at City Assessor's Office)

Parcel Number

Legal Description

0709-133-0605-1

Lots 17 and 18, Block 123, Original Plat

Condition of Property

Physical Condition (excellent, good, fair, deteriorated, ruins)

Excellent

Altered or Unaltered?

Moved or Original Site?

Mostly Unaltered

Original site

Wall Construction

Masonry

# City of Madison LANDMARKS AND LANDMARK SITES NOMINATION FORM (2)

#### Historical Data

Original Owner
Wisconsin Wagon Company

Original Use
Wagon Factory

Architect or Builder Unknown Architectural Style
Astylistic Utilitarian

Date of Construction 1903; 1911

Indigenous Materials Used

None

#### List of Bibliographical References Used

Madison City Directory. Madison: G. R. Angell & Co., 1914; and 1916.

Madison City Directory. Milwaukee: Wright Directory Company; 1921 and 1925.

Madison City Directory: 1883. Madison: W.F. Curtis & Co., 1883.

Madison Tax Rolls. Madison Department of Planning and Development.

Map of Madison. Pelham, New York: Sanborn Publishing Company, 1885; 1892; 1898; 1902; 1908 and 1942 pasted over through 1959.

Madison Building Permits. Madison Department of Planning and Development.

Mollenhoff, David V. Madison: A History of the Formative Years. Dubuque, IA: Kendall/Hunt Publishing Co., 1982.

Morrissey & Bunn's Madison City Directory: 1880-81. Madison: Morrissey & Bunn, 1880.

Rankin, Katherine H. *Intensive Survey of the Historic Resources of Madison*, prepared for the Madison Department of Planning and Development and the State Historical Society of Wisconsin, 1994.

Wright's Madison City Directory. Milwaukee: Wright Directory Company, 1927; 1929; 1931; 1937; 1939; 1943; 1947; 1951; 1956 and 1957.

Wright's Madison City Directory. St. Paul, Minnesota: Wright Directory Company, 1966; 1973; 1974; and 1980.

## Form Prepared By

Name and Title

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Organization Represented (if any)

City of Madison, Department of Planning and Development

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Madison, WI 53701

266-6552

Date Nomination Form Was Prepared

March, 2001

# Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (3)

#### Describe Present and Original Physical Construction and Appearance.

The Wisconsin Wagon Company Factory is a three-story, astylistic utilitarian building constructed of load-bearing brick. It is located on the northwest corner of Railroad and South Blair Streets, set very close to each street, in an industrial area northeast of the Capitol Square.

The Wisconsin Wagon Company Factory was erected in two sections: the southeast two-thirds were built in 1903 and the northwest one-third was added in 1911. The basement is concrete and the flat, built-up roof is hidden by a parapet. The massive cornice with decorative brickwork and bartizan-like projections at the corners give the factory the appearance of a fortress. Stone and brick beltcourses also appear. Segmental-arched openings with stone sills and lintels of brick headers are found throughout the building. Originally, the factory displayed six-over-six, double-hung sash windows. The original windows were vandalized when the building was left vacant in the mid-1970s. In 1985, one-over-one aluminum windows with dark glass were installed, but the openings were left intact.<sup>2</sup>

The building is rectangular in plan and measures 50 feet (along Railroad Street) by 260 feet. The factory faces southeast, overlooking Railroad Street, although the main entrance is now through the South Blair Street doors. The front (southeast-facing) façade is five bays wide, finished with cream brick and symmetrical about the central entrance. The entrance is composed of a pair of wood doors set in a segmentally-arched opening. The doorway is framed with brick pilasters, and stone and brick moldings form a simple entablature. On either side of the doorway, two windows appear. The second and third stories are nearly identical to the first, except that a single window is set in the center of the façade at each floor.

The southwest-facing façade overlooks South Blair Street and is faced with cream brick. The south two-thirds of this façade comprise the original 1903 section, while the north one-third is the 1911 addition. The addition closely matches the original section in materials, the shape and distribution of the openings, and decorative details. Fifteen bays comprise this façade, nine in the 1903 section and 6 in the 1911 addition. An entrance matching the one on the Railroad Street façade is set toward the middle of the South Blair Street façade. North of this, the addition exhibits two more entrances. One holds a metal garage door (the opening appears original but the door is relatively new). The remaining bays, on all three floors, hold windows.

