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

Common	Historic (if applicable)
Garver Feed & Supply Co.	United States Sugar Company
Location	•
Street Address	Aldermanic District
3244 Atwood Avenue	Sixth
Classification	
Type of Property (building, monumen	t, park, etc.)
Buildings	
Zoning District	Present Use
Ml	feed and supply company
Current Owner of Property (available	le at City Assessor's office)
Name(s) Garver Building: Wayne Wendorf and James	
Street Address Garver: P. O. Box 7756, Madison 53707	Telephone Number
Legal Description (available at Ci	ty Assessor's office)
Legal Description (available at Ci Parcel Number 0710-054-0096-7	Legal Description Lot 2 of Certified Survey Map No. 2030
Parcel Number	Legal Description Lot 2 of Certified Survey Map No. 2030 recorded in Vol. 8, pg. 197 of Certified
Parcel Number 0710-054-0096-7	Legal Description Lot 2 of Certified Survey Map No. 2030 recorded in Vol. 8, pg. 197 of Certified Surveys, Dane County Register of Deeds.
Parcel Number 0710-054-0096-7 Condition of Property	Legal Description Lot 2 of Certified Survey Map No. 2030 recorded in Vol. 8, pg. 197 of Certified Surveys, Dane County Register of Deeds.
Parcel Number 0710-054-0096-7 Condition of Property Physical Condition (excellent, good	Legal Description Lot 2 of Certified Survey Map No. 2030 recorded in Vol. 8, pg. 197 of Certified Surveys, Dane County Register of Deeds.
Parcel Number 0710-054-0096-7 Condition of Property Physical Condition (excellent, good fair	Legal Description Lot 2 of Certified Survey Map No. 2030 recorded in Vol. 8, pg. 197 of Certified Surveys, Dane County Register of Deeds.

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

Describe Present and Original Physical Construction and Appearance.

Situated 1000 feet north of Atwood Avenue at the terminus of Sugar Avenue are two buildings formerly associated with the United States Sugar Company. These two buildings presently comprise part of the complex of buildings owned by Garver Feed and Supply Company. They are:

*the main factory and storage building formerly of United States Sugar Company, now known as the Garver Feed and Supply Co. *the original office building.

The site is bordered on two sides by Starkweather Creek, which empties into Lake Monona. A railroad track and right-of-way separates the property from Olbrich Park and Botanical Gardens to the southwest.

A 1990 expansion of the botanical garden buildings has encroached upon the original Sugar Avenue. It now curves around the building and is slated to be abandoned in the near future and the lands incorporated into Olbrich Park. Access to the site will be from Fair Oaks Avenue.

The main industrial building of Garver Feed and Supply Company is a tall, two story, tan colored brick industrial building with an adjacent single story brick storage wing. The main building is approximately 120 feet by 340 feet and the storage wing is approximately 120 feet by 130 feet. The roof is flat, with a gentle pitch to the rear for drainage. Additions to the northeast portion house the boiler and garage. The boiler wing has a pitched roof and is a two story masonry structure. The garage is a one story, flat roofed structure, nestled between the boiler wing and the main building.

A metal grain and feed elevator with distribution legs extends about 50 feet above the roof of the main building. The distribution legs are connected to two steel frames, two story tall truck loading accessory structures located to the rear of the building.

Main Factory and Storage Building

The main building is constructed in an Industrial Romanesque style, consisting of large central entry block on a central building mass with full circle arches on the first story and segmented arches on the second story and flanked by two slightly taller two story masses with segmented arches on both the first and second stories. The arches are corbeled, giving distinctive shadow lines. The upper windows are set in a brick panel, surrounded by brick pilasters and corbeled top. The cornice has additional corbeling and is capped by tile or metal capping. The first and second stories are separated by a stone band.

The rear half of the main building is separated from the front by a thick masonry wall. It is slightly taller than the front half and has a simpler architectural treatment. The rear facade is divided into two rhythms of pilasters, supporting a corbeled cornice with combinations of segmented arched windows. The eastern end of the facade has a narrow pilaster spacing with two large windows, one over the other. The balance has wider spaced pilasters with three layers of paired windows in the middle portion and large, rectangular wood filled openings, most likely for conveyors, in the balance of the facade.

Many of the windows have been filled in with masonry, wood siding, smaller windows or industrial steel windows without arches. What appears to be original wood double hung windows are in the flanking masses of the front facade. One of the window arches on the front facade has been removed and enlarged for a loading dock. Many of the openings on the rear facade have also been enlarged. The balance of the rear half is used for large machinery rooms for the feed milling, bagging and pelletizing operations. A number of intermediate floors in the middle area allow access to the upper levels of the machinery and the roof. Some machinery vaults still exist under the floor with remnants of drive shafts and gears still in place.

The two flanking masses are relatively small and well lit and appear to contain their original floor structure with an additional floor added in the western wing.

Between the main building and the storage wing is a modest two story masonry and wood portion that appears to have been an early infill addition for the sugar beet factory. It is in very poor condition with significant water damage and standing water.

The single story storage building interior is a series of columns spaced in 15 foot by 16 foot bays, supporting steel beams and a wood frame roof. The single story storage building is on the western end of the main building. It is very simple with very little architectural relation to the main building. It was built at the same time as the original. Most of the segmental arched windows and doorways are still visible with many partially or completely filled with masonry.

The interior is a series of large tall volumes of space with few intermediate floors. Most of the volume is open from floor to roof. Walls are exposed masonry with a few infill wood frame walls. (see 1991 building diagram) Large steel trusses supporting the wood frame roof were installed during the 1929-1931 reconstruction in the front half and the large bin area of the back half of the main building. Evidence of cut off beams and columns still exist in the walls. Large wooden bins were built in part of the rear half of the main building. This heavily reinforced wood structure supports both elevated and floor mounted bins, many with sloped floors to allow gravity to force the feed to small chutes or openings.

Constructed during the fall of 1905 and the winter of 1906, the main building of United States Sugar Company, when completed, varied in height from one to five stories. The main entrance exhibited a full four story, Richardsonian-like tower.

The main block of the building was altered in 1929 following acquisition by Mr. Garver. The alteration designs were prepared by Law, Law and Plotter Architects of Madison. Converting the sugar refining factory to Garver Feed and Supply Company resulted in the removal of the top stories of the structure, however, the ground plan remained the same. The existing front elevation facade is recognizable as that of the original structure. In subsequent years, following the 1929 alterations, a number of modifications were undertaken to accommodate the uses of Garver Feed and Supply Company and tenants including Minneapolis Moline Implements Co. However, the front elevation continues to be recognizable as that of the original structure.

The machinery associated with the sugar factory was sold in 1926 following the 1925 sale of the building. The interior of the structure was vacant upon acquisition by Garver Feed and Supply Company. The 1908 Sanborn Insurance Map provides an indication of the building's machinery and interior organization.

Office Building

The original office of United States Sugar Company was constructed during the same period as the industrial building and is located approximately forty feet south of the industrial building. The office is a one story gable roofed structure, measuring approximately 40 x 40 feet and mirrors the fenestration, tan brick and trim details of the industrial building.

