

Wisconsin Word Processing Format (Approved 1/92)

**United States Department of Interior
National Park Service**

**National Register of Historic Places
Registration Form**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900A). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Horlick Malted Milk Company Industrial Complex

other names/site number N/A

2. Location

street & number	2100-2234 Northwestern Avenue, 1450-1500 Summit Avenue	N/A	not for publication
city or town	Racine	N/A	vicinity
state Wisconsin	code WI	county Racine	code 101
			zip code 53404-2500

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this X nomination
_ request for determination of eligibility meets the documentation standards for registering properties in the National Register of
Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property
X meets _ does not meet the National Register criteria. I recommend that this property be considered significant _ nationally
_ statewide X locally. (_ See continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State Historic Preservation Office - Wisconsin

State or Federal agency and bureau

In my opinion, the property _ meets _ does not meet the National Register criteria.
(See continuation sheet for additional comments.)

Signature of commenting official/Title

Date

State or Federal agency and bureau

Name of Property

County and State

4. National Park Service Certification

I hereby certify that the property is:

entered in the National Register.

See continuation sheet.

determined eligible for the National Register.

See continuation sheet.

determined not eligible for the National Register.

See continuation sheet.

removed from the National Register.

other, (explain:)

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property
(check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- structure
- site
- object

Number of Resources within Property
(Do not include previously listed resources in the count)

contributing	noncontributing
10	2 buildings
	sites
2	structures
	objects
12	2 total

Name of related multiple property listing:
(Enter "N/A" if property not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

INDUSTRY: manufacturing facility

INDUSTRY: industrial storage

COMMERCE/TRADE: business

Current Functions

(Enter categories from instructions)

INDUSTRY: manufacturing facility

INDUSTRY: industrial storage

VACANT

7. Description

Architectural Classification

(Enter categories from instructions)

LATE 19TH AND EARLY 20TH CENTURY REVIVALS:

Gothic Revival

NO STYLE

Materials

(Enter categories from instructions)

foundation STONE

walls BRICK

roof TAR AND GRAVEL

other STONE

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for the National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark "x" in all the boxes that apply.)

Property is:

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance
(Explain the significance of the property on one or more continuation sheets.)

Areas of Significance
(Enter categories from instructions)

INDUSTRY

Period of Significance

1885 – 1951

Significant Dates

1885 (Factory #1 constructed)
1904 (Factory #2 constructed and increases production)
1910 (Factory #3 constructed and increases production)

Significant Person
(Complete if Criterion B is marked)

N/A

Cultural Affiliation

N/A

Architect/Builder

James Corse & Son (1904 factory)
Burfiend, William F. (1907 addition to 1904 factory)
Lehle, George L (1916 garage)
Unknown

9. Major Bibliographic References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous Documentation on File (National Park Service):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic landmark
- recorded by Historic American Buildings Survey #
- recorded by Historic American Engineering Record #

Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local government
- University
- Other

Name of repository:

10. Geographical Data

Acreage of Property 16 acres

UTM References (Place additional UTM references on a continuation sheet.)

1	<u>16T</u>	<u>433897.00</u>	<u>4732304.17</u>	3	<u>16T</u>	<u>434133.16</u>	<u>4732218.73</u>
	Zone	Easting	Northing		Zone	Easting	Northing
2	<u>16T</u>	<u>433984.55</u>	<u>4732308.55</u>	4	<u>16T</u>	<u>434129.97</u>	<u>4732020.75</u>
	Zone	Easting	Northing		Zone	Easting	Northing

See Continuation Sheet

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title:	Rachel Barnhart, Associate; Matt Wicklund, Consultant; and Jessica Mavrogenes, Intern	date	July 31, 2019
Organization:	MacRostie Historic Advisors	telephone	312-488-1682
street & number	53 West Jackson Boulevard, Suite 1142	zip code	60604
city or town	Chicago	state	IL

Name of Property

County and State

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs Representative black and white photographs of the property.

Additional Items (Check with the SHPO or FPO for any additional items)

Property Owner

Complete this item at the request of SHPO or FPO.)

See continuation sheet at end of nomination for full list of property owners.

name/title		date
organization		telephone
street & number		zip code
city or town	state	

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects, (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 1

Summary

The Horlick Malted Milk Company Industrial Complex is located on the northwest side of Racine in Racine County, Wisconsin. The National Register boundary is an irregular polygon that encompasses a 16-acre parcel historically associated with the Horlick Malted Milk Company as the site of the company's original Racine manufacturing plant and headquarters. The complex is north of the Root River and approximately 1.6 miles northwest of Racine's historic downtown.

The complex has fourteen total resources comprised of ten contributing buildings, two contributing structures, and two non-contributing buildings. The twelve contributing resources in the complex were constructed by the Horlick Malted Milk Company between 1885 and 1926. The contributing resources were functionally related and operated as the company's manufacturing plant and headquarters during the period of significance from 1885 through 1951. The complex retains integrity and reflects the industrial significance of the Horlick Malted Milk Company. One resource has lost architectural integrity and the other is not strongly linked to the company's period of industrial significance; thus, these two resources are classified as non-contributing.

Most of the buildings in the complex are oriented on a bias facing southwest towards Northwestern Avenue. The boundary of the complex is defined by Northwestern Avenue to the southwest, Albert Street and Kewaunee Street to the south and southeast, legal parcel lines and Summit Avenue to the east, and a gravel service drive (which originates at Summit Avenue and terminates at Northwestern Avenue) to the northeast and northwest.

Nine of the resources in the complex, predominantly those constructed between 1885 and 1916, are designed with Gothic Revival-style details including decorative brick corbelling, crenellated parapets and roof towers, and projecting corner turrets. The remaining resources in the complex are utilitarian in design and do not exhibit distinct characteristics of an architectural style.

The table below provides a list of each resource in the complex, its historic name, the current legal address of the resource, the original construction date and the date of major additions, and its Contributing or Non-contributing status.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 2

Table 1. Resource List

Resource Number	Historic Name	Current Address	Construction Dates	Status (Contributing or Non-contributing)
1	Factory #1	2200 Northwestern Ave.	ca. 1885; additions ca. 1890, 1895, 1911	Contributing Building
2	Warehouse #1	1450 Summit Ave.	1890; top floor addition 1910	Contributing Building
3	Malt Mill	2220 Northwestern Ave.	ca. 1893; additions 1910, 1912, 1960, 1965	Contributing Building
4	Machine Shop	2102 Northwestern Ave.	ca. 1900	Contributing Building
5	Pattern Storehouse	2234 Northwestern Ave.	ca. 1900; moved ca. 1922	Contributing Building
6	Factory #2	2100 Northwestern Ave.	1904; additions 1907, 1910, 1952, 1960, 1963	Contributing Building
7	Entry Gates	2100 Northwestern Ave.	1908	Contributing Structure
8	Factory #3	1450 Summit Ave.	1910; additions 1911, ca. 1950	Contributing Building
9	Depot	1450 Summit Ave.	1914, top floor addition ca. 1920	Contributing Building
10	Garage	1500 Summit Ave.	1916; additions 1923, 1960	Contributing Building
11	Grain Elevator	2230 Northwestern Ave.	1922	Contributing Structure
12	Warehouse #2	2234 Northwestern Ave.	1926	Contributing Building
13	Boiler House	1450 Summit Ave.	1950	Non-contributing Building
14	Storage Building	2009 Kewaunee St.	ca. 1900-1910; altered ca. 1955	Non-contributing Building

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 3

Setting and Site

The Horlick Malted Milk Company Industrial Complex is located along Northwestern Avenue about 1.6 miles northwest of the city's downtown and less than one-half mile north of the Root River. The former Chicago, Milwaukee, and St. Paul Railroad line is located four blocks to the east of the complex. William Horlick High School, built on land donated by William Horlick, is approximately one-half mile north of the complex.

The National Register boundary encompasses a 16-acre site that is historically associated with the Horlick Malted Milk Company and contains the resources which retain integrity and reflect the company's industrial significance. The south corner of the boundary is at the intersection of Northwestern Avenue and Albert Street. Beginning from this point, the boundary continues to the northeast following Albert Street for 435 feet, then continues north along the east edge of legal parcel lines for 485 feet until reaching Kewaunee Street. At Kewaunee Street the boundary continues east for 245 feet to the intersection of Kewaunee Street and Summit Avenue. From this intersection the boundary turns north and continues for 155 feet along Summit Avenue, then turns west-northwest and follows a curving gravel service drive for 500 feet until the gravel drive terminates at a paved service drive. The boundary then turns west and follows the gently-curving paved service drive for 715 feet to its intersection with Northwestern Avenue. The boundary then continues to the southeast and follows Northwestern Avenue for 820 feet to the beginning point at the intersection of Northwestern Avenue and Albert Street.

The portion of Northwestern Avenue in the immediate area of the nominated complex was historically on the outskirts of Racine in the late-nineteenth century, and is now characterized by a mix of industrial, commercial, and civic buildings. Side streets to the northeast and southwest of the complex are characterized by residential neighborhoods with housing dating from the late-nineteenth through the mid-twentieth centuries. A Catholic church and school are located immediately west of the complex across Northwestern Avenue. A modern gas station is located to the northwest of the complex on the former site of William Horlick's residence, which was demolished in the early 1950s. A public middle school is located to the north of the complex. A City of Racine water tower constructed in 1956 is located to the northeast of the complex. A two-story brick building constructed as a research lab by the Racine Hydraulic Company in 1959 is located to the southeast of the complex.

The nominated complex contains ten contributing buildings, two contributing structures, and two non-contributing buildings. The complex maintains its industrial character and historic arrangement of resources within the site. The contributing resources were constructed between 1885 and 1926 and most feature brick cladding with Gothic Revival stylistic details such as corbeled brick parapets and

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 4

projecting turrets and towers; a few of the resources are utilitarian and lack architectural ornamentation. The most visually prominent buildings within the complex are its three factories (Resources #1, #6, and #8), each having a large footprint and a brick cylindrical smokestack. All resources are in their as-constructed locations with the exception of the pattern storehouse (Resource #5), which was moved approximately 150 feet to the west of its original location between 1922 and 1926. Factories #1 and #2 are set back from, and oriented towards, Northwestern Avenue. The remaining contributing resources in the complex are situated to the north and east of Factories #1 and #2 and are oriented inwards towards the approximate center of the site where the Depot (Resource #9) stands. The terrain of the site is generally level.

The complex's main entrance is via a paved driveway entrance at 2100 Northwestern Avenue that is framed by historic entry gates (Resource #7, contributing). The paved driveway gently curves to the north and terminates at the southeast side of the malt mill (Resource #3). Paved parking lots extend from the southeast side of the driveway (fronting Factory #2) and the northwest side of the driveway (fronting Factory #1). These paved parking lots were created in the 1960s. Formerly, this area fronting Factory #1 and Factory #2 was characterized by landscaping that featured a rolling grass lawn, a lagoon in front of Factory #1, and several trees and shrubs. This landscaping and lagoon were removed in the 1960s with the creation of the parking lots and additions to the malt mill (Resource #3). Presently, smaller islands of grass with trees and shrubs remain between the two parking lots, but the historic landscaping has been removed and reconfigured to a degree that it does not retain integrity.

Kewaunee Street also provides vehicular circulation through the complex. It enters the east side of the complex to the south of the Garage (Resource #10) and continues to the southwest through the complex and terminates at the curving paved driveway from Northwestern Avenue. The northeast, north, and northwest boundary of the complex is formed by a curving service drive; the northeast portion of the service drive is gravel and the remaining portion is paved. The remaining site area throughout the complex is largely gravel with deteriorated portions of paving and some revealed patches of brick paving. The linear area to the northwest of the Malt Mill is paved and used for vehicular parking. Historically, the complex was also accessed via a rail spur (laid in 1893) from the Chicago, Milwaukee, and St. Paul Railroad line, which was located four blocks to the east of the complex. The spur track is not extant and was removed prior to 1971.

Boundary Justification

The National Register boundary encompasses a 16-acre site that is historically associated with the Horlick Malted Milk Company and contains the resources which retain integrity and reflect the company's industrial significance. The boundary follows legal parcel lines, roadways, and paved and gravel driveways.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 5

Historically, the Horlick Malted Milk Company's acreage extended north to High Street. However, this acreage to the north of the boundary has not been included because it does not retain integrity from the period of significance. During the period of significance, a rail spur ran through the acreage to the Depot (Resource #9), and a water reservoir (created sometime prior to 1922) was located to the northeast of Factory #3. The spur track was removed sometime prior to 1971, and the reservoir was infilled in the 1950s following the construction of the City of Racine water tower. The former site of the reservoir has remained a greenspace since it was infilled. The Horlick company did not construct any other resources on the remaining acreage north of the National Register boundary and south of High Street. After the period of significance (1885 through 1951), a middle school and associated storage sheds, a modern gas station, and a water tower were constructed on the acreage, permanently altering its historically undeveloped character. Since the northern acreage does not retain its historic character and contains no resources associated with the company, it is excluded from the boundary.

The remaining east, southeast, and southwest boundary lines contain the historic resources associated with the Horlick Malted Milk Company and its industrial significance.

Resource Descriptions

The nominated complex contains ten contributing buildings, two contributing structures, and two non-contributing buildings. The contributing resources were constructed between 1885 and 1926. The predominant building materials throughout the complex are brick and stone. The oldest buildings in the complex feature cream brick cladding, while later buildings have red and orange brick cladding. The buildings range in height from one to five stories, with the tallest visual features in the complex being the Grain Elevator (Resource #11) and the smokestacks of Factories #1-3 (Resources #1, #6, and #8). Nine of the buildings feature Gothic Revival style ornamentation such as corbeled brick parapets and projecting turrets and towers. The remaining resources are utilitarian and lack architectural ornamentation. The resources have been numbered according to their initial year of construction with contributing resources listed first, then non-contributing resources. The historic names have been derived from each resource's function during the period of significance.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 6

Resource #1

Factory #1

2200 Northwestern Ave.

Contributing Building

Construction: ca. 1885; additions ca. 1890, 1895, 1911

Architect/Builder: Unknown

Photos 1-2, 8, 23

Exterior

Factory #1 is a Gothic Revival style, one- to four-story and basement, cream brick building with an irregular footprint, a stone foundation, and a flat roof. The oldest portion of the factory was completed circa 1885 (three-story milk condensing portion). Additions to the factory were constructed in 1890 (three-story manufacturing and storage portion and another three-story portion with boiling and dressing rooms), 1895 (boiler house with a truncated hipped roof and smokestack, and a four-story bottling portion), and 1911 (clocktower added to the 1895 bottling portion and a large four-story addition of fireproof construction used for shipping, warehousing, and offices). The factory is oriented to the southwest towards Northwestern Avenue. The primary entrance is at the southwest elevation at the base of the clocktower in the 1895 addition. The entrance contains a non-historic aluminum-frame glazed single-leaf door sheltered by a non-historic blue canvas awning.

The factory is regularly fenestrated and features a tall brick chimney stack at its southeast corner, two rooftop crenelated towers, and a projecting clocktower containing stairs and an elevator on its southwest elevation. The parapet walls have corbelled brick dentils, terra cotta coping tiles, and turreted corners. The factory has tall rectangular window openings with stone sills and flush segmental brick arches. Windows on the southwest elevation are predominantly non-historic metal windows with three vertically-stacked awning lights. Windows on the northwest elevation are predominantly historic metal two-over-two windows with awning upper sashes; the elevation also has some boarded window openings and non-historic metal awning windows. Windows on the northeast elevation are predominantly paired historic metal three-over-three windows. Loading docks and secondary entrances with non-historic metal slab doors are located along the secondary elevations. Metal tie rods are visible on several elevations. An enclosed metal bridge dating to the 1960s extends from the southeast corner of the building at the second story of the 1890 addition and connects to the second story of the 1904 portion of Factory #2 (Resource #6). An open metal catwalk extends from the third story of the northeast elevation of the 1911 addition and connects to the front elevation of Warehouse #1 (Resource #2). The northeast elevation of the 1890 three-story boiling and dressing room portion has a faded ghost sign that reads "HORLICK'S".

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 7

Interior

The interior of Factory #1 contains a mixture of utilitarian open spaces historically used for manufacturing, shipping, and warehousing, as well as partitioned office spaces. The primary stair and passenger elevator are contained within the projecting clock tower at the southwest elevation. Two freight elevators are located in the three-story 1890 addition and the 1911 addition. Interior walls are predominantly exposed brick with some historic sliding metal fire doors, and some non-historic drywall partition walls. Floors within partitioned offices are largely non-historic carpet or tile, and the columns are enclosed and the ceilings concealed below dropped acoustic tiles. The fireproof 1911 addition has painted concrete floors, painted concrete columns and painted concrete ceilings with steel beams. Historic flooring remaining in other open areas in the factory are predominantly tongue and groove wood plank flooring. Historic wood plank flooring and wood columns are extant in the upper floors of the 1895 bottling addition. The historic tin-panel-clad ceiling is concealed with non-historic dropped acoustic tiles within partitioned offices. Other areas have exposed concrete ceilings.

Integrity and Alterations

Factory #1 retains integrity and is a contributing building to the complex. Alterations are minimal and include the addition of a one-story concrete block addition with a small footprint on the northeast (rear) elevation sometime after 1969. A circa 1882 two-story brick building containing offices and a milk room was constructed as a separate building and historically connected to the three-story 1890 addition via a wood bridge. The 1882 building was demolished circa 1969, but its removal does not hinder the integrity of Factory #1 because it was a separate building from the factory rather than an integral portion of it.

Some non-historic metal windows are present throughout the factory, but many historic windows remain. Interior alterations include the creation of some offices with non-historic partition walls, but large expanses of historic open areas featuring mill and fireproof construction remain and clearly express the industrial historic use of the factory.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 8

Resource #2

Warehouse #1

1450 Summit Avenue

Contributing Building

Construction: 1890; top floor added 1910

Architect/Builder: Unknown

Photos 9, 16 (far left), 18

Exterior

Warehouse #1 is a rectangular three-story and basement warehouse building completed in 1890 with cream brick walls, a stone foundation, and a flat roof. It is located to the northeast of Factory #1 and faces southeast. The third floor was added in 1910. An open wood and metal catwalk runs along the southeast elevation at the third story and connects to Factory #1 (Resource #1) and Factory #3 (Resource #8). At the roof level, the corners of the building feature corbelled brick turrets with plain stone caps. The parapet is detailed with corbelled brick dentils. The southeast and northwest elevations are three bays wide and the longer southwest and northeast elevations are eight bays wide. The window openings have stone sills and segmental brick arches. Some have iron shutter hinges. Most window openings have replacement one-over-one metal windows or glass block infill. Some window openings are protected by metal mesh grates. The primary entrance is at the southeast elevation and contains a non-historic single-leaf composite door with a non-historic front-gabled wood porch. Loading bays with non-historic overhead doors are in the first story of each elevation.

Interior

Warehouse #1 is of mill construction and historically served as a warehousing and storage building. It retains its historic open floorspace. A freight elevator and the main wood stair are located at the southern corner. The freight elevator on the southwestern wall is enclosed by beadboard partitions and features a motorized cable winding system mounted from the ceiling on cast iron and steel supports. The floors predominantly have tongue and groove wood flooring (laid diagonally on the first and second floors). The walls are exposed brick with some metal fire doors, and the ceilings are exposed wood structure. Two rows of square wood posts run the length of each floor.

Integrity and Alterations

Warehouse #1 retains integrity and is a contributing building to the complex. Minor alterations include the replacement of historic windows and doors. The interior retains integrity and clearly demonstrates the building's historic mill construction and historic function.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 9

Resource #3

Malt Mill

2220 Northwestern Avenue

Contributing Building

Construction: ca. 1893; additions 1910, 1912, 1960, 1965

Architect/Builder: Unknown

Photos 19-20

Exterior

The Malt Mill is a multi-story cream brick building with a concrete foundation and flat roof. The three-story central portion with attached four-story kiln house to the southeast was built in ca. 1893. In 1910, a four-story grain storage house was added to the northwest. In 1912, the kiln house was increased in height to seven stories. In 1960 after the period of significance, an unaffiliated company constructed a metal-clad, one-story rectangular addition on the southwest elevation of the central mass of the malt mill. In 1965, a brick one-story rectangular addition was constructed on the southwest elevation of the 1960 addition. The additions lack windows.