The rear (northeast-facing) façade displays red brick and irregularly-distributed segmentally-arched window openings. Several of the first-story openings have been bricked in, a change that appears to have taken place more than 50 years ago. Most of the rest of the openings are boarded but some hold aluminum, one-over-one windows with dark glass. All the openings retain their original stone sills and brick lintels. The southernmost second-floor opening connects to the skywalk, constructed

<sup>1</sup> Map of Madison, (Pelham, New York: Sanborn Publishing Company, 1902 and 1908); and tax rolls, city of Madison, Madison Department of Planning and Development.

<sup>2</sup> Building permit, on file, Madison Department of Planning and Development.

in 1985. The skywalk rests on tall, concrete piers and is finished with metal. The placement of the skywalk at the edge of this façade minimizes its impact. At the ground floor in the 1911 addition, a garage door appears. The opening is probably original to the addition, but the metal door was installed recently.

The northwest-facing façade is contiguous with the adjacent building at 601 East Main Street and displays no openings.

Exterior alterations to the Wisconsin Wagon Company Factory have been confined to replacement windows and the construction of a skywalk. However, the original openings are intact, reducing the impact of the replacement windows, and the skywalk attaches to the back of the building, minimizing its effect. Altogether, the Wisconsin Wagon Company Factory displays a high degree of integrity.

### City of Madison Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (4)

#### Significance of Nominated Property and Conformance to Designation Criteria.

The Wisconsin Wagon Company is eligible for designation as a Madison Landmark because it meets criteria 1 and 3 of the Landmarks and Landmarks Sites Designation Criteria (see Madison Ordinances Sec. 33.01(4)(a)). Under criterion 1, it is significant as one of two structures left in Madison associated with the transition between the horse-and-buggy era and the automobile. Under criterion 3, the building is significant as an excellent and intact example of a building type known as the "textile mill industrial loft."

### History Of The Property

The Wisconsin Wagon Company incorporated in 1883 and acquired this property shortly thereafter. The original officers of the company were John A. Johnson (also president of Fuller-Johnson), Simeon Mills, J. A. Mack and F. F. Proudfit. Christian Hansen (sometimes spelled Hanson) was the superintendent. As early as 1871, Hansen had been employed as a wagonmaker. In 1874, he established his own blacksmith shop. In 1880, his shop was located on Main Street near Webster Street. In 1883, he relocated to the existing site.<sup>3</sup>

When the Wisconsin Wagon Company acquired this property in 1883, a two-story stone building on the north end of lot 18, facing South Blair Street, appears to have been the only structure on the site. The Wisconsin Wagon Company used the stone building for the blacksmithing (first floor) and woodworking (second floor) functions of wagon manufacture. In 1883, the company also erected a large, frame warehouse on the south end of lot 18, with a two-story section overlooking South Blair Street, and a one-story section behind it. A small, frame coal shed stood just east of the warehouse. Lot 18 remained the same until 1903. Although the Wisconsin Wagon Company had acquired lot 17 in 1883, the Ball Brothers Foundry and Machine Shop occupied several sheds on that portion of the site. In 1892, the Wisconsin Wagon Company cleared lot 18 and erected a two-story frame warehouse on it.

In 1903, the frame warehouse on lot 17 was demolished and the south two-thirds of the current brick building was constructed. Three-stories in height, it was used as both a warehouse and for trimming and painting the wagons. An office was located on the first floor (adjacent to the pair of doors midway down the South Blair Street façade). The new brick building was connected to the stone building by means of a frame walkway at the second story. In 1911, the stone building was razed and a three-story addition to the 1903 brick building erected. By 1942, the frame

<sup>3</sup> Morrissey & Bunn's Madison City Directory: 1880-81, (Madison: Morrissey & Bunn, 1880); and Madison City Directory: 1883, (Madison: W.F. Curtis & Co., 1883).

<sup>4</sup> Map of Madison, (Pelham, New York: Sanborn Publishing Company, 1885); and tax rolls.

<sup>5</sup> Ibid.

<sup>6</sup> Map of Madison, (Pelham, New York: Sanborn Publishing Company, 1892).

<sup>7</sup> Tax rolls; and Map of Madison, (Pelham, New York: Sanborn Publishing Company, 1908).

<sup>8</sup> Tax rolls.

warehouse behind the brick building had been removed.9

The Wisconsin Wagon Company made carriages, ice wagons, drays, delivery wagons and six-and-nine-passenger pleasurettes. By 1899, Hansen was president of the company. By 1917, the Wisconsin Wagon Company no longer produced wagons, but was manufacturing auto bodies and tops, as well as repairing, painting and trimming automobiles. In 1921, R. A. Rott was the manager. By 1925, the company had been renamed the Hansen Auto Company. Clarence S. Hansen (son of Christian) was the president and manager. By 1929, the auto body and top manufacturing component of the Hansen Auto Body Company had relocated to 1026-1030 East Washington Avenue. Auto body repair and painting continued at 602 Railroad Avenue until 1957, when Hansen Auto Body moved to 644 East Main Street. Edward S. Hansen succeeded his father, Clarence, in the management of the company around 1940, remaining until 1957.