Today, the building provides office space for Garver Feed and Supply Company. The building's exterior and interior appears much the same as it would have when the United States Sugar Company closed for the final time in 1924. The addition of an entry vestibule is the only notable change.

Note: a concrete beet shed on a neighboring parcel is not included in the landmark designation because of alterations.

City of Madison Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (3)

Original Owner	Original Use
United States Sugar Co.	Sugar beet refinery
Architect or Builder	Architectural Style
Theodore Hapke	vernacular
Date of Construction 1906	Indigenous Materials Used not applicable

List of Bibliographical References Used

please see attached bibliography.

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Form Prepared By:

Name and Title

Susan O. Haswell, Arlan Kay and Katherine Rankin, Preservation Planner

Organization Represented (if any)

Madison Landmarks Commission

Address

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Telephone Number

266-6552

Date Nomination Form Was Prepared

January 20, 1994

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

Significance of Nominated Property and Conformance to Designation Criteria:

The Garver Feed and Supply Company is being nominated as a Madison Landmark for its local significance in the areas of industry and commerce. It represents the maturation of a scientific, research-based, centralized approach to the livestock feed industry, and is an important surviving link to the agricultural industry in the Madison vicinity.

Since its construction in 1906, the factory building at 3244 Atwood Avenue has played an important role in the industrial and commercial history of Madison and the thriving farm district surrounding the city.

The building was occupied from 1906 to 1924 by the United States Sugar Company, a sugar beet processing firm. Since the structure was remodeled c. 1929—'31, it bears only a superficial resemblance to the original structure. Therefore, the period of significance for which the site is being nominated begins in 1931, when James R. Garver established a feed mill and farm supply business there. To document the rich context surrounding the origins of the building, this statement of significance begins with a summary of the building's prior history as the U.S.. Sugar plant, followed by an overview of its more recent use as a feed mill.

The United States Sugar Company, 1906-1924

As headquarters of the United States Sugar Company, the factory's influence reached far beyond Madison and Dane County. During its first season in operation, the Madison plant processed beets from as far away as Prairie du Chien. In subsequent seasons, the U.S. Sugar Co. routinely entered into contracts with farmers within a 100-mile radius, processing beets from thousands of farms in Columbia, Crawford, Dane, Richland, Sauk and Vernon counties.

Additionally, because there is so little physical evidence left of Wisconsin's once-thriving beet sugar industry, the U.S. Sugar complex in Madison (although substantially altered since its construction) takes on a state-wide significance, as well. Only nine sugar beet factories are known to have operated in Wisconsin since 1869. (this total includes a plant at Menominee, Michigan, that got 70 per cent of its beets from Wisconsin farms).

Cultural Resource Management in Wisconsin, the state's historic preservation plan, discusses the significance of the beet sugar industry under the "Fruit and vegetable products" study unit. The state plan notes that , "...An indepth study to identify any of the remaining facilities associated with the limited sugar beet refining industry could prove valuable."

A cursory survey reveals that, of the nine factories once operating in Wisconsin, only tow are still standing. The two earliest plants, built in 1869 and 1870, were dismantled and moved to California. 4

All that remains of Wisconsin's first successful plant, built in 1901 in Menomonee Falls, is a small office building, now used as a Knights of Columbus clubhouse. The factory at Menomonee, Michigan, no longer exists, and the Chippewa Falls plant also has been demolished. Only the ground floor of the former Rock County Sugar Company plant in Janesville, built in 1904, still stands; it is occupied by a knitting firm. All that remains to mark the site of the Menomonee Sugar Company's plant in Green Bay are several piles of lime left behind from the manufacturing process. According to the Wisconsin Agri-Business Council, no beet sugar factories currently operate in the state.

Consequently, the three extant buildings of the former U.S. Sugar Co. complex—the main plant, an office building and a beet storage shed—constitute a large portion of what little remains from a significant chapter in the state's industrial and agricultural history.

The limited number and regional significance of sugar beet refineries certainly make them more important on a statewide level than other agricultural processing facilities such as canneries, as suggested in Cultural Resource Management in Wisconsin. 10

The U.S. Sugar plant also played a role in the development of the American sugar beet industry as a whole. It was designed, built, managed and partially financed by Theodore Hapke, a German immigrant who arrived in the United States around 1890 at the invitation of Oxnard Brothers, a large sugar refining firm based in Brooklyn, New York. 11

In addition to building the Oxnard Brothers plant at Grand Island, Nebraska, Hapke designed and erected sugar beet refineries throughout the U.S., including New York state, Arizona, Illinois and the Rock County Sugar Company plant in Janesville. At the time the U.S. Sugar Company was being organized, Hapke's main office was in Chicago. 12

The U.S. Sugar site also holds local importance for its role in Madison's development. Around the turn of the century, Madison was growing rapidly. As the city's central isthmus area became increasingly congested, real estate promoters platted and eagerly "boosted" residential and industrial development in the suburbs.

Between 1891 and 1899, new subdivisions totalling 728 acres were platted around Madison. But a growing number of businessmen and professionals thought that the city wasn't growing fast enough. Hoping to spark growth by attracting industry, a civic advancement group called The Forty Thousand Club was organized in 1901. Its goal was to boost Madison's population from around 19,000 to 40,000 by 1910. 13

To this end, the club launched a variety of promotional activities including contacting businesses to suggest their relocation to Madison and endorsing the stock offerings of new or relocating enterprises. Club members persuaded Madisonians to buy \$10,000 worth of stock in an Illinois manufacturing firm called the Mason-Kipp Company, resulting in its move to Madison in 1903. 14

Similarly, the Forty Thousand Club played a key role in the U.S. Sugar Company's formation. In 1905, the club hosted a banquet for more than 1,000 farmers to promote the raising of beets for the sugar factory, on which construction began in July. 15

Private interests also played a role in bringing the sugar factory to Madison. U.S. Sugar Company's purchase of a 19-acre site in the Town of Blooming Grove in July, 1905, was the culmination of several months of lobbying by the Fair Oaks Company, a real estate development firm which owned the site and the residential lots surrounding it. Prior to the arrival of U.S. Sugar, the Fair Oaks Company had invested more than \$50,000 in promotional deals, including the donation of land to the American Shredder factory, Mason-Kipp, the American Plow Company and the Madison City Railway Company. 16

John A. Aylward, a principal in the Fair Oaks Company, told a meeting of area residents in April 1905 that "...the company had used every effort to locate the sugar factory in Fair Oaks and believed they would ultimately succeed. 17

The U.S. Sugar Co. complex and its adjacent working-class neighborhood bear witness to the success of Aylward, The Forty Thousand Club, and others in attracting industry and labor to Madison's "East End".

These turn-of-the-century promoters laid the foundation of a east-west dichotomy in Madison's land use pattern that persists today. While the west side developed primarily as a residential area for upper middle class University of Wisconsin faculty and professionals, the east side took on an industrial, working-class flavor. 18

U.S. Sugar's impact on the local economy was substantial. Over the course of a "campaign", the period from October to January when the plant was in operation, some 250 laborers worked round the clock, processing up to 500 tons of beets per day. The factory required 4,000 to 5,000 acres of beets per campaign. 19

In contrast to its economic benefits, the factory proved to have a much less desirable impact on the environment. Initially, effluent from the refining process was dumped into Starkweather Creek, which empties into nearby Lake Monona. The resulting discoloration of the lake ice seriously hampered operations of the Knickerbocker Ice Company. After U.S. Sugar's first "campaign" in 1906-07, the factory superintendent announced plans to build a 800-by-400 foot catchment basin behind the factory to prevent the escape of waste water into the lake.