The malt mill exhibits Gothic Revival style ornamentation; the parapet features corbelled brick dentils, a pressed metal cornice, and decorative crenellation. The historic portion of the malt mill is regularly fenestrated with bays divided by shallow brick piers. The central mass is ten bays wide, and the northwest grain house and southeast kiln house are two bays wide and four bays long. The window openings have stone sills; lower-story windows have segmental brick arches and the top-story windows have round brick arches. The windows are either infilled with opaque panels or contain non-historic metal one-over-one windows. The entrance at the northwestern-most bay on the southwest elevation contains a non-historic metal door accessed via a concrete set of steps.

Interior

Access to the interior of the malt mill was not permitted.

Integrity and Alterations

Despite non-historic additions in 1960 and 1965, the malt mill retains integrity and is a contributing building to the complex. The additions do not negate the integrity of the malt mill because they are lower in height and are clearly distinguishable from the malt mill. The historic form of the historic malt mill is still discernable. Minor alterations to the malt mill include the replacement of historic windows within the historic openings.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 10

Resource #4

Machine Shop

2102 Northwestern Avenue

Contributing Building

Construction: ca. 1900

Architect/Builder: Unknown

Photo 10

Exterior

Built circa 1900, the two-story and basement Machine Shop has a rectangular footprint with a stone foundation, cream brick walls, and a shallow-pitched gable roof with parapets at the northwest and southeast ends. The parapets feature corbeled brick dentils. The rooflines of the longer northeastern and southwestern elevations are lined by metal gutters. A small single-story historic brick addition and a non-historic one-story frame shed are located at the rear of the building. A concrete ramped loading dock fronts the north portion of the southwest elevation.

The Machine Shop is located to the east of Factory #1 (Resource #1) and faces northwest. The building is regularly fenestrated. The shorter northwest and southeast elevations are five bays wide and the longer side elevations are fourteen bays wide. The rectangular window openings have stone sills and segmental brick arches. The majority of windows are boarded with historic six-over-six, double-hung, wood sash windows remaining in the openings. The entrances at the northwest elevation and the southwest elevation each contain a historic pair of wood doors with raised rails and stiles and beadboard panels.

Interior

The interior of the Machine Shop features open spaces with two double-leaf entrances on the longer southwestern and northeastern elevations, and a single-leaf entrance on the northwestern elevation. The northwest portion of the building historically contained a machine shop and printing area, and the southeast portion contained a carpentry area and print shop. The open first floor has painted concrete floors, painted exposed brick outer walls, and ceilings with exposed painted metal beams and wood sub-flooring. The floor is divided by a row of round metal columns that bisect the length of the space.

A narrow wood stair with beadboard walls is roughly centered on the southwestern wall and accesses the second floor. The second floor is bisected lengthwise by a partition of horizontal painted boards, with open space running the length of the building along the northeastern side, and a series of rooms along the southwestern side. The second floor has historic tongue and groove flooring set at a diagonal, painted exposed brick outer walls, and a wood ceiling. The space is punctuated with wood columns.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 11

Integrity and Alterations

The Machine Shop retains integrity and is a contributing building to the complex. The building retains much of its historic building materials, including historic windows and interior finishes, and clearly conveys its historic industrial function.

Resource #5

Pattern Storehouse

2234 Northwestern Avenue

Contributing Building

Construction: ca. 1900; moved ca. 1922

Architect/Builder: Unknown

Photos 17-18

Exterior

The single-room Pattern Storehouse was built circa 1900 at a location about 150 feet to the east of its present location, and was moved to its present location (northwest of Warehouse #1) circa 1922. The Pattern Storehouse was constructed as a fireproof building to house important documents. The cream brick building has a concrete foundation and a front-gabled metal standing seam roof. Along the gables and soffit, the brick wall is slightly corbelled and has corbelled corners. The primary elevation faces southwest and has a stone lintel and a non-historic plywood door hung on strap hinges. The southeast and northwest elevations have no fenestration. The northeast elevation has a single boarded window with a stone sill and lintel.

Interior

Access to the interior of the pattern storehouse was not permitted.

Integrity and Alterations

The Pattern Storehouse retains integrity and is a contributing building to the complex. It was moved during the period of significance, and retains its historic massing, footprint, and building materials.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 12

Resource #6

Factory #2

2100 Northwestern Avenue

Contributing Building

Construction: 1904; additions in 1907, 1910, 1952, 1960, 1963

Architect/Builder: James Corse & Son (1904 factory); William F. Burfiend (1907 additions)

Photos 3-4, 6, 22, 24

Exterior

Factory #2 is a Gothic Revival style, one- to four-story and basement, cream brick building with an irregular footprint and a stone foundation. The original northwest portion of the factory has three hipped roofs with monitor skylights; the remaining portions of the factory have flat roofs. The original portion of the factory was completed in 1904 by contractor James Corse & Son and has a T-shaped footprint with double-height milk condensing and engine rooms, a boiler house with a prominent brick smokestack to the northwest, and a three-story storage and manufacturing section to the southeast. Two additions in 1907 by architect William F. Burfiend consist of a four-story section on the southeast elevation of the original portion of the factory and a three-story addition on the end of the original portion's southwest elevation. A one-story timekeeper's office was constructed to the northwest of the original boiler room in 1910. In 1951, the Horlick Malted Milk Company sold Factory #2 to the unaffiliated Racine Hydraulics Company. In 1952, a one-story brick addition with a flat roof was added to the northwest half of the southwest elevation of the 1904 portion. In 1960, another one-story brick addition with a flat roof was constructed along the northeast elevation of the 1904 and 1907 portions. Concrete loading docks were added along the 1904 portion's northwest elevation sometime after 1969. The factory is oriented to the southwest towards Northwestern Avenue.

The historic factory (pre-1951) is regularly fenestrated and features a brick smokestack at the north corner and two projecting crenelated towers with round-arch window openings. The historic factory's parapet walls have corbelled brick dentils, terra cotta coping tiles, and turreted corners. The historic factory has tall rectangular window openings with stone sills and round or segmental brick arches. On the main southwest elevation, the double-height 1904 segment has round-arch brick upper windows with raised brick hoods with corbelled ends and flat-arch lower windows with stone sills. The windows are historic two-over-two metal windows. The three-story 1904 segment has brick segmental arch openings infilled with glass block and concrete block with operable awning windows centered in the openings. The projecting three-story 1907 addition has segmented openings with non-historic metal windows with five vertically-stacked lights. The 1907 four-story segment south of the 1907 addition has segmented window openings with historic six-over-six wood windows. A post-1951 entrance pavilion is at the west end of the 1907 segment and contains a non-historic aluminum-frame glazed

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 7 Page 13

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

single-leaf door under a porch with brick side walls and a flat roof. The one-story 1952 addition to the northwest of the entrance pavilion has a boarded row of windows concealed with vegetation and a flat roof with wood board and batten siding.

The southeast elevation of the historic factory is three bays wide, and the windows are predominantly historic six-over-six wood double-hung windows. A small one-story 1963 brick addition with a flat roof projects from the elevation.

On the northeast (rear) elevation, the upper two stories of the historic 1904-1907 factory portions are visible. The elevation is more utilitarian in character and has a metal gutter instead of a decorative parapet wall. A rectangular one-story 1960-1963 cinderblock addition with a flat roof projects from the base of the historic factory and has a row of four semi-truck loading docks (1963) and a series of rectangular window openings with twelve-light metal awning windows (1960). The visible upper stories of the 1904-1907 portions of the historic factory have segmented window openings with historic six-over-six wood windows. The visible upper story of the double-height 1904 portion has three round-arch brick window openings with two-over-two windows. The 1910 timekeeper's office at the north corner has brick walls, a brick corbeled parapet with turreted corners, and a non-historic overhead garage door.

A non-historic raised concrete loading dock projects from the base of the northwest elevation. The northwest elevation corresponds to the original 1904 milk condenser room, engine room, and boiler house. The elevation has round-arch brick upper windows with raised brick hoods with corbelled ends, and flat-arch lower windows with stone sills. The windows are predominantly historic two-over-two windows. An enclosed metal bridge built in the 1960s projects from the upper story of the milk condensing room and connects to the second story of Factory #1 (Resource #1).

Interior

The interior of the historic portions of Factory #2 consists of a T-shaped floorplan, with non-historic one-story additions to the northeast and southwest. The top, or northwestern portion, of the "T" dates to 1904 and consists of a series of double-height former milk condensing rooms separated by brick walls. The shaft, or southeastern portion, of the "T" consists of a three-story 1904 section historically used for storage and a 1907 section also used for storage; a central stair and freight elevator are located between the 1904 and 1907 storage sections. A three-story 1907 wing projects to the south and historically contained employee restrooms and storage. Entrances to the factory are located on the southwest side of the 1907 storage section and from a loading dock along the northeast side of the one-story 1960 addition. Several original sliding metal fire doors are extant throughout the historic factory.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 14

The double-height 1904 milk condensing rooms retain their open volume of space and have concrete floors, painted brick walls, and pyramidal ceilings with exposed metal trusses and raised monitor skylights. The 1904 boiler house also retains open utilitarian space with concrete floors, a pyramidal ceiling with raised monitor skylight, and exposed metal trusses.

The 1904 and 1907 storage sections predominantly retain their open historic spaces, with some smaller areas partitioned into offices with non-historic drywall demising walls and non-historic carpeting. The historic spaces have either concrete or deteriorated plywood or tongue and groove hardwood floors, riveted steel or concrete columns, exposed brick walls, and ceilings of exposed concrete or exposed steel beams with wood subflooring. The central stairwell has a wood stair with painted exposed brick walls and plain wood railings. The 1910 timekeeper's office was converted into a garage and has concrete floors and painted exposed brick walls.

The one-story 1952 addition's interior contains open utilitarian workshop spaces divided by twin rows of steel columns. It has concrete floors, painted brick walls, and a ceiling with the roof structure exposed and painted. Rows of fluorescent lights and pipes hang from the ceiling. The one-story 1960 addition also contains utilitarian workspaces and is divided with a row of steel columns. It has concrete floors, painted brick or concrete block walls, and a ceiling with the roof structure exposed.

Integrity and Alterations

Factory #2 retains integrity and is a contributing building to the complex. Although an addition was added to the southwest side in 1952 and to the northeast side in 1960, these one-story additions are lower in height than the historic factory building, so the scale and design of the historic factory can still be clearly discerned. Other exterior alterations include the replacement of some windows, but many historic windows remain in the factory. Interior alterations include the creation of some offices with non-historic partition walls, but large expanses of historic open areas remain and clearly express the industrial historic use of the factory. In particular, the double-height milk condensing rooms are retained and are a direct expression of the malted milk manufacturing process.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 15

Resource #7

Entry Gates

2100 Northwestern Avenue

Contributing Structure

Construction: 1908

Architect/Builder: Unknown

Photo 21

The entry gates consist of two cream brick walls with limestone caps that frame the paved entrance driveway to the complex at 2100 Northwestern Avenue. Both walls gently curve inward along the entrance driveway. The upper courses of brick on the outer side of either wall feature a row of inset brick crosses. Each wall terminates at a square brick pier with a concrete cap surmounted by a non-historic metal light. A concrete sidewalk runs alongside the northwest wall and travels between the wall and the northwest pier.

Integrity and Alterations

The entry gates retain integrity and are a contributing structure to the complex. The two piers originally stood twice the height of the curved walls and had corbelled and crenellated caps. The piers were reduced to their current height sometime after 1970. While the piers have been shortened in height, the curved walls retain their historic design, and so the structure overall retains sufficient integrity to contribute to the complex.

Resource #8

Factory #3

1450 Summit Avenue

Contributing Building

Construction: 1910; additions in 1911, ca. 1950

Architect/Builder: Unknown

Photos 7 (right), 9 (far right), 14, 15, 25

Exterior

Factory #3 is a two-to three-story and basement common brick building with a concrete foundation and an irregular footprint. Factory #3 is located to the northeast of Factory #1. The original northeast portion of the building was completed between 1910 and 1911 and is comprised of three two-story and basement sections. The easternmost section contained the boiler house and has a roof monitor and a round brick smokestack. The middle section contained an engine room with dressing rooms above and has a shallow-pitched roof. The north section contained a milk condensing room with a shallow-

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 16

pitched roof and a roof monitor. On the southwest side of the milk condensing section is a brick three-story wing (constructed circa 1911) with an elevator penthouse at the northeast corner of the roof. The three-story wing housed manufacturing processes like pressing and boiling on the first and second floors and storage on the third floor. The wing has two single-story additions with concrete foundations; the northwest wing (constructed circa 1950) has brick cladding and the southwest wing (constructed circa 1960) is built of concrete block masonry units.

Factory #3 decorative brick corbeling at the parapet with corbelled corner turrets. The southeast elevation has two vehicular loading bays with non-historic overhead rolling doors, a non-historic single-leaf entrance door, and pairs of historic rectangular two-over-two metal windows with segmental brick arches and stone sills. The northeast elevation has two vehicular loading bays with non-historic overhead rolling doors and a non-historic single-leaf entrance door. The rest of the elevation is characterized by rectangular window openings with segmental brick arches, stone sills, and historic two-over-two or four-over-four metal windows. A few first-story window openings are infilled with concrete blocks. The northwest elevation corresponding to the 1911 milk condensing room is seven bays wide and has a vehicular entrance bay with a non-historic overhead rolling door. The window bays have stone sills, brick segmental arches, and historic two-over-two metal windows.

The northwest elevation of the one-story circa 1950 brick wing has two vehicular entrance bays, and its southwest elevation has four boarded window openings with concrete sills. The southwest elevation of the circa 1960 concrete block addition has a vehicular entrance bay with a metal overhead rolling door and three window openings infilled with masonry units. The southwest elevation of the 1910-1911 sections of the factory is characterized by rectangular window openings with stone sills, brick segmental arches, and historic two-over-two metal windows. A metal frame catwalk leading from Warehouse #1 (Resource #2) and Factory #1 (Resource #1) connects to the third story of the 1911 brick wing above the circa 1960 concrete block addition.

Interior

The interior of Factory #3 retains utilitarian open spaces historically used for manufacturing, storage, and as a boiler house, engine room, and milk condensing room. A central stair is located in the three-story 1911 wing, and another stair is located in the southwest corner of the engine room. The 1911 wing's stair has exposed brick walls and historic metal stairs. The spaces throughout the factory predominantly feature exposed concrete floors, painted brick walls, and trussed ceilings. The boiler house is a double-height open room with concrete floors, painted exposed brick walls, and truss roof with roof monitor; the ceiling is plaster over hollow clay block. The engine room is divided with riveted metal posts, and historic finishes include terra cotta tile floors, painted walls of exposed cream-toned brick, and ceilings with exposed metal beams. The milk condensing room is a double-height

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 17

space with concrete floors, painted exposed brick walls, and a metal truss roof with a roof monitor and exposed wood sheathing. A T-shaped mezzanine is supported by two rows of riveted metal beams and is accessed from the 1911 wing stairwell. The mezzanine has wood tongue and groove flooring and an office at the eastern corner with beadboard and a ribbon of historic nine-light wood windows.

The three-story 1911 wing is divided into northwest and southeast halves linked by doorways with sliding metal fire doors. The northwest half has the main stairwell and a freight elevator along its northeast wall, and tongue and groove wood floors, exposed painted brick walls, and ceilings with exposed metal beams and subflooring. The southeast half has concrete lower floors and steel plate upper floors with metal pipe railings. The second and third floors are largely open to below and historically accommodated tall storage tanks that are no longer extant. The roof has exposed metal beams and wood sheathing.

Integrity and Alterations

Factory #3 retains integrity and is a contributing building to the complex. Non-historic alterations are minimal and include the construction of a one-story concrete block garage addition on the southwest elevation in circa 1960. Historic entrances to the factory have been replaced with non-historic doors, although most historic windows remain throughout. The interior retains its historic manufacturing and production spaces and clearly expresses the historic industrial character of the building.

Resource #9

Depot

1450 Summit Avenue

Contributing Building

Construction: 1914; top floor added circa 1920

Architect/Builder: Unknown

Photo 7 (center)

Exterior

The Depot is a three-story and basement reinforced concrete building constructed in 1914 with the third floor added in circa 1920. It faces southwest and is located to the northeast of Factory #1. It has a rectangular footprint, a concrete foundation yellow-orange brick walls, a flat roof, and a parapet with corbelled brick dentils and turrets at the corners. The face brick at the third story is darker in tint than the lower stories. All windows are historic two-over-two, double hung, metal sash windows with wire glass, stone sills, and raised brick segmental arch hoods. The ground-level windows are boarded.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 18

The primary southwest elevation is four bays wide with pairs of windows in each bay. At the ground-level is a projecting steel canopy frame supported by chains anchored to plates above the second-story windows. At the base of the ground story there is a projecting fragment of a largely-demolished platform, which served a non-extant spur track. Two entry doorways at the ground story are boarded.

The southeastern elevation is two bays wide with pairs of windows in each bay. The northeastern elevation has similar fenestration to the southwestern elevation, but also includes one exit door per floor, which lead to a metal fire escape mounted in the second bay from the east. At the base of the ground story is a projecting concrete platform with concrete support brackets.

The northwestern elevation has four evenly-spaced windows on the upper two stories and two entrances and a window at the ground story. There is a wood double-doorway at the second story with a projecting steel I-beam centered above the doorway at the parapet.

Interior

The Depot is a three-story and basement building with a rectangular floorplan. A stair in the north corner of the building accesses each floor. The stair has split landings and is composed of cast iron with square newel posts, square balusters set in groups of four, and oak handrails. A dumbwaiter shaft is located at the southeast end of the building. Each floor accesses the shaft through a small paneled wood door. The building throughout has concrete floors, plaster walls and ceilings, plain wood trim, and some historic wood paneled doors. Many plaster ceilings are concealed above non-historic acoustic tile dropped ceilings. Areas of non-historic linoleum or carpet flooring are present on the upper floors.

Integrity and Alterations

The Depot retains integrity and is a contributing building to the complex. It has no non-historic additions and while the interior is in poor condition, it retains historic finishes such as plaster walls and ceilings.

Resource #10

Garage

1500 Summit Avenue

Contributing Building

Construction: 1916; additions 1923, 1960

Architect/Builder: George L. Lehle

Photos 11, 12

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 19

Exterior

The one-to-two-story Garage was constructed in 1916 by architect George Lehle, with a one-story addition on the rear completed in 1923. The Garage faces west and is located to the east of Factory #3. It has a rectangular footprint, a concrete foundation, and common brick cladding in variegated red and brown tints. The 1916 roof is flat and the 1923 roof has a shallow pitch. The parapet has corbelled brick dentils and corbelled brick turrets at the corners. In circa 1960, a small one-story metal-clad addition was constructed on the rear of the 1923 section, and another one-story concrete block addition was constructed on the north elevation of the 1923 section. A small loading bay and dock with a concrete ramp is located at the northeastern corner of the building. The windows throughout the building have stone sills and are generally boarded with smaller double-hung replacement windows set within the larger original openings.

The primary west elevation is divided into three bays with a taller parapet wall above the center bay. A vehicular entrance with a non-historic overhead door is centered in the first story. A single-leaf entrance is located at the south end of the first story. The southern elevation is fourteen bays long, each with two windows per bay separated by a brick mullion. Two vehicular entrances with non-historic overhead doors are located along this elevation. The circa 1960 metal-clad addition partially conceals the east elevation, which is five bays wide. A metal single-leaf door is set in the north elevation of the addition. The north elevation is fourteen bays long and partially concealed with a circa 1960 concrete block addition. The concrete block addition has four wide boarded windows along its east elevation and a vehicular loading dock on its south elevation. Visible windows on the 1916-1923 portions of the garage are boarded or infilled with brick or concrete block.

Interior

The interior of the Garage consists of a series of connected spaces set in an east-west line, with primary vehicular entrances on the west elevation and through the addition on the north elevation. Two main garage sections built in 1916 and 1923 form the majority of the space. The western 1916 section is an open space with truss roof and is divided across its width by a non-historic unfinished drywall partition. Some historic finishes are intact, including smooth concrete floors with raised curbs along the north and south walls, exposed brick walls, and a ceiling with exposed metal trusses and tongue and groove sheathing.

The east wall, which connects to the adjoining 1923 eastern section, has a large centered doorway opening with a pair of metal fire doors. The interior of the 1923 section is divided at its eastern end by a non-historic drywall partition with an overhead door. To the west of the partition, the space is similar in finish to the 1916 section. The north wall features a large opening with a pair of wood paneled doors that lead to the adjoining circa 1960 addition; some historic three-over-three, double-hung, wood sash

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 20

windows remain visible inside the garage. At the southwest corner of the 1923 section is a frame two-story office and observation booth with a wood stair on its east side. The east circa 1960 metal-clad addition has concrete floors with a speckled grey epoxy coating, exposed brick walls, and a ceiling with exposed metal trusses and wood joists. The circa 1960 concrete block addition on the north elevation has concrete floors, exposed concrete block walls, and a ceiling with exposed metal structure.