In 1957, Automatic Temperature Supplies, Incorporated acquired the property, using the building as a warehouse for refrigerator, heating, plumbing and air conditioning supplies. The company was run by three brothers, Raymond, Robert and Richard Sweeney. The company remained in the building until 1974. The building was left vacant thereafter until at least 1980. It was owned by Reynolds Transfer and Storage in 1982. By 1985, Madison Gas and Electric had acquired the property. The same year, MG&E refurbished the building for use as a employee training center, installing the existing windows and erecting a skywalk on the back of the building at the second story. Is

#### Historical Significance

Gasoline-driven automobiles first appeared in Madison in 1903. By 1916, there were more cars in Madison than there were horses. When the public began buying automobiles, most businesses related to the horse-and-buggy branched out into automobile sales and/or service. Only two buildings in Madison survive that bridged both types of transportation. These are the Wisconsin Wagon Company Factory and the Joseph Dottl Blacksmith Shop. The Wisconsin Wagon Company Factory began producing wagons at 602 Railroad Street in 1883, converted to the manufacture of auto bodies and tops as well as auto body repair around 1917. These functions were in separate locations by 1929, and the company continued under the name of Hansen Auto Body Company, repairing car bodies at 602 Railroad Street until 1957. Joseph Dottl was a blacksmith who gradually converted his shop at 502 South Park Street into an auto body repair shop. Dottl also founded the Dottl Manufacturing Company, which made spring and frame supports for Ford

<sup>9</sup> Map of Madison, (Pelham, New York: Sanborn Publishing Company, 1942).

<sup>10</sup> Historic Preservation file, Madison Department of Planning and Development.

<sup>11</sup> Madison City Directory, (Milwaukee: Wright Directory Co., 1917).

<sup>12</sup> Madison City Directory, (Milwaukee: Wright Directory Co., 1921).

<sup>13</sup> Wright's Madison City Directory, (Milwaukee: Wright Directory Co., 1925; 1927; 1929; 1937; 1939; 1943; 1947; 1951; 1954; 1956; and 1957).

<sup>14</sup> Wright's Madison City Directory, (St. Paul, Minnesota: Wright Directory Company, 1973; 1944; and 1980).

<sup>15</sup> Building Permit Records.

<sup>16</sup> David V. Mollenhoff, *Madison: A History of the Formative Years*, (Dubuque, Iowa: Kendall/Hunt Publishing, 1982), p. 366.

automobiles around 1917.<sup>17</sup> Today this building houses the Ideal Body Shop.

#### Architectural Significance

The Wisconsin Wagon Company Factory presents a good and intact example of a "textile mill industrial loft," a building type that was constructed in the United States between about 1885 and 1930.

The form of the textile mill industrial loft had its origins in the textile mills of the late eighteenth and early nineteenth centuries. Technical improvements in weaving and spinning developed in England in the 1760s required the use of a mechanical system of pulleys and belts, rotating shafts and gears, linked together and driven by steam or water power. Economic efficiency dictated the layout of the mechanized textile mill, creating a long, narrow, multistory building with open floors and high ceilings to accommodate the machinery and provide sufficient light and ventilation. On each floor, a single, rotating wooden shaft operated the textile machinery. Belts, pulleys and shafts running through the floors connected the horizontal shafts to the source of power. The first mechanized textile mill in the United States was erected in Pawtucket, Rhode Island in 1790. Conditions in New England proved ideal for mechanized textile manufacturing. A network of rivers provided ample water power, capital was abundant, labor sufficient and the damp climate strengthened cotton fiber. The textile industry flourished, especially in Massachusetts, into the late nineteenth century. The building form that had developed for textile mills in Britain was widely used in New England. As other industries in the United States mechanized, many adopted the long, narrow, multistory building form of the textile mill and continued to use it into 1930s. 18