But waste disposal continued to be a serious problem. In 1919, Madison city engineer E.E. Parker blamed the pollution of Lake Monona on refuse from the plant and the algae that thrived on it, estimating that an average of 50,000 pounds of waste a year had been dumped into the lake.²¹

Waste disposal was only one of the may problems with which the plant's managers had to cope. Unfavorable tariff legislation that lowered the price of foreign-grown sugar shut down the factories in Madison, Janesville and Chippewa Falls, although the Menomonee Falls factory continued operations. The Madison plant reopened in October 1915.22

By 1924, however, U.S. Sugar found itself in another economic squeeze, one from which it would never recover. On 26 May 1924, company owners filed a voluntary petition of bankruptcy. Unable to reach company officials for comment, the <u>Wisconsin State Journal</u> reported: "The company's failure has been rumored for more than a year, coming, it is believed, from a slump in sugar prices after high-priced beet crops were contracted for."²³

In subsequent years, the refining machinery was sold and removed. The main building and a little over three acres of land were sold to a group of Milwaukee businessmen at a public auction in February 1925. The property changed hands again in 1926 and finally was acquired by James R. Garver in May 1929.²⁴

The Garver Years

James Russell Garver(1885-1973) was an alumnus of the University of Wisconsin College of Agriculture, earning a master's degree in animal husbandry in 1908. After graduation, he held a variety of agriculture-related positions in several states. 25

In November 1912, Garver joined the staff of the Indiana Agricultural Extension Service at Purdue University, where he headed the Purdue Dairy Extension Movement. While at purdue, he wrote an extension bulletin, "How to Select A Good Dairy Cow." Garver resigned from the Indiana Extension in February 1914. 26

Subsequently, he became a livestock advertising solicitor for <u>Hoard's</u> Dairyman in Fort Atkinson, Wisconsin. ²⁷ By 1917, he had returned to

Madison to establish his own business, the Wisconsin Live Stock Advertising Company. $^{28}\,$

By 1929, Garver had become vice president of Straus Printing Company. His wife, Anna Van Vranken Garver, apparently was managing the advertising firm at this point. 29

After purchasing the U.S. Sugar building in 1929, Garver set up a new business there, the Wisconsin Sales and Storage Company. A listing in the Madison city directory for 1931 describes the firm's offerings: "General storage, also complete line of Dairy & Poultry Feeds." Garver's business office was downtown at the Beavers Insurance Building, 119 Monona Avenue (now Martin Luther King, Jr. Boulevard), while the location of his warehouse is listed as "Atwood Av. at Oakridge". 30

Apparently undaunted by the Depression, Garver proceeded to convert his warehouse into a state-of-the-art feed mill, a project that was completed early in 1931. Although an exact date hasn't been established, it was probably at this time that the building's exterior appearance was changed markedly, including the removal of its top two stories.

A large display advertisement in the 3 March 1931 edition of the <u>Wisconsin State Journal</u> announced the opening of the new Economy Feed <u>Milling Company</u>. The ad proclaimed:

This new grinding, mixing and molasses processing plant is equipped with the most modern machinery built by the Anglo-American Mill Company, the largest manufacturer of milling machinery. According to Mr. H.A. Hambey, the highest ranking millwright from he company, the Economy Feed Milling company installation is the best he has ever made. From the point of compactness, convenience and economy of operation, it represents his masterpiece to date. 31

The new plant boasted "a number 4 Hammer mill driven by a 60 horse power motor...capable of grinding from a six to 10 tons per hour." Feed components could be custom-mixed in a "ton and a half vertical type batch mixer." 32

The mill also offered a molasses processing service, which could "thoroughly impregnate finely ground, thoroughly mixed, home grown feeds with from ten to twenty per cent of molasses by means of pressure instead of heat." In addition, a 40,000-gallon molasses tank on the premises would allow the Economy Feed Milling Company "to sell molasses at a price that will save this trade area thousands of dollars annually," the advertisement stated. 33

Initially, Garver's business strategy appears to have been to help farmers make the best possible use of their own home grown feeds. But the Economy Feed Milling Company soon entered the commercial feed business, as well, producing its won brand of poultry feed, "Economy Growing Mash," in 1931. 34

Feed inspection reports compiled annually by the State Department of Agriculture and Markets document the mill's expansion into other lines. In 1932, four commercial feeds were being produced: "Garver's Economy 16% Dairy Ration," Garver's Sunshine Chick Starter," Garver's Economy Laying Mash," and "Garver's Economy Mix." 35

The 1933 feed inspection report lists five brands: "Garver's Economy 16% Dairy," "Garver's Economy Manamash 16%," "Wayne Local Mix chick Mash," "Economy Wayne Egg Mash," and "Garver's Economy Sunshine Egg Mash." 36

In 1934, only three Garver/Economy feeds were listed: "Corn Gluten Meal," "Wayne Local Mix Mash," and "Garver's Economy Mix."37

When it began operation in 1931, the Economy Feed Milling Company was one of at least four feed mills within the city of Madison. In addition, there were several additional feed firms in local farming communities, such as C.J. Schimdt in Waunakee and Math. Esser & Son of Dane, Wisconsin.

Within Madison, Garver's competitors in the 1930s were the Hoffman Feed Company, the Alex Sinaiko mill and the Dane County Farm Bureau.

The Hoffman Feed Company

The Hoffman Feed Company was located at 710 West Washington Avenue adjacent to the Chicago, Milwaukee & St. Paul railway corridor. (The mill site is known today as 706-712 Regent Street). The former mill has undergone many alterations and uses since passing from the ownership of Albert F. and John G. Hoffman. Feed was sold there as recently as 1963. Since that time, the building has been used as a paper goods assembly plant, a warehouse, a Salvation Army store, a furniture store, a television repair service, a window factory and a fitness club.

According to Wright's 1931 Madison city directory, the Hoffman Feed Company sold flour, feed, grain, seeds and salt. 40 Feed inspection reports from the early 1930s indicate that the Hoffman mill was producing several poultry feeds at that time. 41

By 1937, the firm was operating a branch at 927 East Washington. 42 Today, the 900 block of East Washington is occupied by the Mautz Paint Company's offices and factory.