Integrity and Alterations

The Garage retains integrity and is a contributing building to the complex. Non-historic alterations include the replacement of most of the building's historic windows, and the construction of one-story additions on parts of the rear and secondary north elevations in circa 1960. The interior of the Garage retains open space to convey its historic function. Despite the loss of the historic windows and the secondary additions, the Garage overall clearly conveys its historic function.

Resource #11

Grain Elevator

2230 Northwestern Avenue

Contributing Structure

Construction: 1922

Architect/Builder: Unknown

Photos 9, 16, 18, 20

The poured concrete Grain Elevator is located to the north of the Malt Mill (Resource #3) and is the tallest resource in the complex. It has a rectangular footprint and a flat roof. Multi-pane metal-frame windows with operable awning sashes are located on each elevation just below the roofline. Cell tower equipment is attached to the roof.

Integrity and Alterations

The Grain Elevator retains integrity and is a contributing structure to the complex. Between 1922 and 1933, a second, shorter, poured concrete grain elevator was built to the northwest of the extant grain elevator. The two were connected near the top by an enclosed elevated concrete walkway. In 2018, the north grain elevator was demolished. The extant grain elevator is held in a long-term lease due to the attached cell tower equipment on its roof, and thus has been spared from demolition at this time.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 21

Resource #12

Warehouse #2

2234 Northwestern Avenue

Contributing Structure

Construction: 1926

Architect/Builder: Unknown

Photos 16-17

Exterior

Warehouse #2 was built in 1926 and is a four-story and basement, reinforced concrete building with a square footprint, a concrete foundation, common brick cladding in red and brown tints, and a flat roof. It is located to the north of Warehouse #1 (Resource #2) and its primary elevation faces southwest. The parapet has a corbelled brick dentil pattern and corbelled brick corners. Two brick rooftop penthouses project from the roof. A concrete accessibility ramp fronts the entrance on the southeast elevation, and a wide concrete vehicular ramp with metal pipe railings fronts two vehicular loading bays on the northeast elevation. A narrower concrete vehicular ramp fronts one vehicular loading bay on the northwest elevation.

Each elevation is six bays wide with two historic metal-frame windows separated by a brick mullion in each bay. The windows are four-by-five panes in size and have operable two-by-three pane awning sashes. A few first-story windows on each elevation are infilled with bricks or metal louvers. At the first story, the building's southwest elevation has two semi-truck loading bays with metal overhead doors in the first and second bays from the west. A single-story concrete block addition with a metal door and a pitched roof with asphalt shingles is located on the fourth bay from the west and was built sometime between 1971 and 1995. The easternmost bay contains a single-leaf metal entrance door. The southeast elevation features exposed reinforced concrete columns and capitals in its three easternmost bays at each story. These columns were left exposed for a planned addition that was never completed. An elevator penthouse is visible at the top of the second bay from the east. A concrete accessibility ramp leads to a single-leaf metal entrance door. The northwest elevation has a five-story-tall bay that is the third from the west. All windows in this bay are smaller metal-framed fixed windows with six or nine panes. A metal single-leaf door is located at the ground level. In the third bay from the north is a concrete ramp with sidewalls and metal railings that leads down to a basement-level vehicular entrance with a metal overhead door. A secondary double-leaf entrance with a metal awning and metal porch and stair is in the westernmost bay.

Interior

Access to the interior of Warehouse #2 was not permitted.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 22

Integrity and Alterations

Warehouse #2 retains integrity and is a contributing building to the complex. The building retains most of its historic windows and has minimal non-historic exterior alterations. It clearly expresses its historic function as a warehouse.

Resource #13

Boiler House

1450 Summit Avenue

Non-Contributing Building

Construction: 1950

Architect/Builder: Unknown

Photo 15 (left)

The Boiler House was built in 1950 and is located to the northeast of Factory #3 (Resource #8). The boiler house is divided into two halves. The taller southeast half is three stories with a rectangular footprint, a concrete foundation, red brick cladding, and a flat gravel roof. The shorter two-story northwest half has a rectangular footprint, a concrete foundation, red brick cladding, and a gabled roof with raised parapet walls. All parapet walls on the boiler house are capped with terra cotta coping tiles. Both halves are fenestrated on each elevation. The first and second-story window openings on each elevation are boarded with corrugated metal. The windows on the third story of the southeast half are metal-frame multi-pane windows with operable central awning sashes.

The southeastern elevation is three bays wide and has a vehicular entrance with a metal overhead door. The northeastern elevation is six bays wide, and four of these bays are within the taller half. A paneled door is located at the eastern corner and a metal door set in a metal-paneled surround is located in the northernmost bay. The northwestern elevation of the shorter half has three columns of windows, all of which are covered. Three uncovered windows line the upper northwestern elevation of the taller half. The southwestern elevation is similar to the northeastern elevation but features a vehicular entrance with a metal overhead door in the westernmost bay. At the southern end is a small one-story brick wing with a flat roof. Above the addition is a rectangular metal vent stack that extends up along the boiler house to the roof level, where it terminates and is encircled by a cantilevered metal framed balcony.

Interior

The Boiler House is divided into two separate interior spaces. The northwest space is a single open room with an infilled vehicular entrance on the northeast wall and a vehicular entrance with an

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 23

overhead door on the southwest wall. The space is finished with concrete floors, exposed brick walls with exposed riveted piers, and the ceiling is clad in corrugated enameled metal. The southeastern space is accessed via the one-story entrance wing on the southern corner of the building. The entrance wing is finished with concrete flooring, gypsum board walls, and an acoustic tile dropped ceiling. A metal door opens into the main southeastern space, which is a tall mechanical room with an exposed steel framework supporting five levels of metal grate floors, mechanical systems, and control panels. The space is finished with a concrete ground floor, exposed brick outer walls, and a truss roof with exposed purlins and metal sheathing.

Integrity and Alterations

The Boiler House does not appear to have received extensive alterations beyond its period of construction in 1950. Nevertheless, the Boiler House is not contributing to the complex because it was constructed in 1950 (one year prior to the end of the period of significance in 1951) by the Horlick company at a time when it was preparing to downsize its operations. The construction of the Boiler House in 1950 allowed the company to sell off Factory #2 in 1951, which is a direct manifestation of the company's declining impact in the milk food products industry. Since the Boiler House is not associated with the industrial significance of the Horlick Malted Milk Company, and instead is a product of the company's shift to downsize its operations at the nominated complex, it is classified as non-contributing.

Resource #14

Storage Building

2009 Kewaunee Street

Non-Contributing Building

Construction: ca. 1900-1910; altered ca. 1955

Architect/Builder: Unknown

Photo 13

Exterior

The one-story wood frame Storage Building was initially constructed in two stages as a garage with a concrete floor between 1900 and 1910. In 1955, after the period of significance, an unrelated company converted it into a storage building, constructing a larger rear addition and adding metal siding. The Storage Building currently reflects this remodel in 1955 and has a rectangular footprint, standing seam metal siding, and metal single-leaf and overhead doors.

Interior

Access to the interior of the Storage Building was not permitted.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 7 Page 24

Integrity and Alterations

The Storage Building no longer retains integrity to convey its historic appearance from the period of significance. The wood-frame building has been heavily altered by being complete re-clad in standing seam metal siding. Thus, the Storage Building is classified as non-contributing.

Integrity

The Horlick Malted Milk Company Industrial Complex retains integrity to express its significance at the local level under Criterion A in the area of Industry. Non-historic alterations to individual resources in the complex are discussed above, and when viewed as a whole, do not hinder the ability of the resources together to express the historic appearance and significant function of the Horlick Malted Milk Company Industrial Complex. The contributing resources were constructed between 1885 and 1926. Overall, the historic design features and materials and industrial functions of the resources are clearly conveyed through their exterior appearance and the retention of interior historic finishes and utilitarian open manufacturing spaces. All of the resources are in their original locations, with the exception of the Pattern Storehouse (Resource #5) which was moved to its current location between 1922 and 1926, during the period of significance, which begins in 1885 and ends in 1951. Non-historic additions to the Malt Mill (Resource #3) and Factory #2 (Resource #6) have sizeable footprints, but are one-story and thus significantly lower in height than the historic resources. Their mid-century materials and design also clearly distinguish them from the historic buildings, allowing the historic building design to remain discernable.

Historically, the area between Northwestern Avenue and Factory #1 and Factory #2 was landscaped with a pond, trees, and bushes. Most of this landscaping was removed in the 1960s when two paved parking lots were constructed in front of Factory #1 and Factory #2. Smaller islands with grass lawn and trees remain, but these are not substantial enough to form a contributing resource. While the loss of the historic landscaping negatively impacts the integrity of the complex, the retention of the majority of the historic resources in the complex is sufficient to convey the industrial significance of the Horlick Malted Milk Company. The other resources that have been demolished after the period of significance are: 1) An 1882 two-story brick building that contained offices and a milk room, and was located to the southwest of Factory #1 and connected to the three-story 1890 addition to Factory #1 via a wood bridge. The 1882 building was demolished in circa 1969; 2) The northwest grain elevator was demolished by the owner in 2018.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 1

Summary of Significance

The Horlick Malted Milk Company Industrial Complex, located at 2100-2234 Northwestern Avenue in Racine, Racine County, Wisconsin, is eligible for listing in the National Register of Historic Places at the local level under Criterion A in the area of Industry. The complex is located on a 16-acre site approximately 1.6 miles northwest of Racine's historic downtown and has fourteen total resources comprised of ten contributing buildings, two contributing structures, and two non-contributing buildings. The twelve total contributing resources in the complex represent the historic headquarters and manufacturing plant of the Horlick Malted Milk Company, one of Racine's most significant industrial enterprises.

Brothers William and James Horlick established the company in 1874 in Chicago and moved to the nominated property in 1877. In 1883, William Horlick patented a powdered milk food product consisting of malted barley, wheat extract, and evaporated whole milk that was nutritious, easily digestible, non-perishable, and soluble in water. This invention was the world's first "malted milk." Horlick's malted milk was widely popular across the United States, the United Kingdom and the Greater British Empire, appealing both to consumers looking for a nutritious and digestible infant food and to the general population who enjoyed malted milk in dessert shakes and candies. Malted milk, revered for its non-perishable and lightweight qualities, was carried on numerous high-profile polar expeditions and customarily provided in American and British soldiers' ration kits during the Spanish-American War of 1898 and World Wars I and II.

The period of significance of the complex begins in 1885 with the construction of the earliest extant portion of Factory #1 and ends in 1951, when the Horlick Malted Milk Company reduced its operations and sold a significant building in the complex, Factory #2, to an unrelated company. The twelve contributing resources in the complex are functionally related and are directly associated with the manufacture and distribution of the Horlick Malted Milk Company's milk food products during the period of significance. Horlick's milk food products, particularly its widely-successful malted milk, were manufactured and shipped from the nominated property to customers nationwide. The scale of the company's operations necessitated an industrial plant comprised of multiple buildings and a sizeable local labor force to work at the plant. During the period of significance, the Horlick Malted Milk Company played a significant role in the industrial economy of Racine and contributed to important historical patterns in the processed food industry in the country. The nominated Horlick Malted Milk Company Industrial Complex retains sufficient integrity to convey its local-level significance under Criterion A in the area of Industry.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 2

Racine's Development and Industrial History

The city of Racine is located along Lake Michigan in Racine County within the southeast region of Wisconsin. It is approximately twenty-five miles south of Milwaukee, Wisconsin, and sixty miles north of Chicago, Illinois. The initial settlement that would become Racine was established at the mouth of the Root River as "Port Gilbert" in 1834 by Captain Gilbert Knapp.¹ By 1836 the settlement was surveyed and apportioned into blocks, and early settlers included William See, who built a sawmill on the Root River.² In February of 1843 the settlement incorporated as the village of Racine, "Racine" being the French word for "root." In 1848, the village was re-incorporated as a city. By 1850, the city of Racine had a population of 4,023. The region's economy was initially anchored in the production of wheat, but by the late 1800s Racine's economy largely shifted from agricultural towards industrial and manufacturing enterprises.³ Between 1850 and 1890, Racine's industrial expansion led to a local population boom as people moved there in search of employment.

Industrial enterprises in Racine were initially driven by agricultural and farming needs, which included processing equipment, threshers, and wagons. Racine's harbor facilitated the export and import of goods, encouraging commerce in the region. Some of the earliest industries in Racine were fanning mills operated by Lucias Blake and A.P. Dickey, which produced machines that cleaned and separated grains. Jerome Case, who developed a threshing machine that more efficiently processed grains, started the J.I. Case Company in 1842 and emerged as one of the city's most prominent employers, shipping its threshers on a national scale.⁴ In the mid-1840s, Henry Mitchell created the Mitchell Wagon Works Company, producing up to 200 wagons per day. Racine also emerged as a leading producer of leather goods. F.J. Burnham established the city's first tannery on a site along the Root River and his operation grew into the third-largest tannery in the state by the start of the Civil War.⁵ In 1855, Racine had two significant tanneries producing more than \$62,500 worth of leather goods annually, and by 1870 Racine's tanneries were valued at over \$200,000. In addition to the J.I. Case Company, other Racine operations such as the Woolen Mills, established in 1865, and the Iron Works, begun in 1869, began distributing products to regional and national markets.

¹ A.B. Eads, publisher, *Eads Illustrated History of Racine* (Chicago: 1884), 5.

² Racine County Historical Museum, *The Grassroots History of Racine County* (Racine, WI: Racine County Historical Museum, 1979), n.p.

³ Wisconsin Department of Transportation, "Horlick Industrial Historic District Determination of Eligibility Form," March 28, 2012, n.p. Wisconsin Historical Society, Division of Historic Preservation/Public History.

⁴ Racine County Historical Museum, *The Grassroots History of Racine County*, n.p.

⁵ Barbara Wyatt, Ed., "Industry – Tanning and Leather Processing," *Cultural Resource Management in Wisconsin: A Manual for Historic Properties* (Madison, WI: Historic Preservation Division, State Historical Society of Wisconsin, 1986), n.p.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 8 Page 3

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Racine's population continued to grow in the late 1800s as its industrial sector thrived. It was in this boom period of the late 1800s that William Horlick established the Horlick Malted Milk Company plant on the outskirts of Racine in 1877. Other manufacturing firms that were established in Racine in the 1880s and 1890s included the S. C. Johnson Company (which initially specialized in parquet flooring before expanding to cleaning products), Belle City Malleable Iron Company (which later became Racine Steel Castings), and the Gold Medal Camp Furniture Company (producer of folding portable furniture). By 1890, the city's population was 23,840 and approximately 4,200 residents were employed in factories.⁶

During the early 1900s, the manufacture of automobiles and auto parts was on the rise in Racine and the production of farm tools and implements waned. The Mitchel-Lewis Motor Car Company, established in 1902, was a prominent employer in the city by 1911. The J.I. Case Company shifted from manufacturing threshers to tractors. By the 1920s, Racine's automobile manufacturing sector had largely shut down, unable to compete with Detroit. However, other industries in Racine, such as the Horlick Malted Milk Company, continued to thrive and supported local employment in the industrial sector. Western Printing (which opened in 1907 and introduced their popular series of Big Little Books in 1932) and the Hamilton Beach Manufacturing Company (a producer of appliances such as drink mixers and blenders founded in 1910) were other manufacturing enterprises that, along with the Horlick Malted Milk Company, carried Racine's industrial sector during the Great Depression. After the Depression, a bulk of Racine's industrial sector began to shift towards metalworking and tool and die. After World War II, fewer new industries moved into Racine, and some of those that were already established moved operations in search of cheaper land and labor. In the early 1950s, during this period of economic change in Racine's industrial sector, the Horlick Malted Milk Company consolidated its operations at the plant and sold some of its property and buildings to other companies. Citing the prolonged toll of declining sales, the Horlick Malted Milk Company officially closed in 1975.

History of Malted Milk and the Milk Food Product Industry

In the nineteenth century, illness from bacterial growth in fresh milk was not an uncommon problem for consumers. The milk food product industry, which included malted milk and condensed and evaporated milk, developed in the mid-to-late nineteenth century as inventors, scientists, and entrepreneurs sought ways to capitalize on the nutritious qualities of milk while creating a safer food product with a longer shelf life. The various methods developed to convert fresh milk into milk food products involved elaborate systems that included kettles, vacuums, sterilizers, and cooling tanks. Companies that marketed their milk products on a large scale for public sale and distribution needed

⁶ Racine County Historical Museum, *The Grassroots History of Racine County*, n.p.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 4

factories and plants in which to house such equipment and manufacture their products. The Horlick Malted Milk Company Industrial Complex in Racine, Wisconsin, was developed to facilitate the large-scale production of milk food products, particularly malted milk.

Malted milk was invented by two British brothers, James and William Horlick, founders of J&W Horlick Company in 1874. James emigrated from England after working as a pharmacist for Mellin's Foods, a company founded by Gustav Mellin, who developed a concoction of wheat flour and malt as a nutritional supplement for infants. William, a mechanic, left England four years before James and worked at a relative's quarry in Racine, Wisconsin. Inspired by James's work at Mellin's Foods, the Horlick brothers sought to develop an improved wheat and malt-based nutritional supplement for infants and were able to raise the capital required in the United States.⁷ The business originally opened in Chicago, Illinois. In 1877, the brothers relocated to Racine, and in 1883 they invented malted milk, identified in their patent as a "Granulated Food for Infants" and initially marketed as "Diastoid."⁸ The success of malted milk elevated their business venture, which was renamed the Horlick Malted Milk Company in 1906 after their star product.

Malt is the food product created when cereal grain is placed in a warm environment so it germinates, then is dried quickly.⁹ It is naturally sweet and is a good source of essential vitamins and minerals, making it highly attractive for infant food. Doctors advocated the use of malted sugars, mixed with fresh milk, to supplement a child's diet by means of a tasty drink. Since fresh milk spoiled easily, the Horlick brothers wanted to create an alternative product that was healthy, affordable, non-perishable, lightweight, and conveniently prepared by combining with water instead of fresh milk.

The Horlicks' "Diastoid" malted milk was created as a "non-farinaceous highly nutritious food for infants and invalids."¹⁰ This new formula combined dried whole milk with malted barley and wheat extract. It was soluble in water and provided nutrients in an easily digestible and non-perishable form, executing the brothers' initial intent. The name, however, did not appeal to the market and the product was rebranded with the term "malted milk," trademarked in 1887 and promoted as Horlick Malted Milk. It came in powder or tablet form. Due to its non-perishable and lightweight nature, malted milk became popular as survival provisions in World War I and was carried by explorers to the North and

⁷ Wisconsin Historical Society, "That's Meat and Drink to Me: Wisconsin's Malted Milk Story", <https://www.wisconsinhistory.org/museum/exhibits/horlicks/index.asp>. Accessed July 15, 2019.

⁸ William Horlick, "Granulated food for infants and process of preparing the same," U.S. Patent 278,967, filed March 9, 1882 and issued June 5, 1883. Google Patents, <https://patents.google.com/patent/US278967>. Accessed July 16, 2019.

⁹ Kitchen Lore, "The History of Malted Milk Powder", July 22, 2011, <http://www.kitchenlore.com/2011/07/history-of-malted-milk-powder.html>. Accessed July 15, 2019.

¹⁰ William Horlick, "Granulated food for infants and process of preparing the same," U.S. Patent 278,967, filed March 9, 1882 and issued June 5, 1883. Google Patents, <https://patents.google.com/patent/US278967>. Accessed July 16, 2019.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 5

South Poles.¹¹ Horlick Malted Milk soon became a household – and later, soda fountain parlor – name. It was discovered that powered malted milk could be made into an inexpensive syrup to flavor drinks. When combined with ice cream, the drink was not only delicious but also filling. With Fred Osius' invention of the electric blender, malted milkshakes became all the rage in the 1920s. Bulk malted milk sales increased from less than one million pounds annually in 1910 to more than 35 million pounds in 1926.¹²

Horlick Malted Milk was the first of its kind in the United States and enjoyed a lion's share of the malted milk market. Its success inspired other manufacturers, including the Elgin Milkine Company, Carnation, and the Borden Dairy Company, to offer their own malted milk products. Malted milk's marketed use ranged from infant supplements to survivalist provisions to tasty malted shakes, and these companies saw the milk food product's varied potential. Malted milk was advertised as a bedtime drink, aiding in sleep deprivation. It was sold as candy. It was included in World War II lifeboat rations and aircrew escape kits. Today, malted milk is still popular outside of the United States as a standalone drink, and worldwide as a malted milkshake.