As defined by architectural historian Betsey Hunter Bradley, the "industrial loft" was a long, narrow, multistory industrial building designed to optimize natural light and ventilation. Prior to 1930, the industrial loft had brick walls with heavy timber framing. The earliest industrial lofts displayed single, segmentally-arched windows, punched into the masonry walls. Around the turn of the century, engineers realized that timber framing had high tensile strength (that is, it resisted bending and breaking well), and began to install grouped windows within the timber frame. This was called the "pilaster-and-panel" wall, and it became a standard feature of what became known as "mill construction." In the late 1910s, steel-reinforced concrete construction began to be utilized in industrial loft buildings. Paired with continuous, steel industrial sash windows, this was called "daylight" construction because the amount of wall space devoted to windows doubled. Daylight construction became widely used for other kinds of industrial buildings, especially the sprawling, one-story "production shed," in the first decade of the twentieth century. The multistory industrial loft was more expensive to erect than the one-story production shed and daylight construction was more expensive than brick-and-timber. Therefore, factory owners, always striving for economic efficiency, did not adopt daylight construction for loft buildings

<sup>17</sup> Rankin, Katherine H., Intensive Survey of the Historic Resources of Madison, prepared for the Madison Department of Planning and Development and the State Historical Society of Wisconsin, 1994, no page numbers. 18 Ken Breisch, Serge Hambourg, et al., Mills and Factories of New England, (New York: Harry N. Abrams Inc., 1988), pp. 24-26.

until the 1920s, when the cost of steel dropped and long, straight lengths of timber grew scarce due to the harvesting of old-growth forests. Daylight industrial lofts were built until around 1940.<sup>19</sup>

During the 1920s, use of the electric fork-lift truck became wide-spread. As a result, the concrete-floored, one-story, production shed type of industrial building was increasingly preferred over the multistory industrial loft after 1930. Improvements in artificial lighting, such as the introduction of fluorescents in 1938, and the increasing efficiency of air-conditioning, led to the development of the "controlled conditions plant." A one-story, steel-reinforced concrete structure, the controlled conditions plant had glass-block or other fixed windows, or was windowless. It was the preferred type of industrial plant after 1940, although daylight production sheds continued to be built into the 1950s.<sup>20</sup>

The "textile mill", as defined by Bradley, is a specialized subtype of industrial loft building designed for a specific kind of manufacturing, but it was suited to various types of manufacturing industries, and was widely constructed between 1885 and 1930. Plans for textile mill industrial loft buildings appeared in various publications, such as the 1885 edition of Frank Kidder's construction manual, Architects and Builders Pocketbook. The pilaster-and-panel brick exterior and the wood framing and flooring known as mill construction was standard for textile mill industrial lofts because it minimized the effects of machinery vibration, resisted the spread of fire and provided a high level of natural lighting and ventilating at a relatively low cost. Textile mill industrial loft buildings that predate about 1910 typically have single windows, while later examples show grouped windows (but not the continuous wall of windows that would appear in "daylight construction"). Fire-resistive elements in the textile mill industrial loft included brick and timber frame construction; elimination of ceiling finishes, attics and combustible interior furnishings such as shelving; isolation of staircases and offices in towers apart from the factory floor; plank doors clad with sheet-metal; steel-framed, wire-glass windows, which were shatterproof; and sprinklers with a water tank on the roof. The flat roof, a standard feature of mill construction, added to the stability of the structure, increased its fire resistance and provided outdoor space that could be used for noxious processes or for employee recreation. Ceiling height ranged from 12 to 14 feet, increasing with the width of the building.<sup>21</sup>

The exterior appearance of the textile mill industrial loft, generally termed "astylistic utilitarian," was the result of the engineer's concept of beauty, which was based on function and utility rather than the formality or picturesque qualities that architects of the day found beautiful. Industrial buildings were detailed to imply strength, stability and efficient manufacturing organization. This was achieved through simple, functional designs that showcased the quality of the materials used and expressed the construction on the exterior. On textile mill industrial lofts, the pilasterand-panel brick walls were articulated both vertically and horizontally, with pilasters, spandrels

<sup>19</sup> Betsy Hunter Bradley, *The Works: The Industrial Architecture of the United States*, (Oxford, England: Oxford University Press, 1999), pp. 104-07, 146 and 156.

<sup>20</sup> Ibid., pp. 161-163.

<sup>21</sup> Ibid., pp. 27, 30-33, 113, 125-135.

and belt courses. Pilasters were often truncated at floor or window level on the top story, truthfully showing that, above that point, brick piers no longer supported the structure. Engineers emphasized the structure by placing ornament at load-bearing locations, such as window lintels, and pilaster capitals and bases. In contrast, architects recommended enriching industrial buildings around prominent features, such as entrances and towers. In the 1910s and 1920s, European modernist architects were inspired by American industrial designs, expressing the construction on other types of buildings.<sup>22</sup>

The Wisconsin Wagon Company Factory is a fine example of an early textile mill industrial loft, incorporating and retaining many of the features described above, including brick and timber frame, windows punched into the brick wall, flat roof and fire resistive interior finishes.