Alex Sinaiko

The Alex Sinaiko warehouse was located at 653 West Washington Avenue, also adjacent to the "Milwaukee Road" and just across Washington Avenue from the Hoffman property. In 1931, the Sinaiko firm was selling both flour and feed, according to a city directory listing. 43

The firm suffered \$5,000 worth of damage in a fire on 11 February 1931—just a few weeks prior to the opening of Garver's Economy Feed Mill. Described by the Wisconsin State Journal as "the first big fire of the year in Madison," the early-morning blaze destroyed hay, bran, feed and cattle salt. The State Journal reporter described the Sinaiko building as "quite old," of two-story frame construction with sheet iron covering its walls. 44

Despite the fire, the Sinaiko mill continued in business. Feed inspection reports for the early 1930s list commercial feeds produced by the firm, including "Oat Clips," "Golden Glow Meat Scraps," "Golden Glow digester Tankage," and "Malt Sprouts." 45

By 1937, the business was called "Alex Sinaiko & Sons," and was being managed by Sinaiko and Irving Rosen. It is unclear whether or not the firm was still producing feed, as its 1937 city directory listing mentions only one product—flour. 46

In 1944, a firm called the Standard Feed & Seed Company was doing business in the building. Klein-Dickert Company, Inc., a glass and paint business, acquired the building around 1959, occupying it until February, 1991.

Dane County Farm Bureau

A cooperative warehouse association was incorporated by the Dane County Farm Bureau in 1930, predating the opening of Garver's Economy Feed Mill by less than a year. Launched with capital stock of \$8,000 provided by 400 Dane County farmers, the cooperative warehouse was located at 330 South Blair Street. Its inventory included feeds, grains and fertilizers. A.W. Elver served as president of the warehouse association, which appointed W.R. McClellan as manager. 48

On 19 February 1931, less than two weeks after the Sinaiko fire, the Farm Bureau warehouse was destroyed, with an estimated loss of more than $$10,000.^{49}$

By 1937, the Dane County Farm Bureau Cooperative Warehouse Association had relocated to 640 Railroad Street. Over the next two years, the enterprise apparently relocated again and underwent a name change. The 1939 Madison city directory lists the Dane County Cooperative Farm Supply Company's location as 301 Paterson. 51

It is unclear whether or not the Dane County Farm Bureau Cooperative manufactured feeds or merely sold feeds made by other mills. Feed inspection reports from the early 1930s list several feeds manufactured by the Wisconsin Farm Bureau Federated Cooperative in Madison. S2 Although they were both located in Madison, additional research is required to determine what relationship existed between the Dane County Farm Bureau and the Wisconsin Farm Bureau Federated Cooperative.

Today, the Dane County Farm.Bureau is located at 5371 Farmco Drive, Town of Westport. The Dane County Farmers Union (CENEX) Cooperative is located at 203 West Cottage Grove Road, Cottage Grove. The Wisconsin Farm Bureau Federation's offices are located at 7010 Mineral Point Road, Madison. 53

Historical context: the feed industry

To comprehend the significance of any individual feed mill, a rudimentary understanding of the commercial feed business as a whole is essential.

<u>Cultural Resource Management in Wisconsin</u>, the state's historic preservation plan, has no study unit on the feed industry <u>per se</u>. However, a few brief references to the feed industry and feed mills are included in "Milling," a study unit within the "Industry" theme.

Focusing on the milling of flour and other human foods, the "Milling"study unit fails to portray accurately the key role of the feed industry in the development of Wisconsin's dairy and livestock industries.

The study unit notes that many flour millers adjusted to the decline of wheat farming in the mid-1800s by converting their mills to animal feed processing plants. A second reference to feed mills states that:

"...former mill sites dot the Wisconsin countryside in various states of ownership, use and repair. For instance, the feed mill, sometimes a former flour mill, is now mostly a mixing station where various grains can be mixed with natural molasses and chemical additives, and still serves an occasional dairy or livestock community in various regions." 54

Because of "their vast numbers," mills or milling sites are "only of local significance and should be evaluated under those terms," the study unit advises. 55

The Garver mill also holds significance as a commercial enterprise. However, since the "Commerce" study units of Wisconsin's cultural resource management plan have not been completed, this statement will focus on the Garver mill's significance to "Industry/milling" within a local context—i.e., the city of Madison.

Broad patterns within the feed industry

Because feed mills tend to be located far from main highways and because the number of people employed by the feed industry is relatively small, those outside the industry typically fail to recognize its significance to agriculture and the American economy as a whole. 56

Feed is the largest single item of expense in the production of meat, milk and eggs, accounting for 50 to 75 percent of the total costs. 57

Walter Ebling, a Wisconsin Department of Agriculture statistician, observed in 1943:

"Agriculture in Wisconsin has long had as its main source of income its livestock and dairy industry. The livestock industry rests upon a broad program of feed production which in recent years has used about 90 percent of the state's cropland. This has not always been so. In pioneer days, Wisconsin was a producer of crops for market, such as wheat, barley, potatoes, hay and others. With the progress of time, however, the output of the state's cropland has increasingly been fed to livestock and converted into animal products." ⁵⁸

By 1924, Wisconsin farmers were spending more than \$27 million a year on feeds to supplement their home-grown grains and roughages. In 1930, the figure had increased to \$31 million, with about \$8 million spent on commercial mixed feeds. 59

Expenditures for feed dropped off during the Depression era. In 1939, Wisconsin farmers spent nearly \$26 million on feed. This figure represented 8.7 percent of gross farm income and nearly 10 percent of the cash farm income for that year.

Prior to 1930, there were no statistics for Wisconsin on what percentage of total feed expenditures went towards commercial mixed feeds. But in 1937, the Wisconsin legislature authorized the state Department of Agriculture to obtain sales data from feed manufacturers. ⁶¹ [NB: Data on individual manufacturers that was collected before 1980 has been destroyed, according to officials at the Wisconsin Department of Agriculture, Trade and Consumer Protection].

By 1941, the net retail value of commercial feeds sold by Wisconsin manufacturers was close to \$25 million, and the feeders' outlay for commercial feed was equivalent to approximately 5 percent of gross farm income. 62

In 1942, a total of 1,100 firms were registered as feed manufacturers with the Wisconsin Department of Agriculture. Of these, 802 were located in Wisconsin. More than 2,000 retail outlets wee distributing 6,062 separate brands of feed to the state's farmers. 63

U.S. Census of Manufactures figures for 1956 showed that the formula feed industry ranked thirteenth of all American industries by value of product, selling \$3.2 billion worth of feed. 64

Origins of the feed industry

The American commercial feed industry evolved in the late 1800s, when millers, meat packers and other food processors discovered that industrial by-products such as corn gluten and meat scraps had considerable feed value. Not only did these by-products contain substantial amounts of protein, but they also furnished minerals and vitamins lacking in the grains and roughages that comprised the typical diet of livestock and dairy cows at that time. 65

Following this discovery, these waste materials (which typically had been dumped into lakes and rivers) acquired a definite market value. A new industry soon sprang up to process and mix these by-products with feed grains. 66

Closely tied to the growth of the commercial feed industry were contemporary advances in animal nutrition research. A German chemist, Emil Wolff, published the first livestock feeding standards in 1864. Around the same time, German and American scientists discovered that protein needs varied between animals and the functions they perform. This led to the realization that protein could be a limiting factor in the production of meat, milk and eggs. ⁶⁷

Around the turn of the century, the University of Wisconsin's college of Agriculture was becoming a world-renowned center for animal nutrition research. Feeds and Feeding, William A. Henry's guide to animal nutrition, appeared in 1898 and quickly became the bible of American livestock and dairy farmers. Henry was the first dean of the College of Agriculture. By the mid-1950s, Feeds and Feeding was in its twenty-second edition and had been translated into Portuguese, Russian and Spanish. 68

One of the earliest documented feed manufacturing firms in the U.S. was established in 1875 with plants in Chicago and Waukegan, Illinois. Operated by John W. Barwell, an English immigrant, the business eventually became known as the Blatchford Calf Meal Company.