Two other types of processed milk food products created during the late 1800s are condensed milk and evaporated milk. Condensed milk is created when fresh milk is heated to remove water and the remaining milk product is then sweetened, with the sugar acting as a preservative. Condensed milk has a dense, syrupy consistency and, when canned, has a long shelf life. Evaporated milk is also created by the removal of large volumes of water from fresh milk. Unlike condensed milk, evaporated milk is not sweetened, and therefore is sometimes marketed as unsweetened condensed milk. Evaporated milk requires more processing than condensed milk in order to inhibit bacterial growth. Both condensed and evaporated milk were used as substitutes for fresh milk. They are different from malted milk in that they are canned, highly-viscous liquid milk food products, whereas malted milk comes in powdered or tablet form and is dissolved in water. Malted milk was less expensive to produce and ship than the canned and evaporated milk products.¹³

Gail Borden, founder of the Borden Dairy Company (initially named the New York Condensed Milk Company), developed the first successful commercial method of condensing milk in 1856, which kept

¹¹ William Horlick contributed to the funding of Polar explorations including \$30,000 to Byrd's 1933-1934 expedition. Wisconsin Historical Society, "That's Meat and Drink to Me: Wisconsin's Malted Milk Story", <https://www.wisconsinhistory.org/museum/exhibits/horlicks/index.asp>. Accessed July 15, 2019.

¹² Food Timeline, "Malted Milk", <http://www.foodtimeline.org/foodicecream.html#maltedmilk>. Accessed July 15, 2019.

¹³ Anne Mendelson, *Milk: The Surprising Story of Milk Through the Ages* (New York City: Alfred A. Knopf, 2008), 81.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 6

milk preserved for a longer period of time, allowing it to be shipped across larger areas.¹⁴ Borden's condensed milk was supplied to Union soldiers on a wide scale during the Civil War and it was proven to be portable and safe for consumption, increasing the product's integration into the American diet. In 1866, the Anglo-Swiss Condensed Milk Company, a parent company of Nestle, was founded in Cham, Switzerland by Americans Charles and George Page, who had studied Borden's production methods.¹⁵ They established the first condensed milk factory in Europe and produced and distributed their condensed milk under the "Milkmaid" brand name, using fresh milk from Swiss dairy herds.¹⁶ Meanwhile, in 1867 German entrepreneur Henri Nestlé developed "Farine Lactée" in Vevey, Switzerland, an infant food cereal that consumers dissolved in fresh milk.¹⁷ The Anglo-Swiss Condensed Milk Company merged with Henri Nestlé's operations in 1905, creating the Nestlé Company. The company later expanded its products in the European and American markets to include evaporated milk, powdered infant cereal, and malted chocolate milk.

One year after Borden established his patent in American and Europe for condensed milk, Joseph House received an English patent in 1857 for evaporated milk, essentially unsweetened condensed milk.¹⁸ Evaporated milk did not gain a foothold in the milk food product industry until John Meyenberg, formerly the head of processing and packaging at the Anglo-Swiss Condensed Milk Company headquarters in Cham, Switzerland, immigrated to the United States to start his own company manufacturing evaporated milk.¹⁹ In 1885, Meyenberg established the Helvetia Milk Condensing Company in Highland, Illinois, near the city of St. Louis, which was the first evaporated milk plant in the United States and the world.²⁰ The company's first product was an evaporated milk marketed as "Highland Evaporated Cream."²¹ In 1924, the company relocated to St. Louis and adopted the new name "Pet Milk Company" after its top-selling product, a condensed cream. Another prominent manufacturer in the evaporated milk industry was the Carnation Company, which was

¹⁴ Borden Dairy, "The Story Behind the Name: Borden, An American Heritage Brand," 2019, <https://www.bordendairy.com/press-room/history/>. Accessed July 17, 2019. E.H. Parfitt, "The Development of the Evaporated Milk Industry in the United States," *Journal of Dairy Science* 39 (1956): 838.

¹⁵ Nestlé Company, "The pioneer years: 1866-1905," 2019, <https://www.nestle.com/aboutus/history/1866-1905>. Accessed July 17, 2019.

¹⁶ Nestlé Company, "A condensed history: the Page Brothers and Anglo-Swiss," 2019, <https://www.nestle.co.nz/media/newsandfeatures/a-condensed-history>. Accessed July 17, 2009.

¹⁷ Nestlé Company, "Good Food, Good Life: Celebrating 150 Years of Nestlé," January 28, 2016, <https://www.nestle.co.nz/media/newsandfeatures/nestle-150-years>. Accessed July 17, 2019.

¹⁸ E.H. Parfitt, "The Development of the Evaporated Milk Industry in the United States," *Journal of Dairy Science* 39 (1956): 838.

¹⁹ E.H. Parfitt, "The Development of the Evaporated Milk Industry in the United States," 839.

²⁰ E.H. Parfitt, "The Development of the Evaporated Milk Industry in the United States," 838.

²¹ PET Evaporated Milk, "History," https://naitc-api.usu.edu/media/uploads/2017/02/13/PET_history.pdf. Accessed July 12, 2019.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 8 Page 7

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

founded by Elbridge Amos Stuart as the Pacific Coast Condensed Milk Company in Kent, Washington in 1899.²² The company initially produced and sold evaporated milk to gold prospectors traveling throughout the Pacific Northwest. In 1911, the company established a dairy storage facility in Chilton, Wisconsin, to gain a Midwest market.²³ The company was reincorporated in Maine in 1916 and renamed the Carnation Milk Products Company, diversifying to include powdered milk and condensed milk along with evaporated milk.

The malted milk and milk food product industry is an important facet of American food history, as this nutritional supplement was the first of its kind in the United States to convert a fresh milk product into a shelf-stable powdered milk, one that when mixed with water provided nutrition to infants, soldiers, and explorers and when mixed with ice cream satisfied the taste buds of malted milkshake drinkers alike. The legacy of malted milk established by the Horlick Malted Milk Company continues today. The product is used in commercial confectionaries and by home cooks in baked goods, desserts and milkshakes, and as mainstays of food assistance programs and international relief agencies.²⁴

History and Significance of the Horlick Malted Milk Company in Racine

William Horlick, founder of the Horlick Malted Milk Company, was born in Ruardian, Gloucestershire, England on February 23, 1846.²⁵ William was taught the saddle-making trade by his father and subsequently opened his own shop. In 1869, at the age of 24, William decided to leave England and pursue opportunity in America.²⁶ William initially worked in a saddle shop in Chicago, Illinois, but soon learned that a relative, Col. Joseph A. Horlick, had settled in the vicinity of Racine, Wisconsin, in 1844 and operated a quarry and a grist mill on the Root River. William traveled to Racine in 1870 to work in Joseph's lime and stone business, and he eventually married Joseph's daughter, Arabella. William and Arabella returned to Chicago, where William managed a branch of the lime and stone business.²⁷

Meanwhile, William's brother, James Horlick, became a certified chemist in 1869 while living in

²² Pamela G. Hollie, "Carnation: A Family Company's Evolution," *The New York Times*, September 5, 1984. Priscilla Long, "Carnation condensed milk first manufactured in Kent on September 6, 1899," August 6, 1999, <http://historylink.org/File/1608>. Accessed July 17, 2019.

²³ Milk Products, Inc., "Company History," 2019, <https://www.milkproductsinc.com/aboutMilkProducts/companyHistory>. Accessed July 17, 2019.

²⁴ Mendelson, *Milk: The Surprising Story of Milk Through the Ages*, 82.

²⁵ William Horlick High School, "Horlick's Fifty Years: 1928-1978," 1978. Racine History Room, Racine Main Library.

²⁶ Loren H. Osman, "Horlick's: Its History Now," *Milwaukee Journal*, March 16, 1975, Racine Heritage Museum Archives.

²⁷ Wisconsin Department of Transportation, "Horlick Industrial Historic District Determination of Eligibility Form," n.p.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 8

England, and subsequently worked for Mellin's Food, a manufacturer of infant food products.²⁸ Infant mortality from malnutrition and illness was a reality for many families during the Victorian era, and several American and European chemists were vying to develop a nutritious infant food product that was easy to prepare.²⁹ In 1873, James and his wife Margaret emigrated from England and joined William in Chicago. The following year, the brothers established the J & W Horlick Company and began manufacturing their own infant food product, which they named "Horlick's Food."³⁰ Horlick's Food consisted of wheat and malted barley soaked in water, converting the starches to maltose and extrin sugars, which was then evaporated to a granulated consistency. A consumer could then dissolve Horlick's Food in fresh whole milk. Horlick's Food was the first food product on the American market sold in air-tight packaging, which the brothers developed to inhibit spoilage and lengthen the shelf life of their product.³¹

Horlick's Food was successful, with physicians prescribing its use for infants, convalescents, and in the general aid of digestion.³² Initially located in Chicago, the Horlicks moved the company in 1877 to the present-day site in what was then the Mount Pleasant township on the outskirts of Racine. The plot of land was located along the Racine and Raymond Plank Road, now known as Northwestern Avenue. The site was chosen because it provided physical space for the company's operations to grow and had a consistent supply of spring water. The relocation of the company also allowed the Horlicks greater access to wheat, barley, and cheaper labor. The first factory building on the site was a wood structure approximately eighty feet long and twenty feet wide.³³

In 1878, the company was reorganized as the Horlick Food Company, with James Horlick named President, Arabella Horlick named Vice-President, and William Horlick named Secretary and Treasurer.³⁴ As sales increased and the company was exporting its product in America as well as Canada and England, a larger building was needed.³⁵ In 1885, the company constructed a three-story

²⁸ Don Rintz, *The Horlicks of Horlicksville*, n.d., 7. Horlicks Vertical File, Racine Heritage Museum Archives.; Rima D. Apple, *Mothers and Medicine: A Social History of Infant Feeding, 1890-1950* (Madison, WI: The University of Wisconsin Press, 1987), 11.

²⁹ Apple, *Mothers and Medicine: A Social History of Infant Feeding, 1890-1950*, 10.

³⁰ Rintz, *The Horlicks of Horlicksville*, 8; William Horlick High School, "Horlick's Fifty Years: 1928-1978," n.p.

³¹ William Horlick High School, "Horlick's Fifty Years: 1928-1978," n.p.

³² William Horlick High School, "Horlick's Fifty Years: 1928-1978," n.p.

³³ The wood factory building was demolished for the construction of the present factories on the site. Wisconsin Department of Transportation, "Horlick Industrial Historic District Determination of Eligibility Form," n.p.

³⁴ Fanny Stone, ed., *Racine: Belle City of the Lakes and Racine County, Wisconsin* (Chicago: S.J. Clarke Publishing Company, 1916), 45; Richard Minton, *The Horlicks of Racine*, 1997, 8. Horlicks Vertical File, Racine Heritage Museum Archives.

³⁵ "Horlicks Malted Milk," unpublished history, n.d. Horlicks Vertical File, Racine Heritage Museum Archives.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 9

cream brick factory (the earliest extant portion of Factory #1) with a corbeled parapet and a castellated tower, built by James Corse & Son. The factory's design was conceived by William Horlick, who modeled it after the castles he saw during his childhood in England.³⁶ William Horlick and his family could view the Horlick plant from his house, a three-story wood-frame Victorian residence located to the northwest of the plant; though the plant remains today, the Horlick home was demolished in the 1950s.³⁷

The Horlicks continued to experiment with processed foods, seeking to create a product that provided optimal nutrition, a long shelf life, and was easily digestible, but did not require the addition of fresh milk. For consumers living in crowded urban areas, fresh milk was typically difficult to obtain and keep unspoiled.³⁸ In 1883, William Horlick was granted a patent for a new granulated food formulated to provide nutrition for "infants and invalids."³⁹ What made this food product different from the previous version of "Horlick's Food" was that it contained evaporated whole milk, and thus fresh milk did not need to be added; instead, it could simply be dissolved in water. The 1883 patent detailed the recipe: first, equal parts of barley-malt and ground wheat or oats were mixed with fresh milk, then macerated until a mash was formed. The mash was then put in a large kettle, heated to 150 degrees Fahrenheit, and consistently stirred until the starch in the mash was broken down into dextrine and grape-sugar by diastase enzymes, taking approximately thirty minutes. The mash was then heated an additional fifteen minutes at 170 degrees Fahrenheit. After removal from the kettle, the mash was placed in bags and pressed through sieves, allowing the liquid extract to be separated from the insoluble matter. The liquid extract was then evaporated and pulverized in a vacuum pan, creating a granulated milk product that was highly nutritious, soluble in water, and non-perishable. Horlick's non-farinaceous food product was "of peculiar value to the weakest infant stomachs, since they cannot digest starch."⁴⁰ The Horlicks marketed and trademarked their product as "malted milk" in 1887 and introduced it at the annual convention in Chicago of the American Medical Association as well as in medical journals.⁴¹

Horlick's products, including Horlick's Malted Milk for Infants and Adults and Horlick's Dry Extract of Malt, were immediately successful, and by the late-nineteenth century Horlick's Malted Milk was

³⁶ "The Horlick Building," Horlicks Vertical File, Racine Heritage Museum Archives.

³⁷ William Horlick's family house is not extant. It was demolished and replaced with a modern gas station.

³⁸ Stone, ed., *Racine: Belle City of the Lakes and Racine County, Wisconsin*, 45.

³⁹ William Horlick, "Granulated food for infants and process of preparing the same," U.S. Patent 278,967, filed March 9, 1882 and issued June 5, 1883.

⁴⁰ William Horlick, "Granulated food for infants and process of preparing the same," U.S. Patent 278,967, filed March 9, 1882 and issued June 5, 1883.

⁴¹ "The Horlick Building," Horlicks Vertical File, Racine Heritage Museum Archives; Wisconsin Department of Transportation, "Horlick Industrial Historic District Determination of Eligibility Form," n.p.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 10

the most popular infant food product on the American market.⁴² Purchasing catalogs, such as those issued by Sears, Roebuck and Co., were distributed to households nationwide and routinely offered infant food products, including Horlick's Malted Milk, by the early-twentieth century.⁴³ The company expanded its manufacturing facility in Racine to meet the increasing consumer demand. Factory #1 was expanded in 1890 and 1895 and contained areas for manufacturing processes (including mashing and mixing tanks, a condensing area, and milling and grinding), an engine room with a smokestack, printing, packing, bottling, and storage, and offices.⁴⁴ In 1890, Horlick's built a two-story brick warehouse⁴⁵ to store boxes, bottles, and flour to the north of Factory #1. In 1893, a malt mill with a kiln⁴⁶ was constructed to the northwest of Factory #1. The malt mill incorporated areas to clean, grade, and separate wheat. In 1900, a two-story brick machine shop⁴⁷ was built to the east of Factory #1, and a small fireproof pattern storehouse was constructed. William Horlick also established a herd of Holstein cattle in Racine to supply milk for the company, and eventually owned several dairy farms in the area by the 1900s.⁴⁸ Meanwhile, James Horlick and his family returned to England and opened a branch office of the company in 1890 and then a factory in Slough, England, in 1906.⁴⁹

In 1904, William Horlick built a second factory⁵⁰ to the east of Factory #1. Factory #2 was also of cream brick construction with a corbelled parapet in a similar style to Factory #1 that referenced the English castles of William's youth. Factory #2 contained a series of milk condensing rooms with large skylights at its north end, an engine room with a smokestack, and large storage areas for stock and raw materials. Two additions containing storage areas and employee restrooms (and featuring turreted corners and a castellated tower) were added to the east and south sides of Factory #2 in 1907. Demand for malted milk products continued to increase, and in 1910-1911 the company constructed a third factory⁵¹ that included an engine room, employee dressing rooms, and a milk condensing room. In 1911, the company added a large addition to the north side of Factory #1 to increase production capacity. In 1912 the malt mill was enlarged and the attached kiln room was rebuilt to six stories. By this time, the Horlick Malted Milk Company plant had grown to occupy nearly fifteen acres. Along Northwestern Avenue, the grounds were bucolically landscaped with trees and a lagoon with Australian

⁴² Apple, *Mothers and Medicine: A Social History of Infant Feeding, 1890-1950*, 10.

⁴³ Apple, *Mothers and Medicine*, 143.

⁴⁴ Sanborn Fire Insurance Map, 1894, Sheet 13. Library of Congress.

⁴⁵ This two-story brick warehouse is labeled as Resource #2 in Section 7. Its historic name is Warehouse #1.

⁴⁶ This malt mill is labeled as Resource #3 in Section 7.

⁴⁷ This two-story brick machine shop is labeled as Resource 4 in Section 7.

⁴⁸ Minton, *The Horlicks of Racine*, 8.

⁴⁹ Wisconsin Department of Transportation, "Horlick Industrial Historic District Determination of Eligibility Form," n.p.

⁵⁰ This factory is labeled as Resource #6 in Section 7. Its historic name is Factory #2.

⁵¹ This factory is labeled as Resource #8 in Section 7. Its historic name is Factory #3.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 11

swans, whose cygnets were given to zoos.⁵² Corbeled brick entry gates⁵³ to the plant were constructed along Northwestern Avenue in 1908. A castellated clock tower was attached to the south side of Factory #1 in 1911, further enhancing the grounds. The stately castle-like factory buildings and picturesque grounds of the Horlick Malted Milk Company plant were a local point of pride. Henry Bacon visited the plant while developing his design for the Lincoln Memorial in Washington, D.C., and declared it a one of the most beautiful manufacturing plants he had seen.⁵⁴

The Horlick Food Company reincorporated in 1906 as the Horlick Malted Milk Company, a name that reflected its popular food product.⁵⁵ Malted milk was typically sold to the public in tablet or powder form and was initially marketed as a nutritious product for infants that was easily digestible, and thus also ideal for convalescing adults and anyone with digestive issues. It was widely advertised in medical journals. The popularity of the soda fountain in the early 1900s encouraged the use of malted milk among healthy teenagers and adults. The American soda fountain of the early-twentieth century was typically associated with a drug store, and served carbonated beverages and desserts. Soda fountains began offering “malt shakes,” a mixture of milk, chocolate or vanilla syrup, ice cream, and an ounce of malted milk powder. Malted milk gave the milkshake a distinct toasty flavor. Malt shakes became extremely popular and elevated the general public’s recognition of malted milk. Soda fountains and restaurants began ordering bulk amounts of malted milk from Horlick’s, initially the nation’s only producer, in response to customer demand. Cookie and candy factories and pharmaceutical companies were also large bulk purchasers of malted milk.⁵⁶ By the 1920s, Horlick’s Malted Milk of Racine, Wisconsin was a recognizable household name, developed through nationwide advertising campaigns and worldwide distribution.⁵⁷

The nutritious and non-perishable qualities of malted milk were appreciated by military forces and explorers. Horlick’s malted milk tablets were included in ration kits for American and British soldiers serving in the Spanish-American War of 1898 and World Wars I and II.⁵⁸ William Horlick donated malted milk products to the Antarctic and Polar expeditions of several prominent explorers; these donations also benefited the company, as they increased public recognition of malted milk by linking the product to the activities of famous adventurers.⁵⁹ Captain Robert Peary brought Horlick’s malted

⁵² This landscaping is not extant. “Classic Tower Designed by Manufacturer,” *Racine Review*, August 2, 1928.

⁵³ The entry gates are extant and labeled as Resource 7 in Section 7.

⁵⁴ “Classic Tower Designed by Manufacturer,” *Racine Review*, August 2, 1928.

⁵⁵ Stone, Ed., *Racine: Belle City of the Lakes and Racine County, Wisconsin*, 47.

⁵⁶ “Horlick factory paid 7 cents an hour in 1911,” *Racine Journal-Times*, March 11, 1982.

⁵⁷ Gerald L. Karwowski, *Postcard History Series: Racine* (Chicago: Arcadia Publishing, 2007), 100.

⁵⁸ “Space Age Pill Made in Racine,” *Racine Journal-Times*, September 13, 1967.