Another pioneer feed manufacturing firm was the National Food Company of Fond du Lac, Wisconsin, founded in 1885. It made a product called "No-Milk Calf Food." 70

The first feed industry trade association was founded in 1909, when the American Feed Manufacturers' Association was organized in Milwaukee. 71 Milwaukee also subsequently became headquarters for a regional trade association and two nationally-distributed trade journals. The Central Retail Feed Association was organized in 1926, with offices in Milwaukee. The association's official publication was The Feed Bag. Also published in Milwaukee was Flour and Feed. 72

Early Problems

the early years of the feed industry were characterized by poor relations between consumers and manufacturers. Those who sold by-products and feeds of poor or varying quality got the industry off to a bad start. 73

Government regulation of feed began prior to 1900, but the exact date is in doubt. In 1895, Connecticut passed a general food law containing provisions for the regulation of food sales for humans and animals. 74

Massachusetts passed the first specific feed law in 1896. Other New England and eastern states followed. Wisconsin passed a feeding stuffs law in 1901. By 1920, 38 states had some form of regulation in effect. 75

An historian of the feed industry observed in 1961: "The fact that laws were passed to control the sale of ingredients and formula feeds implied that everything was not on the 'up and up', and created an unfavorable image the industry is still trying to overcome." 76

The pioneer companies of the feed industry had to do considerable missionary work to get their product accepted by farmers. Once sufficient orders for the feed were secured, the salesman often rushed back to the plant to help mix and load the feed for delivery.⁷⁷

Trade associations, such as the Midwest Feed Manufacturers' Association headquartered in Kansas City, Missouri, attempted to foster better working relations between the feed industry and opinion leaders such as veterinarians and the faculty of land grant colleges and universities. 78

The Depression era

In the years prior to the Great Depression, the feed industry enjoyed rapid growth. Estimated U.S. production of mixed feed in 1929 was about 10 million tons. American mills were producing at least twice the amount of feed in 1929 that they had in 1919, with several of the leading manufacturers multiplying production by three or four times. 79

Early in 1930, on observer of the industry declared:

"The blue sky days in feed manufacturing, when the business consisted of trying to force a product of doubtful value upon the livestock farmer, whether or not he wanted it, are now largely in the past. Instead, there is a sincere desire on the part of most manufacturers to turn out a product that will be of real service to the feeder and to help him use it to best advantage...The new standards of the feed industry are exemplified by such constructive things as the experimental farms of some of the larger feed concerns."

A local manifestation of this trend was the Quaker Oats Company's experimental farm in Monona, Wisconsin, located near the southeast edge of Madison on the Frank Allis estate. During the 1920s. research to determine the value of oat feed as compared with other feed ingredients was conducted there by G. Bohstedt, a professor of animal husbandry at the University of Wisconsin. The farm also served as a meeting place of regional sales meetings. 82

U.S. commercial feed production reached a peak of 13.1 million tons in 1930, then dropped sharply as the Depression gripped the nation's economy. The industry responded in a variety of ways: making special feeds for drought-stricken areas, introducing supplements to be mixed with the farmer's home-ground grain, and offering many new feeds and services to increase sales.⁸³

As with other American industries, recovery was slow and prosperity did not reappear until World War II, when the nation's farmers stepped up production in aid of the war effort.

It wasn't until 1941 that feed production passed its previous peak. Production doubled during the next ten years, climbing to 32.8 million tons in 1951.⁸⁴

Changes in product lines

In the 1930s and 1940s, horses wee being replaced by gasoline engines as the main source of motive power on farms. As the market for horse feed, which had once been the main product line of most feed mill, began to dry up, improved feeds for other farm animals were developed. 85

Poultry feeds began to take an ever-greater share of the market. New breakthroughs in nutrition research enabled feed manufacturers to offer vastly improved poultry feeds. In 1922, the role of Vitamin D in rickets was discovered, which made confinement rearing of poultry possible. by 1930, production of poultry feeds accounted for 47 percent of the industry total. By 1950, almost 62 percent of all the feed manufactured in the U.S. was poultry feed. ⁸⁶

Before 1930, feed manufacturers made "complete feeds," which were sold ready to feed to the animal. In the late 1920s and early 1930s, a new product line was being introduced—concentrates. Concentrates are mixtures of protein, minerals and vitamins that may be added to homegrown grain. 87

The introduction of concentrates, coupled with the impact of the Depression, stimulated the development of a new type of retail feed dealer. This dealer installed grinding and mixing equipment for processing the farmer's grain and mixing it with a concentrate to make a complete formula feed. Large manufacturers supplied their retail dealers with concentrates and recommended mixing formulas based on applied research. 88

Distribution methods also began to change. Feed producers originally moved their products by wagon, train and riverboat. Eventually, rail shipment of bagged feed from a manufacturing plant in a large city of brokers, wholesalers or dealers in smaller trading centers became the common distribution method.

In the late 1920s and early 1930s, manufacturers began to use trucks to move feed from their plants to nearby dealers. But truck shipments increased slowly, due to the capital investment required and higher freight costs. 90

Trucks didn't begin to supplant rail transport until around 1945, when the feed industry began to decentralize. Smaller plants were being built closer to the customers, which eventually made trucks more efficient and cost-effective than rail transport. 91

How the Garver mill reflects "the broad patterns of our history"

During the designated period of significance (1931-1941), the Garver feed and supply business decidedly was "associated with events that have made a significant contribution to the broad patterns of our history."

James R. Garver represented the new breed of feed dealer that emerged as the "blue sky" days of the industry passed into history. His master's degree in animal husbandry and his subsequent career experience gave him the knowledge needed to formulate the research-based products his clientele demanded.

Establishing his business during the depths of the Depression, Garver--like others in the feed business--was compelled to offer innovative products and services in order to survive. When Garver's Economy mill opened in 1931, he advertised its ability to mix molasses and other additives with farmers' homegrown grains.

As more farmers began to appreciate the convenience of ready-to-feed mixes, however, the feed industry responded with an ever-growing list of brands. The Garver mill's expanding line of commercial feeds reflects this trend.

Although his mill was adjacent to a rail corridor, Garver also employed a fleet of trucks to deliver his products. At the close of World War II, Garver was trucking feed to more than 200 dealers throughout southern Wisconsin. 92

Apparently, the Garver operation shared the prosperity that many feed dealers enjoyed during the war years. According to a 1945 newspaper story, Garver took advantage of the mill's "vast storage capacity" by stockpiling feed ingredients against a threatened shortage. Garver estimated the building's storage capacity to be about 5,000 tons, or more than 200 railroad car loads. 93

The Garver Supply Company eventually supplied feed over a 40-county region in southern Wisconsin and northern Illinois. After James R. Garver died in 1973 at the age of 88, the business was run by employees under a trust arrangement. It was sold in 1975 to its current owners, Wayne Wendorf and James Hatch, who since have operated the business as Garver Feed and Supply Co., Inc. 94

Summary of Significance

Garver Feed and Supply represents the increasingly scientific, centralized focus of the livestock feed industry. Livestock feed production mirrored the evolution of the livestock industry as a whole, and illustrates the important impact of "scientific agriculture" as promoted through colleges of agriculture, agricultural extension services, and professional farm journals.

An increased understanding of the special nutritional needs of various livestock led to the formulation of specialty mixed and is reflected in the changing product lines offered by the Garver company. The number of poultry mixes shows that company's sales mirrored the increased market share of poultry feeds. On-site mixing of "concentrates" with farmers' home-grown grains also reflected a general trend in the feed business.

The Garver feed mill embodies the "coming-of-age" of the livestock feed industry and in the period of 1931 to 1941 set the tone for the future of the industry in general.

The Garver mill is the best remaining example of a pre-World War II livestock feed manufacturing plant in the city of Madison. As a whole, the building retains its historic integrity from the period 1931 to 1941, when James R. Garver established his feed and supply business there.

Garver Feed and Supply reflects the importance of agricultural industries to southern Wisconsin. It serves as a reminder that even Madison, in which government and university activities prevail, is not isolated from the state's agriculture-based economy.

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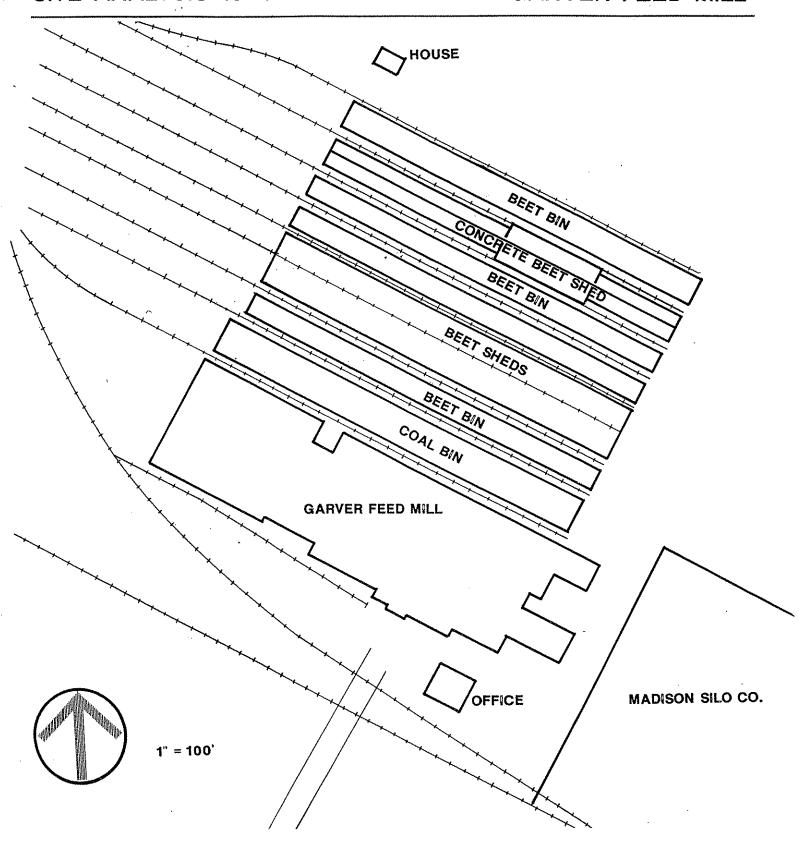
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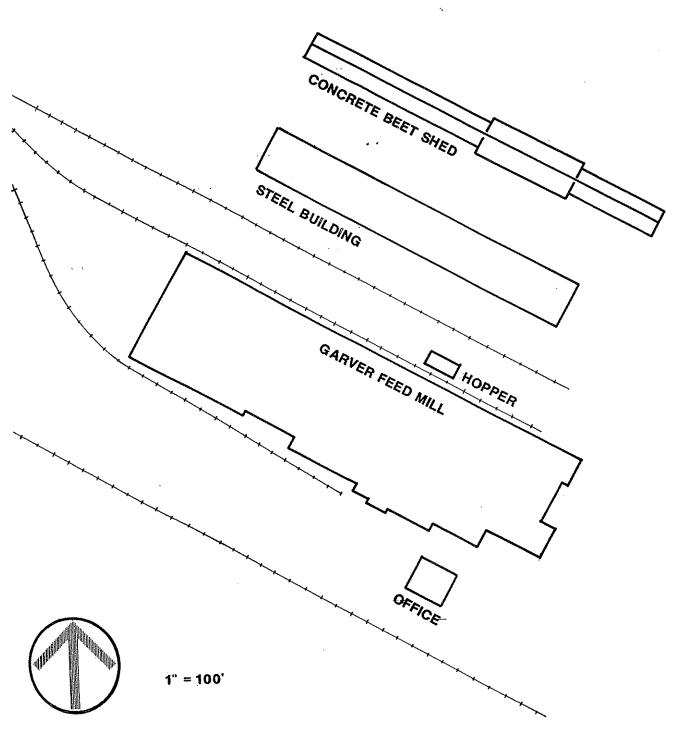
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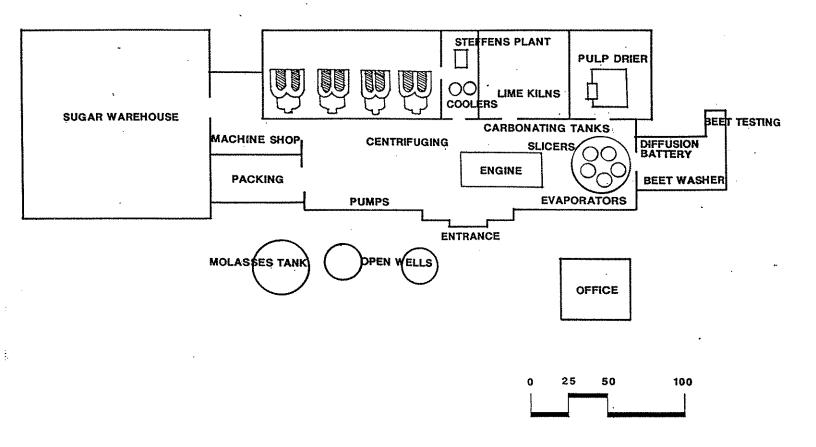