⁵⁹ Karwowski, *Postcard History Series: Racine*, 100.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 12

milk tablets on his North Pole discovery expedition in 1909.⁶⁰ Captain Raoul Amundsen, a personal friend of William Horlick, wrote of his own expedition to the South Pole in 1911, “Our way was littered with boxes stamped Horlick’s.”⁶¹

The rising success of malted milk in the late-nineteenth and early-twentieth centuries established the Horlick Malted Milk Company as a prominent employer and presence in Racine. A large labor force was needed to maintain the daily operations of the plant. In 1916, approximately 350 people were employed at the Horlick Malted Milk plant.⁶² By 1926, the employment number reached a peak of 1,050 workers.⁶³ Many employees were women, and the factory incorporated three restrooms for women and an employee library. A former employee recalled that her hourly pay in 1911 at the plant was seven cents, and explained “there would be about twenty-eight girls sitting around a large table putting the seals and covers on the bottles... there were half-pound, one-pound, and five-pound cans of the malted milk and the tablets.”⁶⁴ The company also had an athletic association, an employees’ beneficial association, and a cricket club.⁶⁵

The Horlick Malted Milk Company plant continued to expand during this period of rapidly-increasing national and global market demand.⁶⁶ A depot⁶⁷ was constructed to the east of Factory #1 in 1914 to distribute the food products, and a brick garage⁶⁸ for storing delivery trucks was built to the northeast of the machine shop in 1916.⁶⁹ In 1922, the Horlick Malted Milk Company constructed two grain elevators next to the malt mill to store barley and wheat.⁷⁰ In 1926, a second warehouse⁷¹ was built to the north of Factory #1 and Warehouse #1.⁷² William Horlick continued to enlarge the company’s herd of dairy cattle and also purchased milk from over one hundred different farms.⁷³ He insisted on barn sanitation measures and milk purity, and his standards were adopted by the Wisconsin dairy industry,

⁶⁰ Karwowski, *Postcard History Series: Racine*, 100.

⁶¹ Osman, “Horlick’s: Its History Now,” *Milwaukee Journal*, March 16, 1975.

⁶² Stone, ed., *Racine: Belle City of the Lakes and Racine County, Wisconsin*, 46.

⁶³ Wisconsin Department of Transportation, “Horlick Industrial Historic District Determination of Eligibility Form,” n.p.

⁶⁴ “Horlick factory paid 7 cents an hour in 1911,” *Racine Journal-Times*, March 11, 1982.

⁶⁵ Stone, ed., *Racine: Belle City of the Lakes and Racine County, Wisconsin*, 46; Minton, *The Horlicks of Racine*, 8.

⁶⁶ Jim Mercier, “Made in Racine: Malted Milk,” *Belle City*, July 2017. Racine Heritage Museum Archives.

⁶⁷ The depot is labeled as Resource #9 in Section 7.

⁶⁸ The garage is labeled as Resource #10 in Section 7.

⁶⁹ Sanborn Fire Insurance Map, Vol. 1, Sheet 211, 1950. Environmental Data Resources, Inc.

⁷⁰ One grain elevator is extant and is labeled as Resource #11 in Section 7. Sanborn Fire Insurance Map, Vol. 1, Sheet 211, 1950. Environmental Data Resources, Inc.; “Horlick factory paid seven cents an hour in 1911,” *Racine Journal-Times*, March 11, 1982.

⁷¹ This warehouse is labeled as Resource #12 in Section 7. Its historic name is Warehouse #2.

⁷² Sanborn Fire Insurance Map, Vol. 1, Sheet 211, 1933. Environmental Data Resources, Inc.

⁷³ Stone, ed., *Racine: Belle City of the Lakes and Racine County, Wisconsin*, 46.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 13

now one of the state's most important assets, while it was still in its infancy.⁷⁴

By the 1920s, other corporations had entered the market for milk food products, and some were producing their own versions of malted milk. The Horlick Malted Milk Company capitalized on their status as the inventors of malted milk, and conveyed that status in their advertising materials. The company's earliest advertisements focused on the safety of Horlick's malted milk compared to fresh milk products and the easily-digestible and long-lasting qualities of the product. Once other competitors hit the milk food products market in the 1920s, Horlick's malted milk advertisements also emphasized that consumers should seek out Horlick's malted milk because it was the original product, and implied that other versions were inferior products. Horlick's malted milk also continued to receive publicity via the arctic explorers that appreciated the product's high-caloric, portable, and non-perishable nature; William Horlick also contributed funds to several arctic expeditions. In 1933, prominent explorer Richard Byrd named a mountain range in Antarctica after the company.

In 1936, William Horlick passed away, leaving a \$17 million fortune.⁷⁵ As a token of appreciation, he willed the equivalent of one year's salary to every employee that had been with the company for at least twenty years.⁷⁶ During his lifetime, William Horlick contributed to Racine in other ways, drawings from funds he amassed as the father of malted milk. On December 21, 1918, he donated eleven acres of land in Racine (approximately one-half mile north of the Horlick Malted Milk Company plant) for a high school and provided additional financial support once the school was built.⁷⁷ William Horlick High School is extant and still operating today. William Horlick also invested in Racine by creating educational scholarships and contributing to the city's YMCA, YWCA, and local hospitals.⁷⁸

William Horlick's sons, William Jr. and Alexander Horlick, took over control of the plant after their father's death. Following World War II, the English branch of the Horlick company purchased shares of the American office in Racine. In 1946, the English branch reorganized the company in Racine and renamed it Horlicks Corporation.⁷⁹ In 1947, the last remaining Horlick family member still associated with the company resigned as chairman and director. This event preceded a series of actions taken by the Horlicks Corporation to downsize the Racine plant in response to declining sales of Horlick's

⁷⁴ "Horlick Herd Will Be Sold; One of Oldest in Wisconsin," *Racine Journal-Times*, October 12, 1951; The agricultural department of the State University of Madison also asserted that Horlick's sanitation standards influenced Wisconsin's dairy industry. Stone, ed., *Racine: Belle City of the Lakes and Racine County, Wisconsin*, 46.

⁷⁵ Karwowski, *Postcard History Series: Racine*, 100.

⁷⁶ Karwowski, *Postcard History Series: Racine*, 100.

⁷⁷ William Horlick High School, "Horlick's Fifty Years: 1928-1978," n.p.

⁷⁸ Osman, "Horlick's: Its History Now," *Milwaukee Journal*, March 16, 1975.

⁷⁹ Wisconsin Department of Transportation, "Horlick Industrial Historic District Determination of Eligibility Form," n.p.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 14

malted milk. In 1950, a boiler house⁸⁰ was constructed in order for the company to consolidate their operations in anticipation of the sale of portions of the Racine plant.

In July of 1951, the Horlicks Corporation sold the Factory #2 building to the Racine Tool and Machine Company, a manufacturer of hydraulic equipment.⁸¹ The 75,000-square-foot factory building represented one-third of the historic industrial plant. The Horlick cattle herd, which supplied milk for the company and was one of the oldest Wisconsin herds, founded in 1890, was also sold in 1951 due to the decreasing operations of the company.⁸² The sale of Factory #2 and the dairy herd reflect the decreasing operations of the Horlick Malted Milk Company and mark the end of the period of significance.

In 1952, Pell-Bari Farms, Inc. purchased the grain elevators, the malt mill, and acreage of the property for feed seed processing.⁸³ Warehouse #2 and three acres of the property were sold to the Wavobe Corporation in 1955.⁸⁴ The Western Printing & Lithographing Company had been using the warehouse for storage during the 1950s.⁸⁵ In the 1950s, William Horlick's former house at the northwest corner of the plant was demolished. The company's picturesque lagoon was infilled in 1960.⁸⁶

Sales of Horlick's malted milk products began declining in the mid-twentieth century. Several factors contributed to the decline. Other companies like Kraft and Carnation entered the market with their own milk products, eventually cutting into Horlick's share.⁸⁷ Medical boards passed more stringent requirements for the advertisement of milk products as infant formula; Horlick's did not follow the requirements and its products ceased to be advertised in medical journals.⁸⁸ The rise of fast food restaurants in the 1950s decreased the popularity of soda fountains, and the new restaurants often used flavored ice milk rather than malted milk products in their desserts and milkshakes.⁸⁹ Candy manufacturers began to eliminate extra ingredients, like malted milk, in their products to save on costs.

⁸⁰ The boiler house is a non-contributing building, labeled as Resource #13 in Section 7. It is non-contributing because it was constructed as part of a move to consolidate portions of the plant due to declining sales.

⁸¹ The new owners constructed one-story additions at the south elevation in 1952 and along the north elevation in 1960.

⁸² "Tool Company Buys Expansion Site," *Racine Journal-Times*, July 18, 1951.

⁸³ "Horlick Herd Will Be Sold; One of Oldest in Wisconsin," *Racine Journal-Times*, October 12, 1951.

⁸⁴ Pell-Bari Farms constructed one-story brick and concrete additions on the south elevation of the Malt Mill (Resource #3) in 1960 and 1965. Wisconsin Department of Transportation, "Horlick Industrial Historic District Determination of Eligibility Form," n.p.

⁸⁵ "Horlick Corporation Sells Land, Warehouse Valued at \$328,000," *Racine Journal-Times*, March 20, 1955.

⁸⁶ "Horlick Corporation Sells Land, Warehouse Valued at \$328,000," *Racine Journal-Times*, March 20, 1955.

⁸⁷ "Looking Back," Horlicks Vertical File, Racine Heritage Museum Archives.

⁸⁸ Mercier, "Made in Racine: Malted Milk," *Belle City*, July 2017.

⁸⁹ Apple, *Mothers and Medicine: A Social History of Infant Feeding, 1890-1950*, 94.

⁹⁰ Osman, "Horlick's: Its History Now," *Milwaukee Journal*, March 16, 1975.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 8 Page 15

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

The post-World War II prosperity in the United States also allowed more and more Americans to afford home refrigeration units, which lessened the perceived need for milk products with long shelf lives.⁹⁰ To keep pace with the rapid changes in the market, other large corporations like Nestlé and Pet diversified their portfolios, a tactic that Horlicks Corporation did not successfully implement. In 1969, Beecham Group, Ltd. of England purchased the Horlicks Corporation for \$60 million.⁹¹ The Horlick Malted Milk Company plant in Racine was officially closed in March of 1975, citing prolonged declining demand, rising raw material costs, and plant overcapacity.⁹²

Comparable Properties

William Horlick invented malted milk, and the company he founded, which operated in Racine from 1877 to 1975, was the only company in the city manufacturing malted milk products. Horlick's malted milk was widely distributed to customers across the nation and the product became a popular staple in the American diet that was used in a variety of ways, cementing its role as part of the important larger trend of American food science and the development of processed foods. A manufacturing and distribution plant comprised of multiple factories and supporting buildings with a large workforce was necessary to ensure successful operations. Thus, the Horlick Malted Milk Company plant is a significant complex in Racine's industrial history. Comprised of three separate factories and several supportive resources such as warehouses, a garage, a malt mill, a machine shop, and a grain elevator, the Horlick Malted Milk Company Industrial Complex is an excellent example of a late-nineteenth and early-twentieth century manufacturing plant in Racine.

There are no comparable historic milk product manufacturing sites extant in the city of Racine. The milk product manufacturer geographically closest to the nominated property was the Carnation Can Company (Carnation) factory, located at 132 S. Concord Road in Oconomowoc, Waukesha County, Wisconsin, approximately forty miles west of Milwaukee and sixty miles northwest of the Horlick Malted Milk Company Industrial Complex. Carnation originated as the Pacific Coast Condensed Milk Company in Washington and began producing evaporated milk in 1899.⁹³ The company prospered and established an eastern division office in 1914 in Oconomowoc, Wisconsin and purchased a farm in Oconomowoc the following year. Shortly thereafter, the company established a can factory in Oconomowoc at 132 S. Concord Road. The company reincorporated in Maine in 1916 and officially

⁹⁰ National Register of Historic Places, Pet Plaza, St. Louis (Independent City), Missouri, National Register #04000749, 8-7.

⁹¹ Osman, "Horlick's: Its History Now," *Milwaukee Journal*, March 16, 1975.

⁹² Mercier, "Made in Racine: Malted Milk," *Belle City*, July 2017.

⁹³ Priscilla Long, "Carnation condensed milk first manufactured in Kent on September 6, 1899," August 6, 1999, History Link, <http://historylink.org/File/1608>, accessed July 17, 2019.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 8 Page 16

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

changed its name to the Carnation Milk Products Company. By 1919, Carnation operated twenty facilities in the nation producing evaporated milk.⁹⁴ In 1922, Carnation purchased the Malt-A-Milk company in Kansas City, adding malted milk products to its line.⁹⁵ Carnation also branched into fresh milk operations, but its primary product remained evaporated milk into the World War II era. In 1954, Carnation joined the Western Condensing Company to form a new powdered milk department called the Instant Milk Company. Carnation also developed other instant powdered foods, including instant cocoa. The Oconomowoc factory became a producer of instant and powdered foods for the company. In January of 1985, Carnation was purchased by Nestlé. Lake Country Foods purchased and operated the plant at 132 S. Concord Road from 1998 until its closing in 2018.

The Carnation Can Factory at 132 S. Concord Road, located approximately sixty miles from the Horlick Malted Milk Company Industrial Complex, predominantly manufactured evaporated milk, a different milk food product from malted milk. It is a manifestation of the milk food product industry in Wisconsin. In summation, the Horlick Malted Milk Company Industrial Complex is the most appropriate property to express the industrial significance of the Horlick Malted Milk Company to Racine and the significance of malted milk in the evolution of food science and processed milk food products.

Conclusion

The Horlick Malted Milk Company Industrial Complex, located at 2100-2234 Northwestern Avenue in Racine, Racine County, Wisconsin, is eligible for listing in the National Register of Historic Places at the local level under Criterion A in the area of Industry. During the period of significance from 1885 to 1951, the Horlick Malted Milk Company Industrial Complex played an important role in the industrial economy of Racine. William Horlick's invention of malted milk, which came in powdered or tablet form, proved to be a milestone in the history of food science and processed foods as the product gained a national reputation and was integrated into the American diet in myriad ways. Malted milk was widely popular because it offered consumers numerous desirable qualities. It had a long shelf-life, was easily digestible, was conveniently prepared by dissolving in water, and was marketed as nutritious. Malted milk was used as an infant food, as a dessert ingredient – particularly in the popular malted milk shake, and in meal kits for soldiers and long-range explorers. Many other milk food product companies, such as those specializing in condensed and evaporated milk, developed their own versions of powdered malted milk in response to the success of Horlick Malted Milk.

⁹⁴ Thomson Gale, "Carnation Company," 2006, International Directory of Company Histories, Encyclopedia.com, <https://www.encyclopedia.com/books/politics-and-business-magazines/carnation-company>. Accessed September 27, 2018.

⁹⁵ Thomson Gale, "Carnation Company," 2006, International Directory of Company Histories, Encyclopedia.com, <https://www.encyclopedia.com/books/politics-and-business-magazines/carnation-company>. Accessed September 27, 2018.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 8 Page 17

The high demand for malted milk during the period of significance necessitated a large industrial manufacturing complex. Over a period of time ranging from 1885 into the 1920s, the Horlick Malted Milk Company constructed a series of industrial buildings and additions to manufacture, bottle, and distribute the company's malted milk products. Many of the buildings and additions were designed with Gothic Revival style ornamentation such as cornices, parapets and turrets with decorative corbeled bricks and projecting castellated towers to invoke medieval castles.

The nominated Horlick Malted Milk Industrial Complex has twelve functionally-related contributing resources and two non-contributing buildings. While the site of the complex has lost its historic landscaping and lagoon, the contributing resources retain integrity and easily convey the historic significance of the complex. The period of significance begins in 1885 with the construction of the earliest extant portion of Factory #1 (Resource #1) and ends in 1951 when the company sold Factory #2 (Resource #6) and significantly downsized its operations due to declining demand.

Preservation Activities

The various buildings in the Horlick Malted Milk Company Industrial Complex have had different owners in the years since the company was shuttered in 1975, and the complex as a whole has been generally underused since that time. In 2018, the city of Racine hired the Lakota Group to complete a citywide heritage preservation plan. The heritage preservation plan identified the complex as having good potential for adaptive reuse.⁹⁶ Milwaukee-based development company J. Jeffers has purchased eight of the resources in the complex and is currently creating an adaptive reuse plan utilizing state and federal historic tax credits. The first building proposed for rehabilitation is Factory #2 (Resource #6) and the company wishes to convert the building into multi-family mixed-income residential housing.

⁹⁶ The Lakota Group, "Racine Heritage Preservation Plan," October 23, 2018, 37. Available online at: https://www.thelakotagroup.com/wp-content/uploads/2018/11/Final_Draft_HeritagePreservationPlan.pdf. Accessed July 18, 2019.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 9 Page 1

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Bibliography

- Apple, Rima D. *Mothers and Medicine: A Social History of Infant Feeding, 1890-1950*. Madison, WI: The University of Wisconsin Press, 1987.
- Borden Dairy. "The Story Behind the Name: Borden, An American Heritage Brand," 2019. <https://www.bordendairy.com/press-room/history/>. Accessed July 17, 2019.
- "Classic Tower Designed by Manufacturer." *Racine Review*, August 2, 1928.
- Eads, A.B., publisher. *Eads Illustrated History of Racine*. Chicago: A.B. Eads, 1884.
- Food Timeline. "Malted Milk." <http://www.foodtimeline.org/foodicecream.html#maltedmilk>. Accessed July 15, 2019.
- Gale, Thomson. "Carnation Company." 2006, International Directory of Company Histories, Encyclopedia.com, <https://www.encyclopedia.com/books/politics-and-business-magazines/carnation-company>. Accessed September 27, 2018.
- Hollie, Pamela G. "Carnation: A Family Company's Evolution." *The New York Times*, September 5, 1984.
- Horlick, William. "Granulated food for infants and process of preparing the same." U.S. Patent 278,967. Filed March 9, 1882 and issued June 5, 1883. Google Patents, <https://patents.google.com/patent/US278967>. Accessed July 16, 2019.
- "The Horlick Building." Horlicks Vertical File, Racine Heritage Museum Archives.
- "Horlick Corporation Sells Land, Warehouse Valued at \$328,000." *Racine Journal-Times*, March 20, 1955.
- "Horlick factory paid 7 cents an hour in 1911." *Racine Journal-Times*, March 11, 1982.
- "Horlick Herd Will Be Sold; One of Oldest in Wisconsin." *Racine Journal-Times*, October 12, 1951.
- "Horlicks Corp. Enters Food Market for Pets." *Racine Journal Times*. March 4, 1962. Racine Heritage Museum Archives.
- "Horlicks Corp. Enters New Year with Hope Pinned on New Products." *Racine Journal-Times*. January 19, 1958. Racine Heritage Museum Archives.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 9 Page 2

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

“Horlicks Malted Milk.” Unpublished history, n.d. Horlicks Vertical File, Racine Heritage Museum Archives.

Horlicks Gets a New Contract.” *Racine Journal-Times*. March 20, 1956. Racine Heritage Museum Archives.

Karwowski, Gerald L. *Postcard History Series: Racine*. Chicago: Arcadia Publishing, 2007.

Kitchen Lore. “The History of Malted Milk Powder.” July 22, 2011, <http://www.kitchenlore.com/2011/07/history-of-malted-milk-powder.html>. Accessed July 15, 2019.

The Lakota Group. “Racine Heritage Preservation Plan,” October 23, 2018, 37. https://www.thelakotagroup.com/wp-content/uploads/2018/11/Final_Draft_HeritagePreservationPlan.pdf. Accessed July 18, 2019.

Long, Priscilla. “Carnation condensed milk first manufactured in Kent on September 6, 1899.” August 6, 1999, History Link, <http://historylink.org/File/1608>. Accessed July 17, 2019.

“Looking Back.” Horlicks Vertical File, Racine Heritage Museum Archives.

Mendelson, Ann. *Milk: The Surprising Story of Milk Through the Ages*. New York City: Alfred A. Knopf, 2008.

Mercier, Jim. “Made in Racine: Malted Milk,” *Belle City*, July 2017. Racine Heritage Museum Archives.

Milk Products, Inc. “Company History,” 2019. <https://www.milkproductsinc.com/aboutMilkProducts/companyHistory>. Accessed July 17, 2019.

Minton, Richard. *The Horlicks of Racine*, 1997. Horlicks Vertical File, Racine Heritage Museum Archives.

National Register of Historic Places. Pet Plaza, St. Louis (Independent City), Missouri, National Register #04000749.

Nestlé Company. “A condensed history: the Page Brothers and Anglo-Swiss,” 2019. <https://www.nestle.co.nz/media/newsandfeatures/a-condensed-history>. Accessed July 17, 2009.

Nestlé Company. “Good Food, Good Life: Celebrating 150 Years of Nestlé,” January 28, 2016. <https://www.nestle.co.nz/media/newsandfeatures/nestle-150-years>. Accessed July 17, 2019.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 9 Page 3

Nestlé Company. "The pioneer years: 1866-1905," 2019.