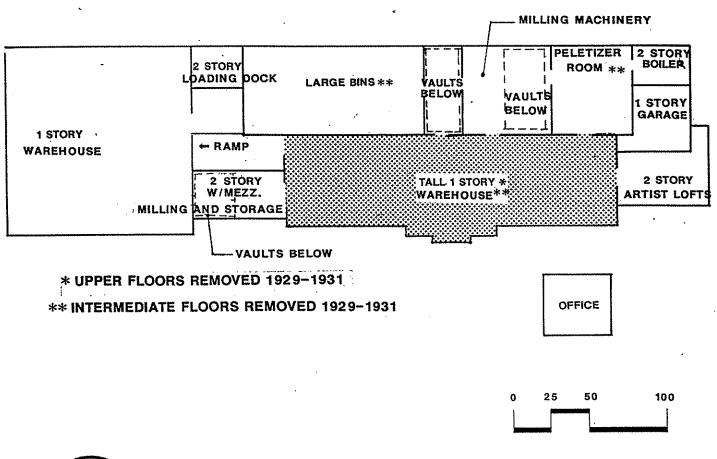
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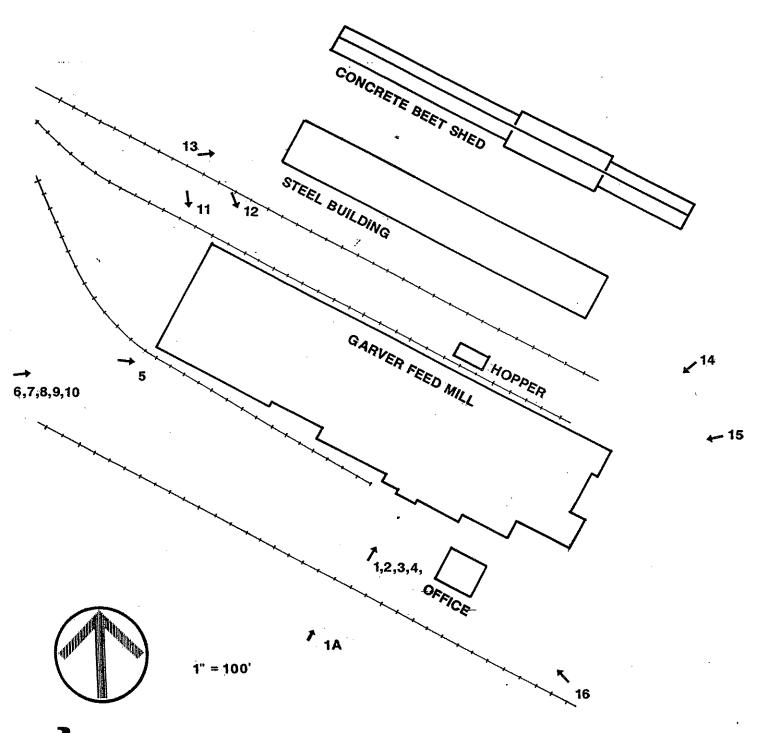
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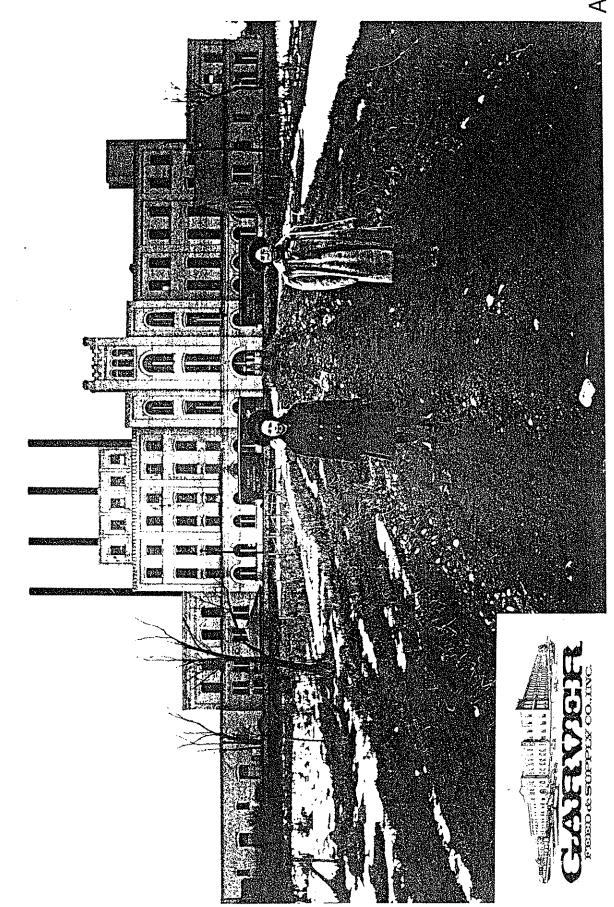


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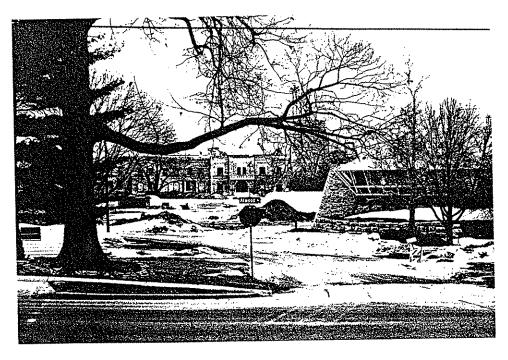
PHOTOGRAPHS

1A FRONT OF FEED MILL

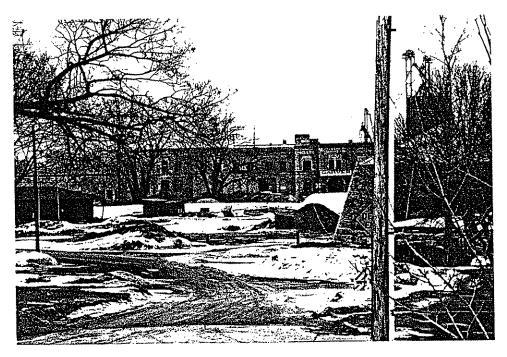




1 FRONT OF FEED MILL



2 FEED MILL FROM ATWOOD AVENUE



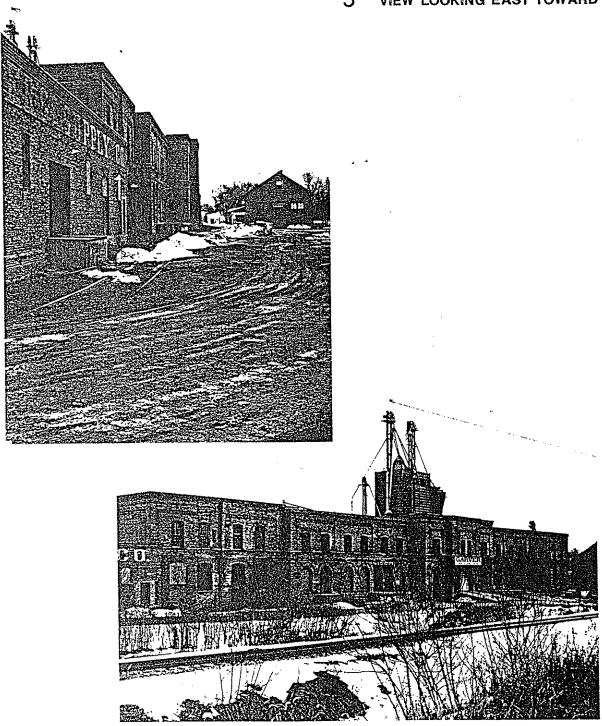
3 FEED MILL FROM ATWOOD AVENUE



4 FEED MILL FROM ATWOOD AVENUE



5 VIEW LOOKING EAST TOWARD OFFICE

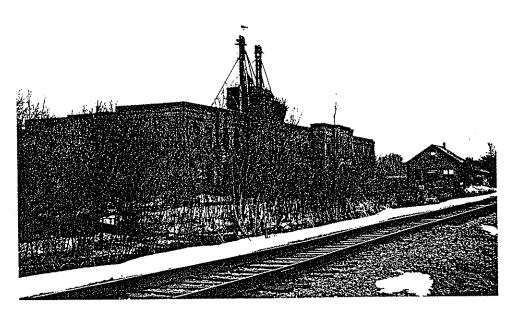


6 FEED MILL FROM WEST SIDE

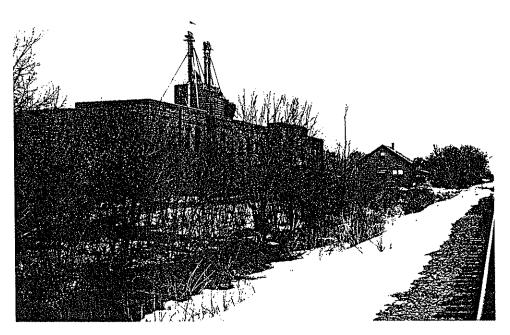
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7 FEED MILL FROM WEST SIDE

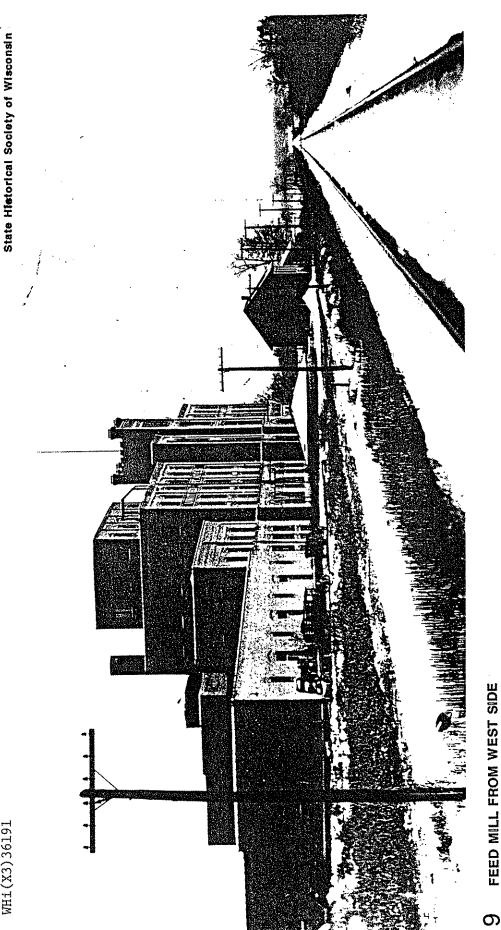


8 FEED MILL FROM WEST SIDE



PHOTOGRAPHS

About 1915-20. United States Sugar Company factory on Atwood Avenue. WHi(X3)36191 Madison, Wis.



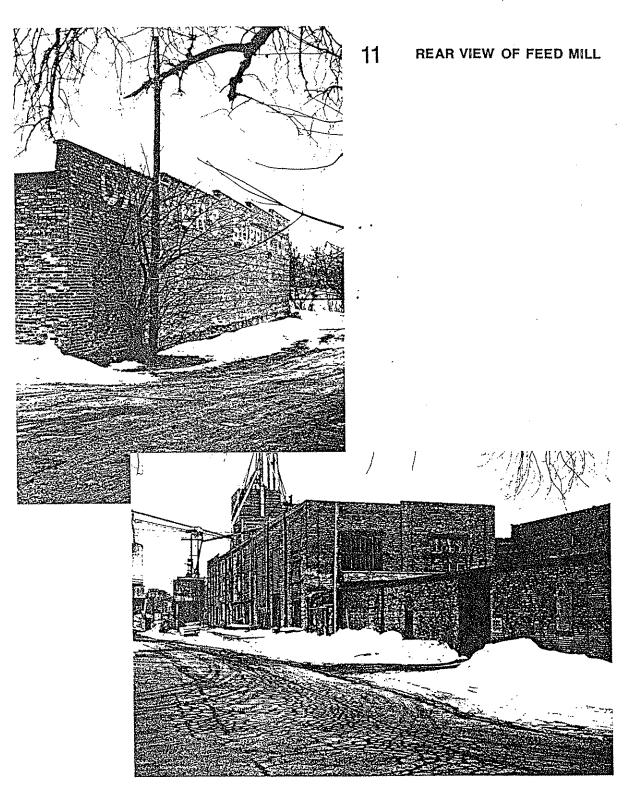
FEED MILL FROM WEST SIDE

PHOTOGRAPHS

Madison, Wis. About 1900-10(?) United States Sugar Beet Company on Atwood Avenue. Halftone. WHi(X3)45410

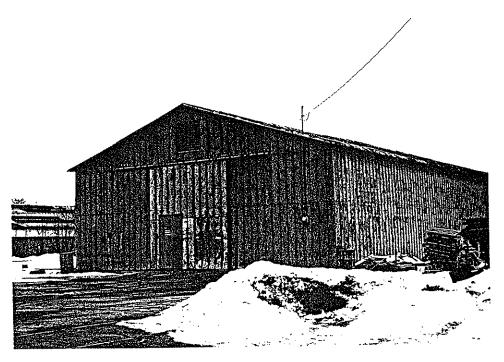
State Historical Society of Wisconsin

10 FEED MILL FROM WEST SIDE

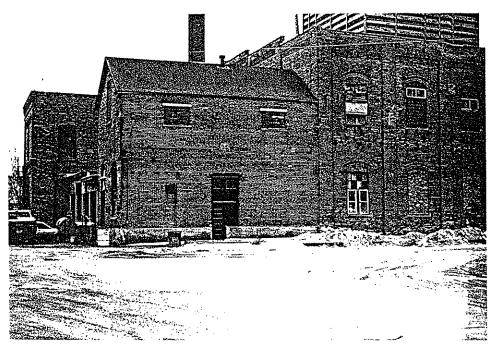


12 REAR VIEW OF FEED MILL



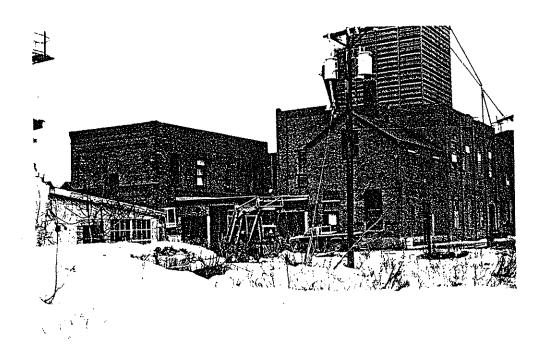


13 STEEL BUILDING FROM WEST



14 VIEW OF FEED MILL FROM NORTHEAST





15 VIEW OF FEED MILL FROM NORTHEAST



16 VIEW OF FEED MILL AND OFFICE FROM SOUTHEAST



ADVERTISING GRAPHICS