<https://www.nestle.com/aboutus/history/1866-1905>. Accessed July 17, 2019.

Osman, Loren H. "Horlick's: Its History Now." *Milwaukee Journal*, March 16, 1975. Racine Heritage Museum Archives.

Parfitt, E.H. "The Development of the Evaporated Milk Industry in the United States." *Journal of Dairy Science* 39 (1956): 838-842.

PET Evaporated Milk. "History." https://naitc-api.usu.edu/media/uploads/2017/02/13/PET_history.pdf. Accessed July 12, 2019.

Racine County Historical Museum. *The Grassroots History of Racine County*. Racine, WI: Racine County Historical Museum, 1979.

Rintz, Don. *The Horlicks of Horlicksville*, n.d. Horlicks Vertical File, Racine Heritage Museum Archives.

Sanborn Fire Insurance Map, 1894, Sheet 13. Library of Congress.

Sanborn Fire Insurance Map, Vol. 1, Sheet 211, 1933. Environmental Data Resources, Inc.

Sanborn Fire Insurance Map, Vol. 1, Sheet 211, 1950. Environmental Data Resources, Inc.

"Space Age Pill Made in Racine." *Racine Journal-Times*, September 13, 1967.

Stone, Fanny, ed. *Racine: Belle City of the Lakes and Racine County, Wisconsin*. Chicago: S.J. Clarke Publishing Company, 1916.

"Tool Company Buys Expansion Site." *Racine Journal-Times*. July 18, 1951.

William Horlick High School. "Horlick's Fifty Years: 1928-1978." 1978. Racine History Room, Racine Main Library.

Wisconsin Department of Transportation. "Horlick Industrial Historic District Determination of Eligibility Form." March 28, 2012. Wisconsin Historical Society, Division of Historic Preservation/Public History.

Wisconsin Historical Society. "That's Meat and Drink to Me: Wisconsin's Malted Milk Story," <https://www.wisconsinhistory.org/museum/exhibits/horlicks/index.asp>. Accessed July 15, 2019.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 9 Page 4

Wyatt, Barbara, ed. "Industry – Tanning and Leather Processing." *Cultural Resource Management in Wisconsin: A Manual for Historic Properties*. Madison, WI: Historic Preservation Division, State Historical Society of Wisconsin, 1986.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 10 Page 1

Verbal Boundary Description:

The National Register boundary is an irregular polygon that encompasses a 16-acre parcel containing ten contributing buildings, two contributing structures, and two non-contributing buildings. The boundary follows legal parcel lines, asphalt-paved roadways, and gravel-paved service driveways.

The south corner of the boundary is at the intersection of Northwestern Avenue and Albert Street. Beginning from this point, the boundary continues to the northeast following Albert Street for 435 feet, then continues north along the east edge of legal parcel lines for 485 feet until reaching Kewaunee Street. At Kewaunee Street the boundary continues east for 245 feet to the intersection of Kewaunee Street and Summit Avenue. From this intersection the boundary turns north and continues for 155 feet along Summit Avenue, then turns west-northwest and follows a curving gravel service drive for 500 feet until the gravel drive terminates at a paved service drive. The boundary then turns west and follows the gently-curving paved service drive for 715 feet to its intersection with Northwestern Avenue. The boundary then continues to the southeast and follows Northwestern Avenue for 820 feet to the beginning point at the intersection of Northwestern Avenue and Albert Street.

The National Register boundary is shown on the accompanying Site Map in Figure 1.

Boundary Justification:

The National Register boundary encompasses a 16-acre site that is historically associated with the Horlick Malted Milk Company and contains the resources which retain integrity and reflect the company's industrial significance. The boundary follows legal parcel lines, roadways, and paved and gravel driveways. Historically, the Horlick Malted Milk Company's acreage extended north to High Street. This acreage to the north of the boundary has not been included because it does not retain integrity from the period of significance. During the period of significance, a rail spur ran through the acreage to the Depot (Resource #9), and a water reservoir (created sometime prior to 1922) was located to the northeast of Factory #3. The spur track was removed sometime prior to 1971, and the reservoir was infilled in the 1950s following the construction of the City of Racine water tower. The former site of the reservoir has remained a greenspace since it was infilled. The Horlick company did not construct any other resources on the remaining acreage north of the National Register boundary and south of High Street. After the period of significance (1885 through 1951), a middle school and associated storage sheds, a modern gas station, and a water tower were constructed on the acreage, permanently altering its historically undeveloped character. Since the northern acreage does not retain its historic character and contains no resources associated with the company, it is excluded from the boundary.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section 10 Page 2

The remaining east, southeast, and southwest boundary lines contain the historic resources associated with the Horlick Malted Milk Company and its industrial significance.

10. Geographical Data (Continuation)

	<u>Easting</u>	<u>Northing</u>	<u>Zone</u>
1.		433897.00	4732304.17
		16T	
2.		433984.55	4732308.55
		16T	
3.		434133.16	4732218.73
		16T	
4.		434129.97	4732020.75
		16T	
5.		433932.08	4731974.78
		16T	
6.		433774.57	4732171.08
		16T	

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Photos Page 1

Photo Log

Name of Property: Horlick Malted Milk Company Industrial Complex
City or Vicinity: Racine
County: Racine **State:** Wisconsin
Photographer: Matt Wicklund
Date Photographed: August and October 2018; July 2019
Location of Original Digital Files: State Historic Preservation Office, Wisconsin Historical Society

Photo 1
Southwest Elevation, Factory #1 (Resource #1)
Camera facing north
July 2019

Photo 2
Southwest Elevation, Factory #1 (Resource #1) and Grounds
Camera facing northwest
July 2019

Photo 3
Northwest Elevation, Factory #2 (Resource #6)
Camera facing southeast
July 2019

Photo 4
Southwest Elevation, Factory #2 (Resource #6)
Camera facing northeast
August 2018

Photo 5
Horlick Malted Milk Company Industrial Complex
Camera facing northwest
July 2019

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Photos Page 2

Photo 6
Northeast Elevation, Factory #2 (Resource #6)
Camera facing south
August 2018

Photo 7
Industrial Complex; Depot (Resource #9); Southwest Elevation, Factory #3 (Resource #8)
Camera facing north
July 2019

Photo 8
Northeast Elevation, Factory #1 (Resource #1)
Camera facing northwest
August 2018

Photo 9
Southwest and Southeast Elevations, Warehouse #1 (Resource #2)
Camera facing north
July 2019

Photo 10
Northwest and Southwest Elevations, Machine Shop (Resource #4)
Camera facing southeast
August 2018

Photo 11
West and South Elevations, Garage (Resource #10)
Camera facing northeast
August 2018

Photo 12
East Elevation, Garage (Resource #10)
Camera facing northwest
October 2018

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Photos Page 3

Photo 13

Northeast elevation, Storage Building (Resource #14, Non-contributing)

Camera facing south

October 2018

Photo 14

Southeast and Northeast Elevations, Factory #3 (Resource #8)

Camera facing west

October 2018

Photo 15

Rear Elevations, Factory #3 (Resource #8); Boiler House (Resource #13, Non-contributing)

Camera facing southeast

October 2018

Photo 16

Southeast Elevation, Warehouse #2 (Resource #12); Pattern Storehouse (Resource #5)

Camera facing northwest

July 2019

Photo 17

South Elevation, Pattern Storehouse (Resource #5); Southwest Elevation, Warehouse 2 (Resource #12)

Camera facing northeast

August 2018

Photo 18

Grain Elevator (Resource #11)

Camera facing southeast

July 2019

Photo 19

Southwest Elevation, Malt Mill (Resource #3)

Camera facing east

October 2018

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Photos Page 4

Photo 20
South and West Elevations, Malt Mill (Resource #3)
Camera facing east
July 2019

Photo 21
Entry Gates (Resource #21)
Camera facing north
July 2019

Photo 22
Factory #2 (Resource #6) and Grounds
Camera facing northeast
July 2019

Photo 23
Interior, Factory #1 (Resource #1)
Camera facing west
August 2018

Photo 24
Milk Condensing Room, Factory #2 (Resource #6)
Camera facing southwest
August 2018

Photo 25
Milk Condensing Room, Factory #3 (Resource #8)
Camera facing south
October 2018

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 1

List of Figures

Figure 1. Horlick Malted Milk Company Industrial Complex, Site Map.

Figure 2. Horlick Malted Milk Company Industrial Complex, Chronology Map.

Figure 3. Horlick Malted Milk Company Industrial Complex, Photo Key.

Figure 4. Horlick Malted Milk Company, USGS Map and UTM Coordinates.

Figure 5. Sanborn Fire Insurance Map, **1894**, Sheet 13.

Figure 6. Sanborn Fire Insurance Map, **1908**, Vol. 1, Sheet 69.

Figure 7. Sanborn Fire Insurance Map, **corrected to 1922**, Vol 1., Sheet 69.

Figure 8. Sanborn Fire Insurance Map, **1933**, Vol. 1, Sheet 211.

Figure 9. 1883 Illustration of non-extant wood-frame Horlick's Food Co. factory.

Figure 10. Circa 1910 photograph of William Horlick (1846-1936), co-founder of the Horlick Malted Milk Company.

Figure 11. Photograph of containers of Horlick's Malted Milk dating to circa 1900.

Figure 12. 1904 Advertisement for Horlick's Malted Milk.

Figure 13. Ca. 1911 photograph of the Horlick plant. View northeast from Northwestern Avenue towards entry gates, Factory #1, and Factory #2.

Figure 14. Ca. 1912 photograph of members of the National Wholesale Druggists' Association visiting the Horlick plant. View northeast towards Factory #1.

Figure 15. Circa 1913 photograph of Warren Gardner, a five-year-old child with lactose intolerance, posing with empty bottles of Horlick's Malted Milk as testament to the product's effectiveness.

Figure 16. Ca. 1920 postcard of the Horlick Malted Milk Company Industrial Complex. View north from Northwestern Avenue.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 2

Figure 17. 1921 photograph of a Horlick's Malted Milk advertisement at the boardwalk in Atlantic City, New Jersey.

Figure 18. Ca. 1922 advertisement for Horlick's Malted Milk urging the consumer to "Ask For and Get Horlick's, the Original, or you may get a Substitute."

Figure 19. Circa 1930 photograph of milk delivery trucks at the Horlick Malted Milk plant. View northeast towards the Depot and Factory #3.

Figure 20. Circa 1933 photograph of crates of Horlick's malted milk to be shipped to an Antarctic expedition led by Admiral Richard E. Bird.

Figure 21. Circa 1940 photograph of a bottling line at the Horlick Malted Milk Company Plant.

Figure 22. Undated photograph of an explorer standing in front of the Horlick Mountain Range in Antarctica, named in honor of the Horlick Malted Milk Company by Admiral Richard E. Byrd.

**United States Department of the Interior
National Park Service**

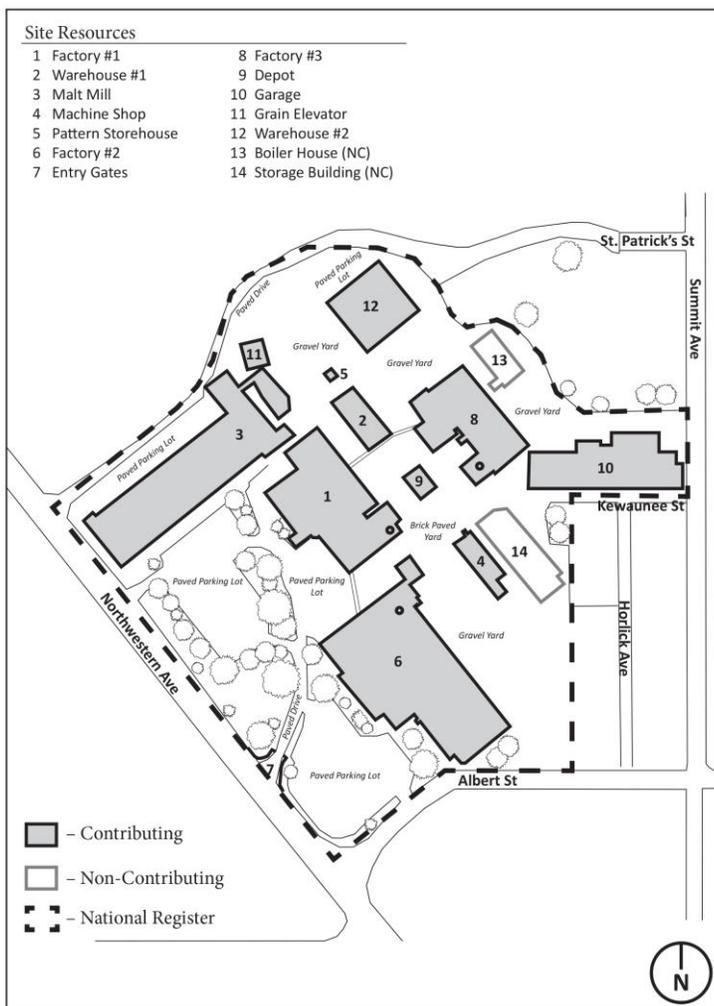
**National Register of Historic Places
Continuation Sheet**

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 3

Figure 1. Horlick Malted Milk Company Industrial Complex, Site Map.

NR
Horlick Malted Milk Company Industrial Complex – Racine, Wisconsin



Site Plan and NR Boundary

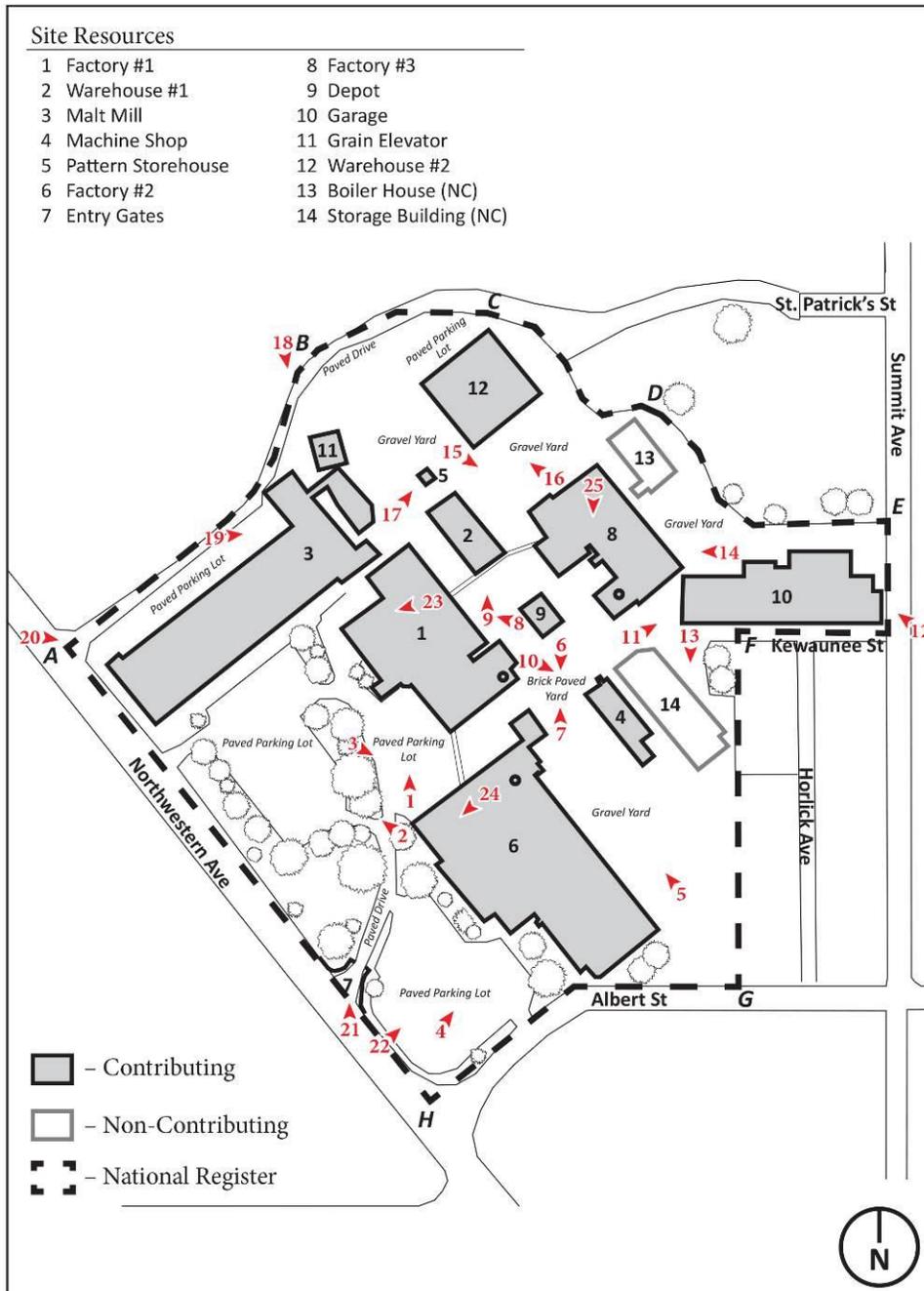
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 5

Figure 3. Horlick Malted Milk Company Industrial Complex, Photo Key.



**United States Department of the Interior
National Park Service**

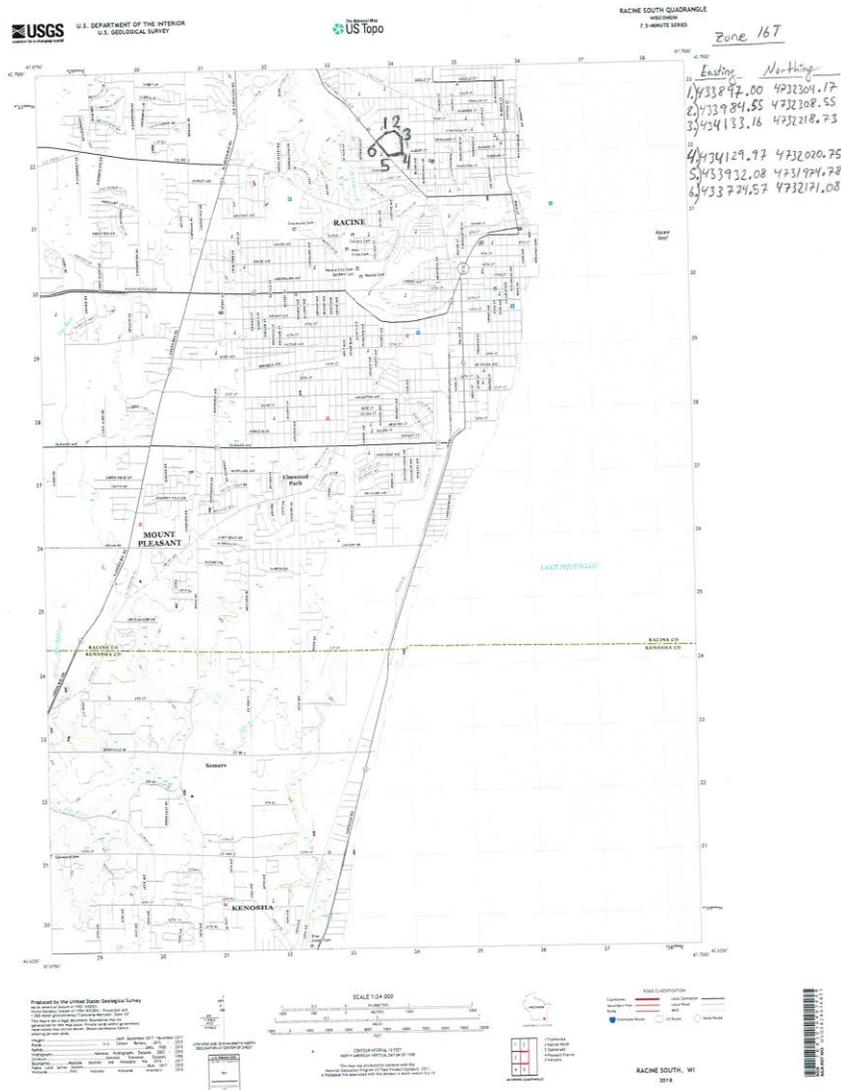
**National Register of Historic Places
Continuation Sheet**

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 6

Figure 4. Horlick Malted Milk Company, USGS Map and UTM Coordinates.

*Horlick Malted Milk Company Industrial Complex
Racine, Racine County, Wisconsin*



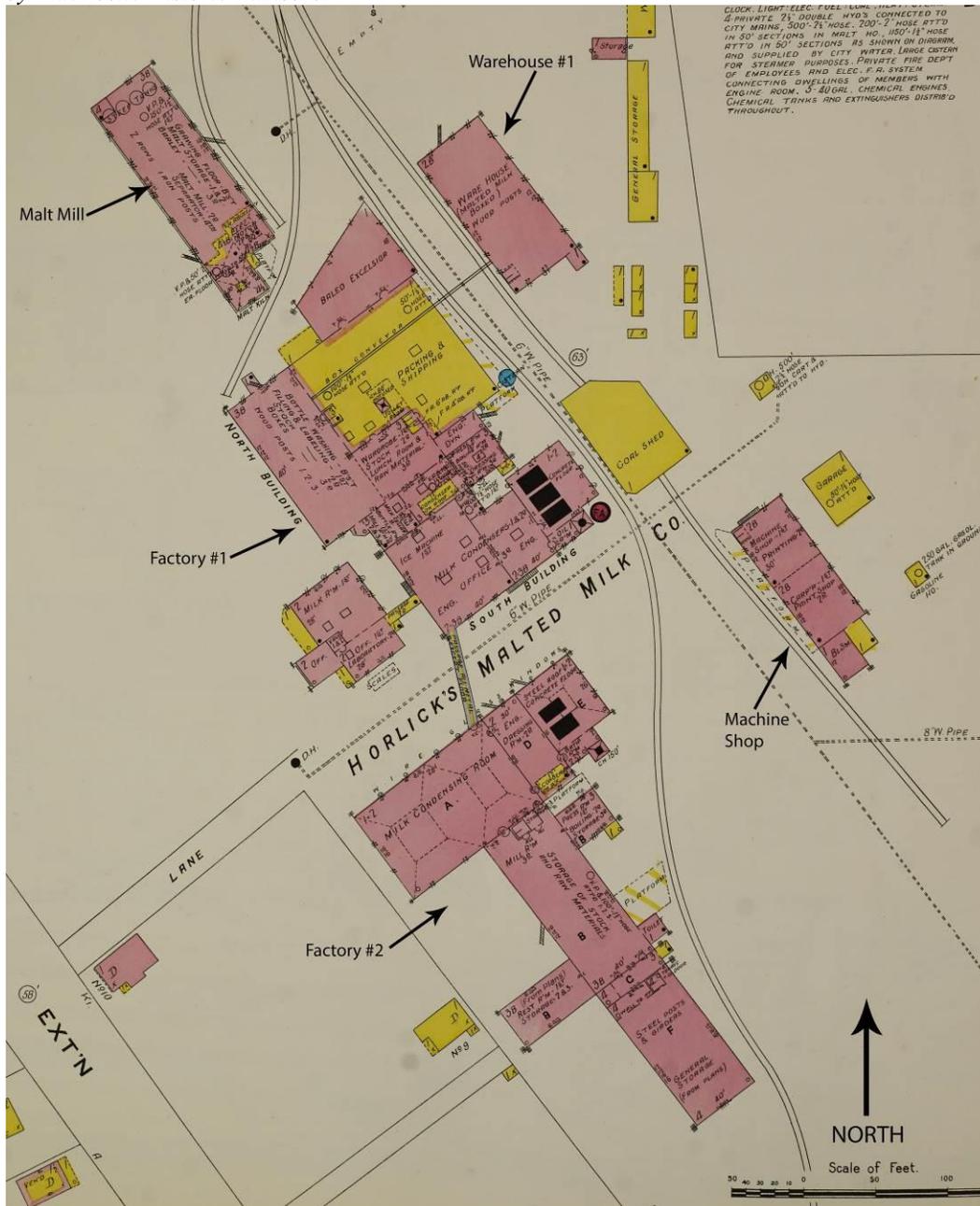
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 8

Figure 6. Sanborn Fire Insurance Map, 1908, Vol. 1, Sheet 69. Source: Library of Congress with notes added by MacRostie Historic Advisors.



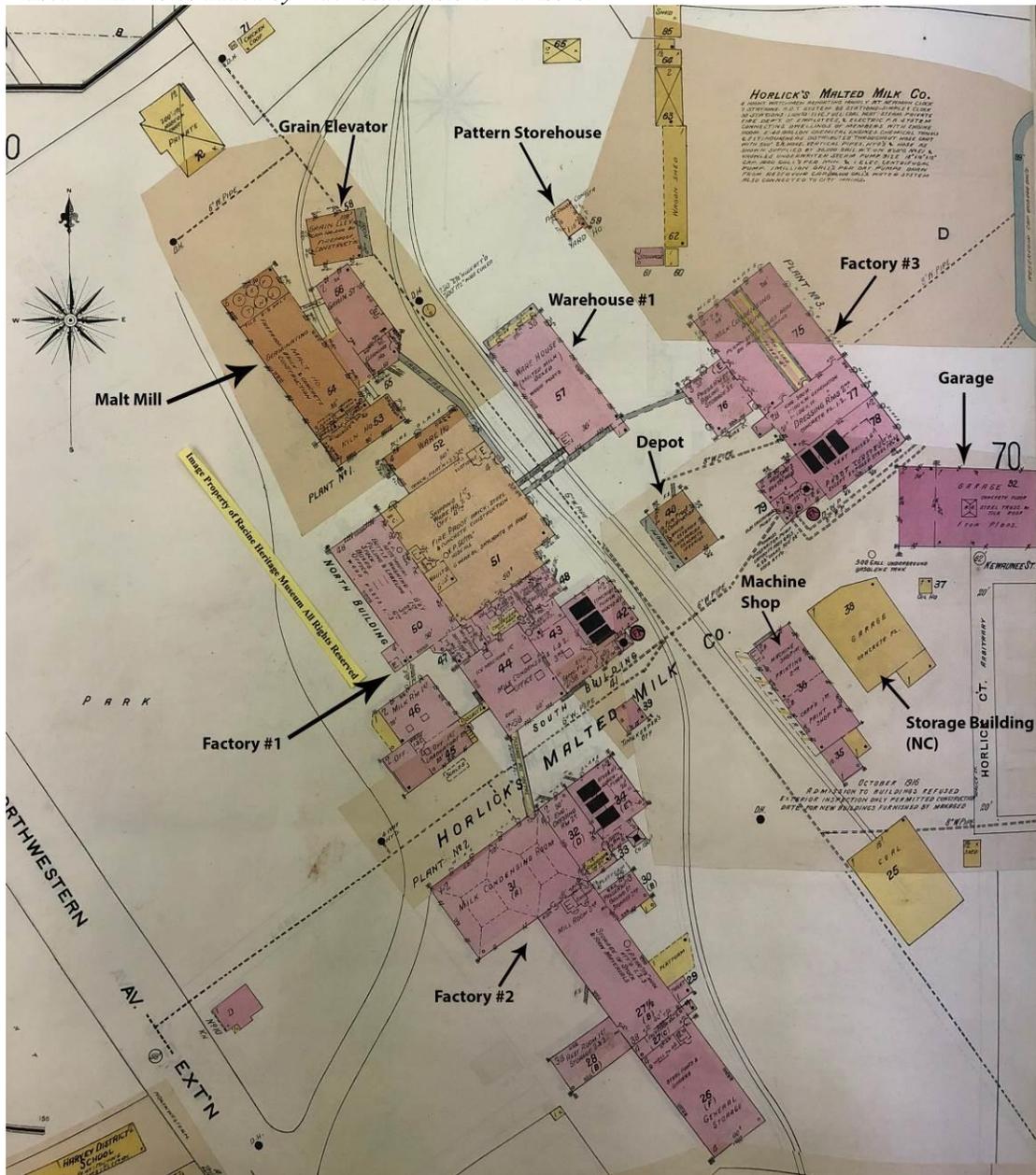
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 9

Figure 7. Sanborn Fire Insurance Map, corrected to 1922, Vol 1., Sheet 69. Source: Racine Heritage Museum with notes added by MacRostie Historic Advisors.



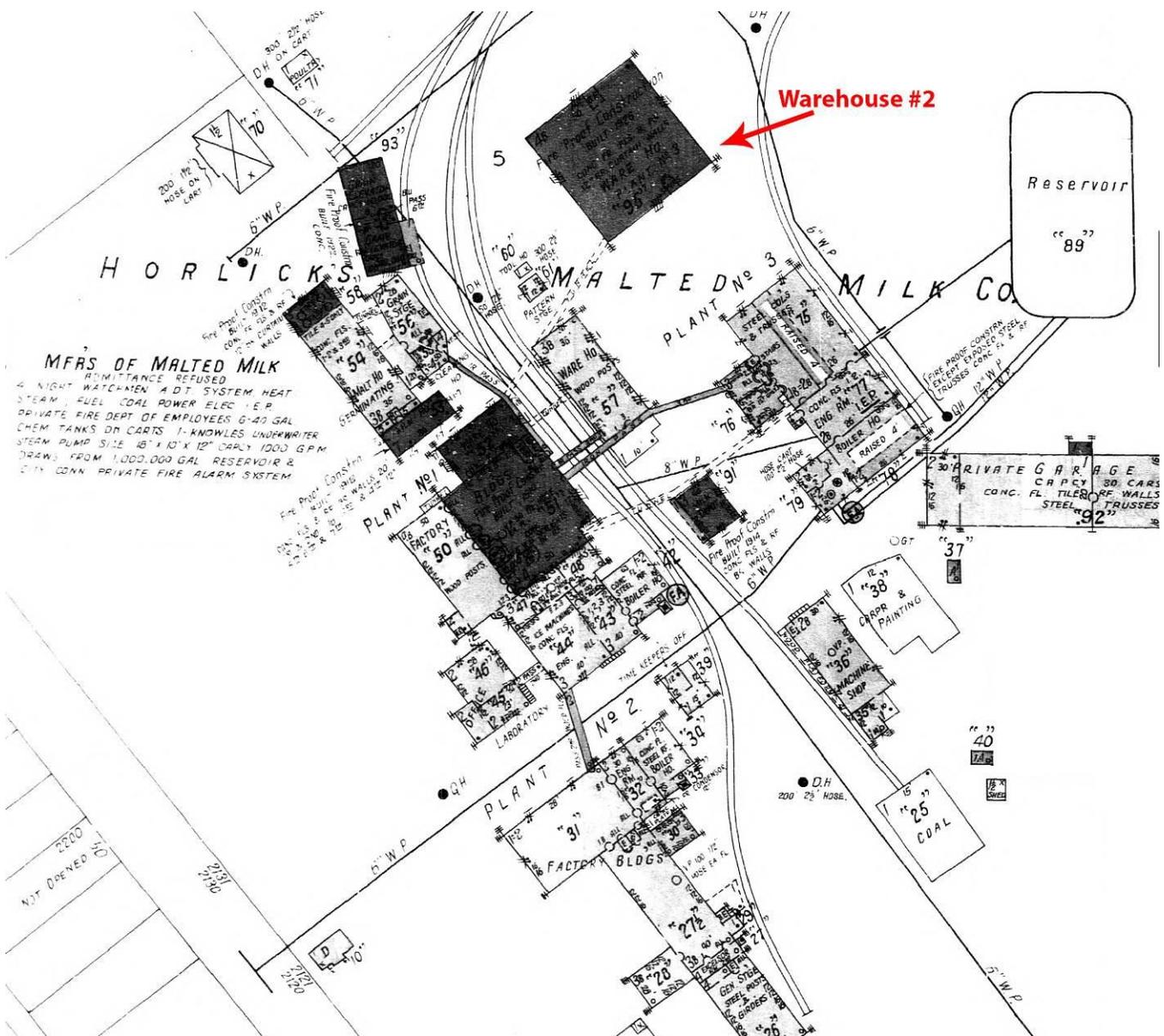
**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 10

Figure 8. Sanborn Fire Insurance Map, 1933, Vol. 1, Sheet 211. *Source: Environmental Data Resources with notes added by MacRostie Historic Advisors.*



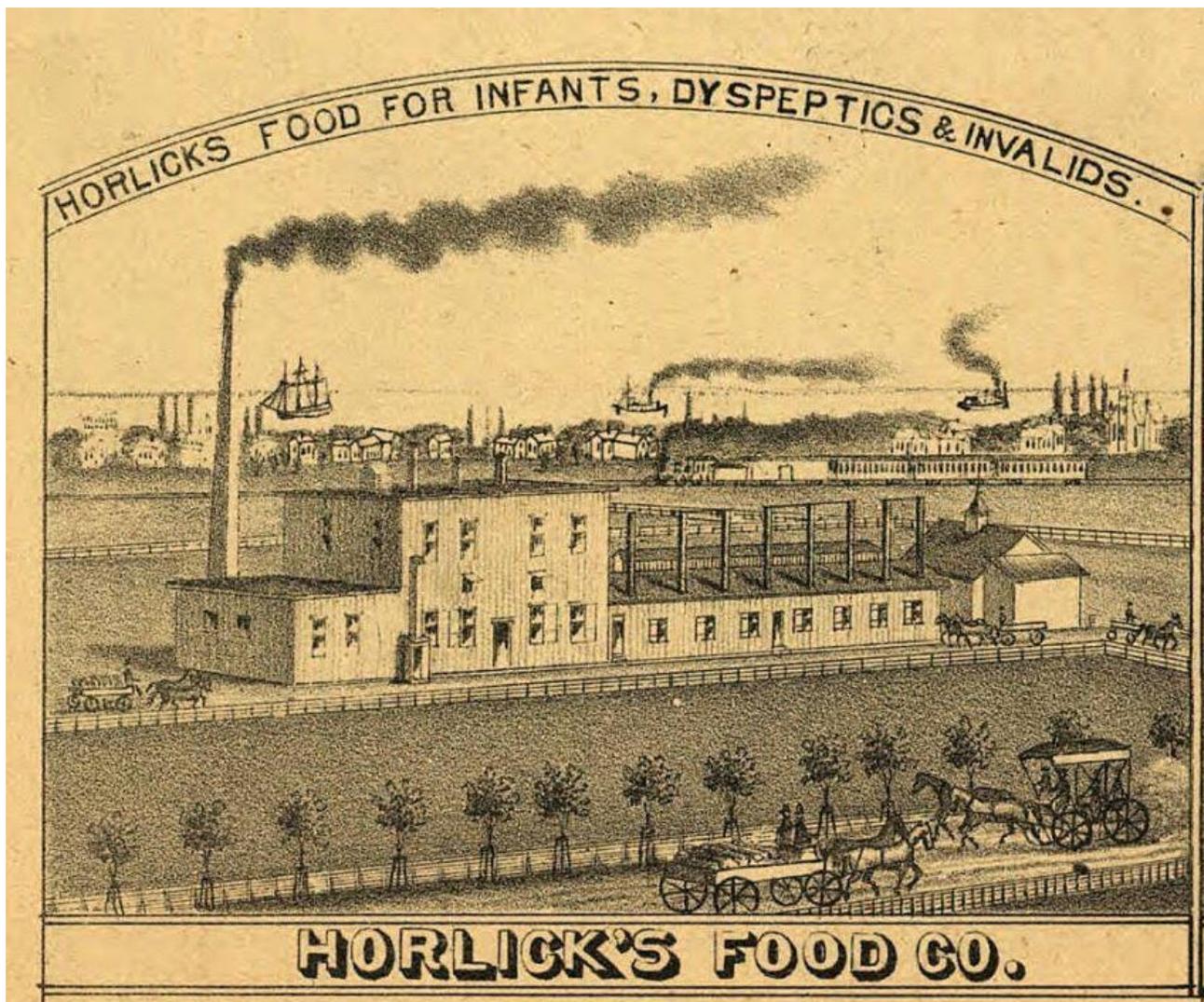
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 11

Figure 9. 1883 Illustration of non-extant wood-frame Horlick's Food Co. factory. *Source: Racine, Wisconsin, Birds' Eye View, Wisconsin Historical Society.*



United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 12

Figure 10. Circa 1910 photograph of William Horlick (1846-1936), co-founder of the Horlick Malted Milk Company. *Source: Wisconsin Historical Society, Image ID 23698.*



United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 13

Figure 11. Photograph of containers of Horlick's Malted Milk dating to circa 1900. *Source: University of Wisconsin-Madison, Department of History.*



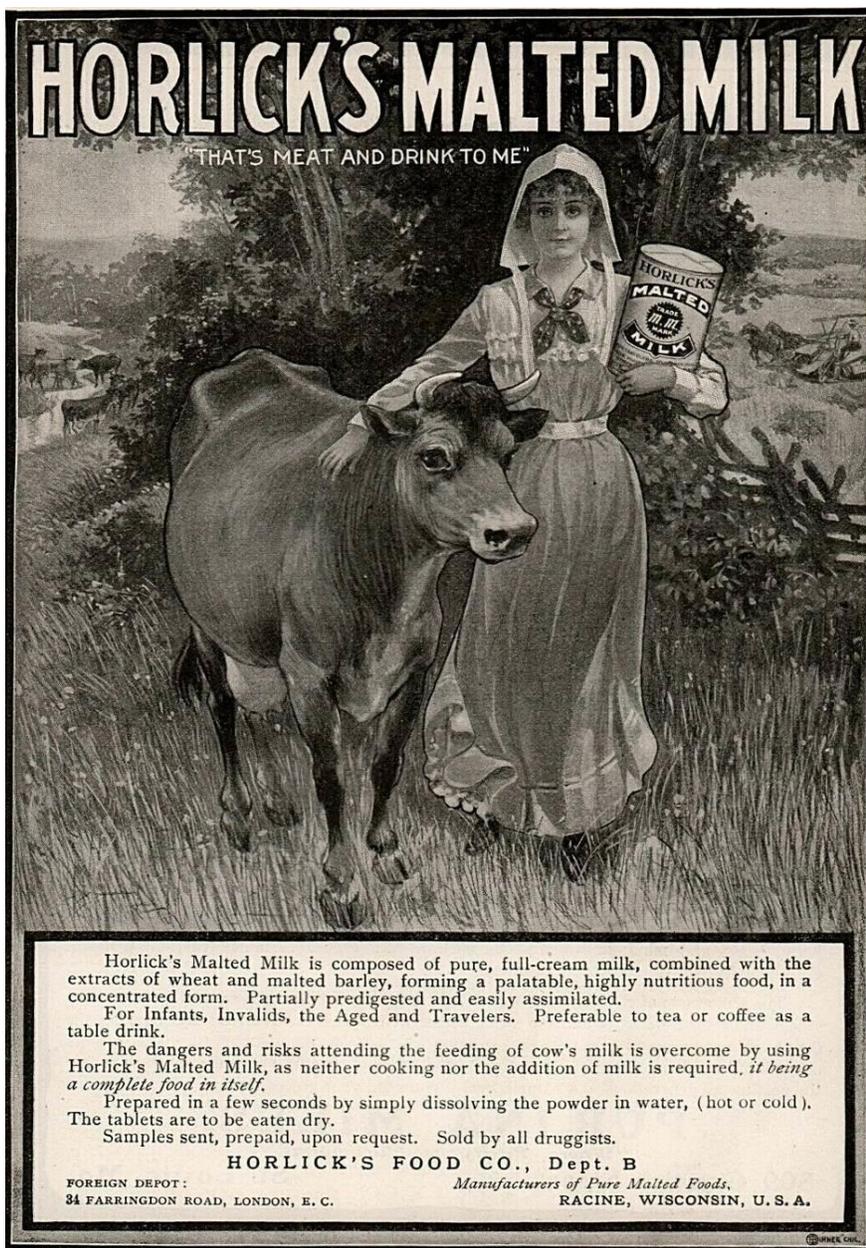
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 14

Figure 12. 1904 Advertisement for Horlick's Malted Milk. *Source: Racine Heritage Museum.*



HORLICK'S MALTED MILK
"THAT'S MEAT AND DRINK TO ME"

Horlick's Malted Milk is composed of pure, full-cream milk, combined with the extracts of wheat and malted barley, forming a palatable, highly nutritious food, in a concentrated form. Partially predigested and easily assimilated.

For Infants, Invalids, the Aged and Travelers. Preferable to tea or coffee as a table drink.

The dangers and risks attending the feeding of cow's milk is overcome by using Horlick's Malted Milk, as neither cooking nor the addition of milk is required, *it being a complete food in itself.*

Prepared in a few seconds by simply dissolving the powder in water, (hot or cold). The tablets are to be eaten dry.

Samples sent, prepaid, upon request. Sold by all druggists.

HORLICK'S FOOD CO., Dept. B
Manufacturers of Pure Malted Foods,
RACINE, WISCONSIN, U. S. A.

FOREIGN DEPOT:
34 FARRINGTON ROAD, LONDON, E. C.

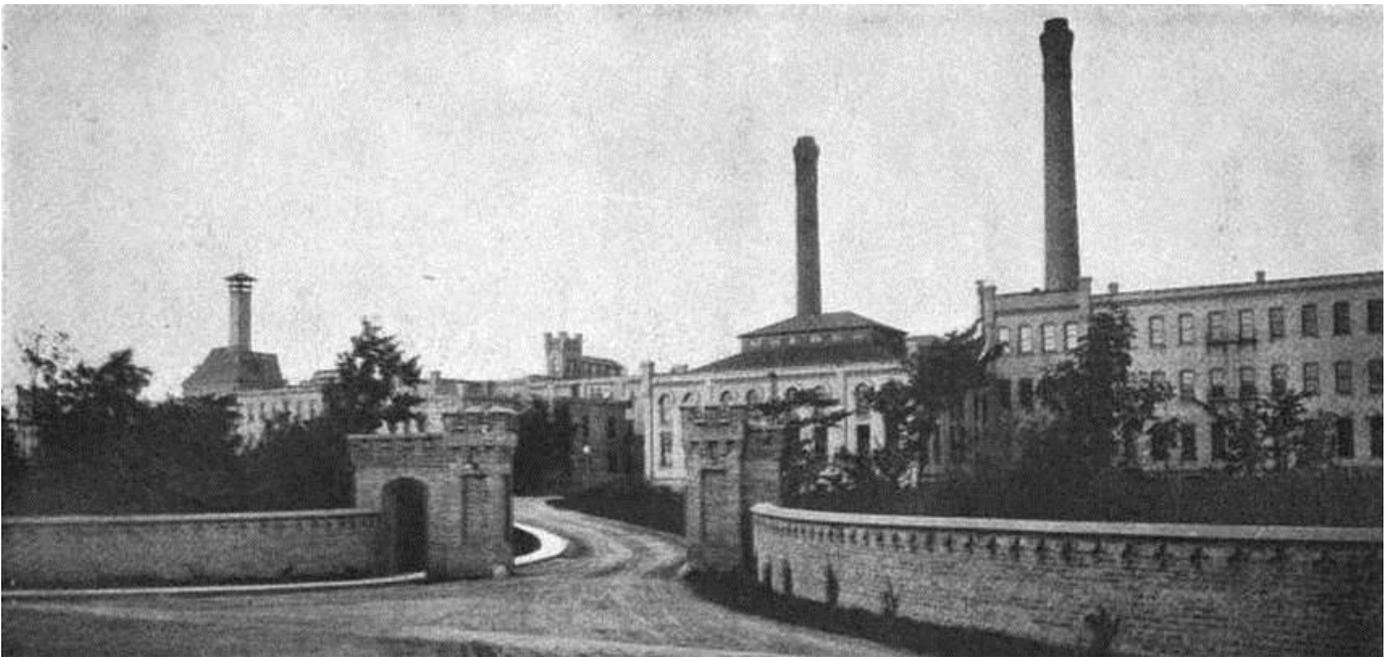
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 15

Figure 13. Ca. 1911 photograph of the Horlick plant. View northeast from Northwestern Avenue towards entry gates, Factory #1, and Factory #2. *Source: Racine Heritage Museum*



United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 16

Figure 14. Ca. 1912 photograph of members of the National Wholesale Druggists' Association visiting the Horlick plant. View northeast towards Factory #1. *Source: Racine Heritage Museum.*



WHOLESALE DRUGGISTS VISIT THE HORLICK PLANT.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 17

Figure 15. Circa 1913 photograph of Warren Gardner, a five-year-old child with lactose intolerance, posing with empty bottles of Horlick's Malted Milk as testament to the product's effectiveness. *Source: Wisconsin Historical Society, Image ID 24983.*



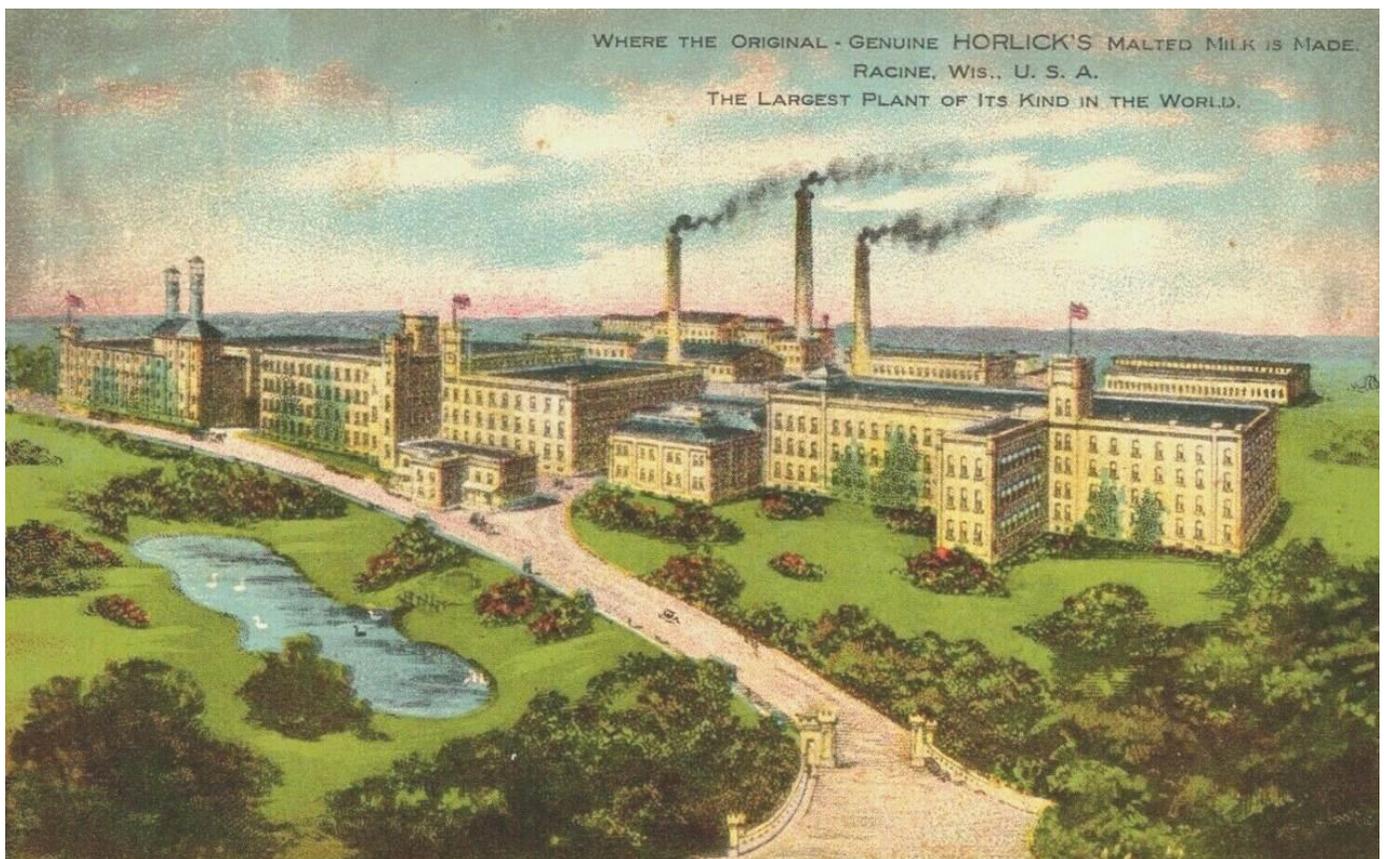
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 18

Figure 16. Ca. 1920 postcard of the Horlick Malted Milk Company Industrial Complex. View north from Northwestern Avenue. The landscaping and lagoon in the foreground was removed and replaced with paved parking in the 1960s. *Source: Racine Heritage Museum.*



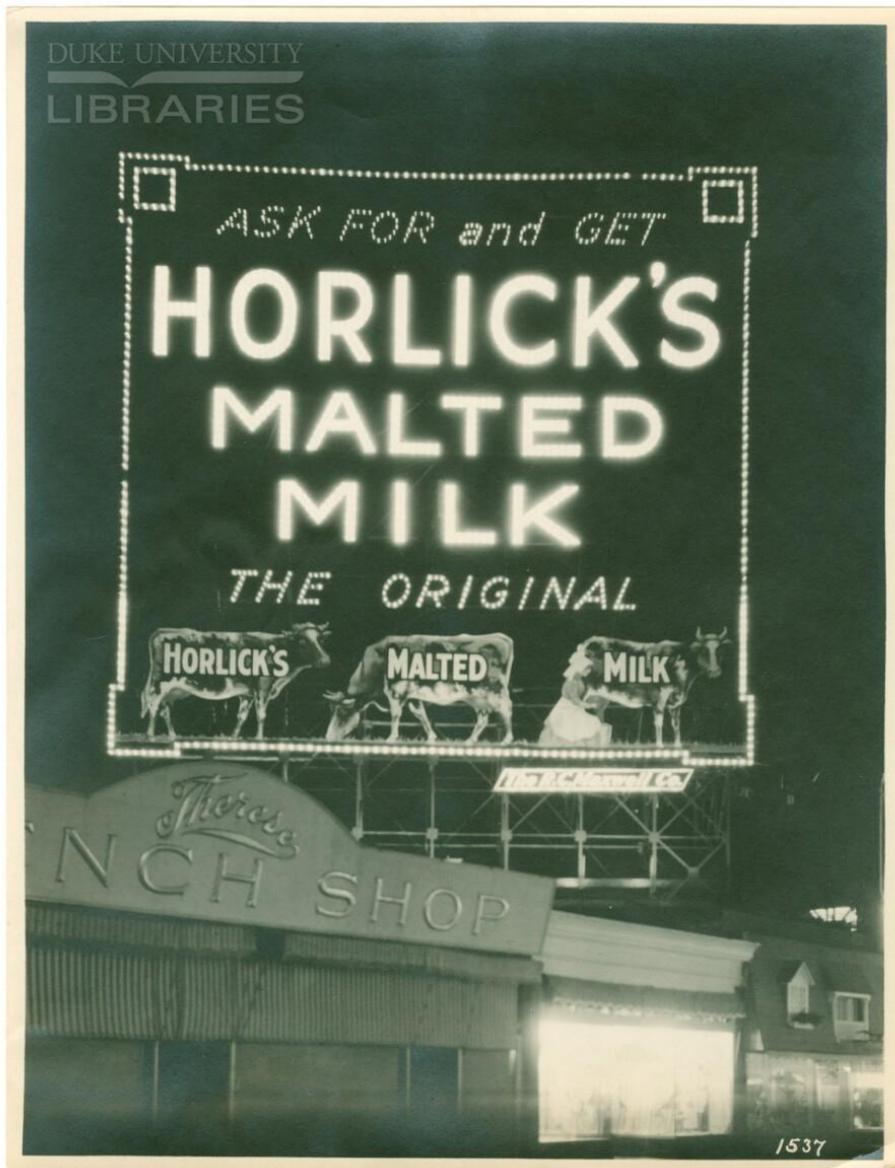
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 19

Figure 17. 1921 photograph of a Horlick's Malted Milk advertisement at the boardwalk in Atlantic City, New Jersey. *Source: Resource of Outdoor Advertising Descriptions, R.C. Maxwell Company Records, Duke University Libraries.*



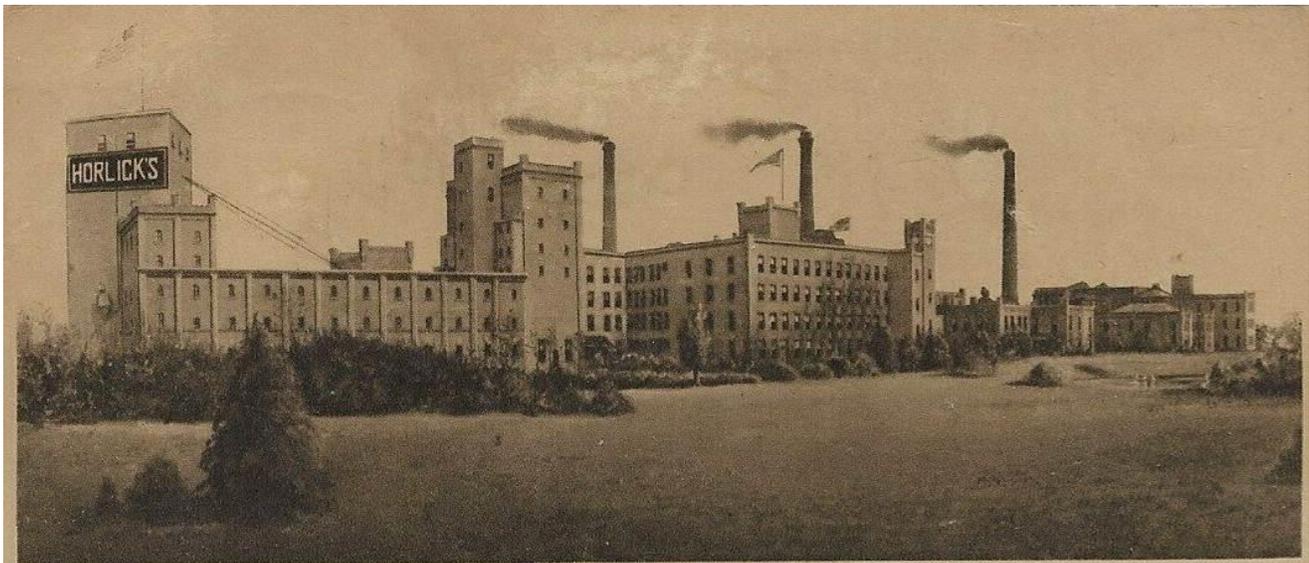
**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 20

Figure 18. Ca. 1922 advertisement for Horlick's Malted Milk urging the consumer to "Ask For and Get Horlick's, the Original, or you may get a Substitute." *Source: Racine Heritage Museum.*



WHERE MALTED MILK WAS ORIGINATED—RACINE, WIS.

Clean, Rich Milk, combined with the extract of select Malted Grains, reduced to powder form. Soluble in water. Requires no cooking nor addition of milk. Endorsed by physicians for over thirty years, as a diet for Infants and Invalids.

Ready in a moment by briskly stirring the powder in water. (An egg-beater may be used or, better, our Speedy Mixer, by mail for 10c.). Invigorating, Nutritious, Digestible, agreeing with the weakest stomach of the Invalid or Aged. Also in tablet form, plain or cocoa flavor. Fine for the boys in the trenches.

Ask For and Get "Horlick's," the Original, or you may get a Substitute.
Send today for a trial package. Use reverse side for your name and address.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 21

Figure 19. Circa 1930 photograph of milk delivery trucks at the Horlick Malted Milk plant. View northeast towards the Depot and Factory #3. *Source: Wisconsin Historical Society, Image ID 23696.*



**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 22

Figure 20. Circa 1933 photograph of crates of Horlick's malted milk to be shipped to an Antarctic expedition led by Admiral Richard E. Bird. *Source: Wisconsin Historical Society, Image ID 23703.*



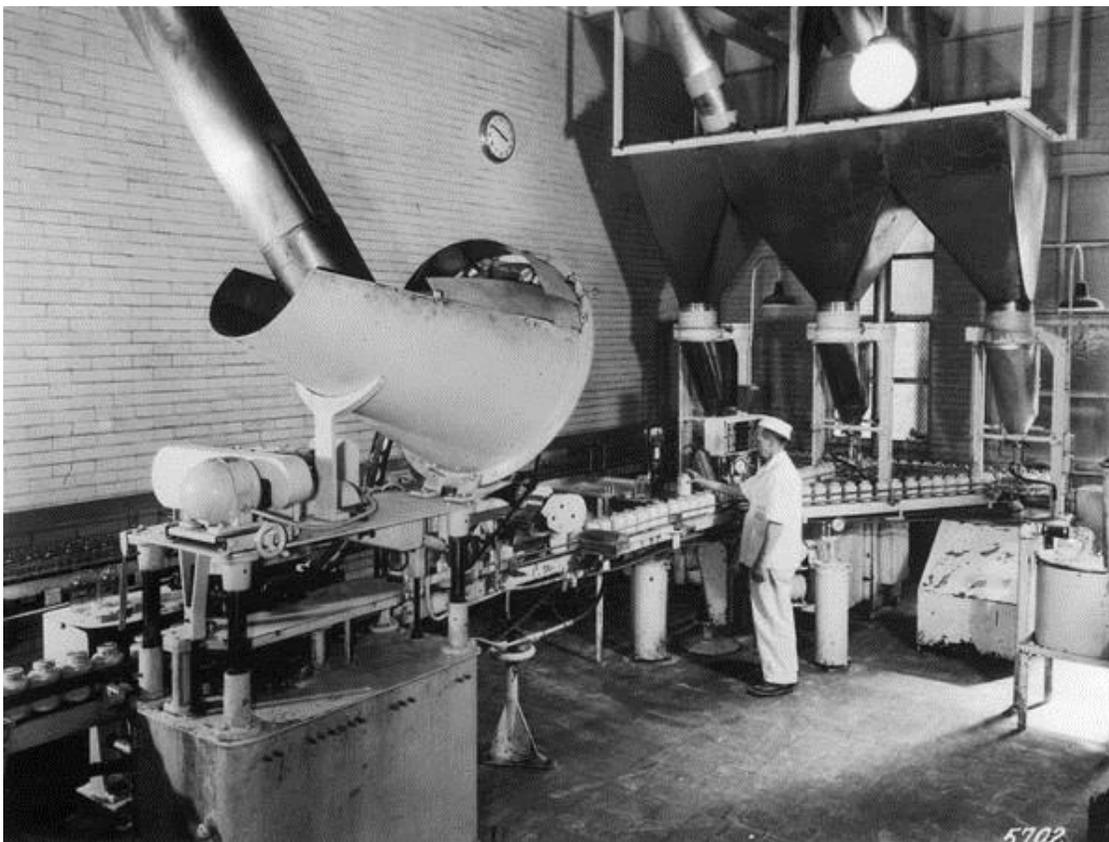
United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 23

Figure 21. Circa 1940 photograph of a bottling line at the Horlick Malted Milk Company Plant.
Source: Wisconsin Historical Society, Image ID 23702.



United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section Figures Page 24

Figure 22. Undated photograph of an explorer standing in front of the Horlick Mountain Range in Antarctica, named in honor of the Horlick Malted Milk Company by Admiral Richard E. Byrd. *Source: Wisconsin Historical Society, Image ID 23700.*



**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section List of Owners Page 25

Horlick Malted Milk Company Industrial Complex Property Owners – Continuation Sheet

Owner Information Obtained from Racine County Tax Assessor Records on July 25, 2019

1. Factory #1, 2200 Northwestern Avenue

Joshua Jeffers
2200 Northwestern Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

2. Warehouse #1, 1450 Summit Avenue

Joshua Jeffers
1450 Summit Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

3. Malt Mill, 2220 Northwestern Avenue

2220 NW LLC
2220 Northwestern Avenue
Racine, WI 53404

4. Machine Shop, 2102 Northwestern Avenue

Joshua Jeffers
2102 Northwestern Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section List of Owners Page 26

5. Pattern Storehouse, 2234 Northwestern Avenue

CDB Holdings LLC
2401 Penbrook Drive
Racine, WI 53406

6. Factory #2, 2100 Northwestern Avenue

Joshua Jeffers
2100 Northwestern Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

7. Entry Gates, 2100 Northwestern Avenue

Joshua Jeffers
2100 Northwestern Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

8. Factory #3, 1450 Summit Avenue

Joshua Jeffers
1450 Summit Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

9. Depot, 1450 Summit Avenue

Joshua Jeffers
1450 Summit Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Horlick Malted Milk Company Industrial
Complex
Racine, Racine County, Wisconsin

Section List of Owners Page 27

10. Garage, 1500 Summit Avenue

Joshua Jeffers
1500 Summit Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

11. Grain Elevator, 2230 Northwestern Avenue

DeLong Co. Inc
214 Allen St.
Clinton, WI 53525

12. Warehouse #2, 2234 Northwestern Avenue

CDB Holdings LLC
2401 Penbrook Drive
Racine, WI 53406

13. Boiler House, 1450 Summit Avenue

Joshua Jeffers
1450 Summit Avenue LLC
225 E. Michigan Avenue, Unit 200
Milwaukee, WI 53202
414-501-5610

14. Storage Building, 2009 Kewaunee Street

John J. and Shirley M. Longo Rev Trust
3112 Four Mile Road
Racine, WI 53404