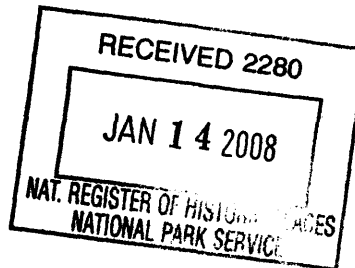


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**United States Department of Interior
National Park Service**



**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 Evansville Standpipe
other names/site number N/A

2. Location

street & number	288 North Fourth Street	N/A	not for publication
city or town	Evansville	N/A	vicinity
state	Wisconsin	code	WI
county	Rock	code	105
zip code	53536	zip code	53536

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this 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 meets / does not meet the National Register criteria. I recommend that this property be considered significant nationally / statewide locally. (See continuation sheet for additional comments.)

Jama Drake
Signature of certifying official/Title

1/9/08
Date

Deputy State Historic Preservation Officer-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

Evansville Standpipe

Rock

Wisconsin

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:)

Edson H. Beall

2-27-08

jen

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property
(check as many boxes as
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
	1 buildings
	sites
1	structures
	objects
1	1 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
is previously listed in the National Register**

0

6. Function or Use

Historic Functions

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION/waterworks

Current Functions

(Enter categories from instructions)

INDUSTRY/PROCESSING/EXTRACTION/waterworks

7. Description

Architectural Classification

(Enter categories from instructions)

Other: Standpipe

Materials

(Enter categories from instructions)

Foundation Concrete

walls Steel

roof Steel

other N/A

Narrative Description

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

Evansville Standpipe
Name of Property

Rock
County and State

Wisconsin

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.

Areas of Significance

(Enter categories from instructions)

Architecture

Community Planning and Development

Period of Significance

1901-1957

Significant Dates

1901

Significant Person

(Complete if Criterion B is marked)

N/A

Cultural Affiliation

N/A

Architect/Builder

Chicago Bridge & Iron Co.

Narrative Statement of Significance

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

Evansville Standpipe

Rock

Wisconsin

Name of Property

County and State

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:
Eager Free Public Library, Evansville

10. Geographical Data

Acreage of Property Less than one acre

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

1 16 310790 4739285
 Zone Easting Northing

3 _____
 Zone Easting Northing

2 _____
 Zone Easting Northing

4 _____
 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	Timothy F. Hegglund/Consultant for the City of Evansville Historic Preservation Commission	date	April 6, 2007
organization		telephone	608-795-2650
street & number	6391 Hillsandwood Road	zip code	53560
city or town	Mazomanie	state	WI

Evansville Standpipe

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Wisconsin

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.)

name/title	Ms. Sandy Decker/Mayor	date	April 6, 2007
organization	City of Evansville	telephone	608-882-2263
street & number	31 South Madison Street	zip code	53536
city or town	Evansville	state	WI

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.

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Continuation Sheet

Section 7 Page 1

Evansville Standpipe
Evansville, Rock Co., Wisconsin

Description

The city of Evansville's still highly intact historic standpipe was built in 1901 by the Chicago firm of John H. Brown & Assoc. as an integral part of Evansville's new city-wide water and electrical supply system. Prior to 1901, both homeowners and businesses in the city got water from their own individual wells and local firefighters were forced to rely on these and on strategically placed cisterns as sources for water with which to fight any fires that occurred. Not surprisingly, this system was not up to the task. Finally, after a major fire in 1896 destroyed thirteen downtown business buildings at a cost to their owners of \$25,000, public agitation resulted in the City's granting a franchise to three Chicago businessmen to build and run a system that would provide the city with both electricity and a dependable, city-wide water supply. In return for being awarded the franchise, John H. Brown & Assoc. agreed to drill a deep well as a water source, build a pump house to house two steam driven pumps that would bring the water up to the surface and also drive a generator that would provide the city with light, lay some four miles of cast iron pipe to convey the water to city homes and businesses, and erect an 80-foot-tall steel standpipe to provide pressure for the system and act as a reservoir for reserve water storage. This standpipe was fabricated by the Chicago Bridge & Iron Co. in 1900 and was erected in the last months of 1901. The entire system was also completed during this period and was in operation by January of 1902. This successful system was the ancestor of the city's current water supply system, and although the 1901 standpipe is no longer in use it is now the only component of the original system that is still in an intact state today.

The principal purpose of a standpipe is to hold water in an elevated position to create pressure in a water supply system. Because of this, standpipes are typically built on elevated sites in communities where such sites are available and the site of the Evansville Standpipe is a classic example. The Evansville Standpipe is situated on a municipally owned lot that crowns a high hill near the northwest edge of the city; it is located approximately one-half mile northwest of the city's historic business district. This triangular-shaped open lot consists of the southeast corner that was formed by the intersection of northwest-southeast-running N. Fourth Street and the north-south running N. Fifth Street and it slopes downhill to the south and is contiguous with a much larger surrounding open parcel of land that is also bounded by these two streets and which extends still further downhill to the south. Mown lawn surrounds the standpipe and its associated modern pump house, and both the site and the standpipe are very well maintained and in excellent condition today.

The Evansville Standpipe is circular in plan and cylindrical in form and it measures 12-feet in diameter by 80-feet-tall. This structure rests on a poured concrete foundation that consists of a thick flat disc of concrete that is two-feet wider than the standpipe itself and this foundation is itself encircled by a

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Section 7 Page 2

Evansville Standpipe
Evansville, Rock Co., Wisconsin

wider, shallow, dish-shaped, poured concrete drain. The standpipe itself is fashioned out of ten courses of eight-foot-tall curved steel sheets that are riveted together. The bottom edge of the first course of these sheets is set directly into the concrete foundation and this course is further secured to this foundation by large steel anchor bolts that are placed at regular intervals around the standpipe base. These bolts penetrate into the foundation itself and they are then connected directly to the sides of the standpipe using bent steel plates that are attached to the sides with rivets. The horizontal joints that occur when one course of steel sheets is secured to the course above it consist of an overlapping lap-joint that is fashioned using a single row of rivets, while the vertical joints that occur when one sheet of a course of steel sheets is attached to the next sheet consist of an overlapping lap-joint that is fashioned using a double row of rivets. These single-riveted and double-riveted joints are found on all ten courses of the sheets that form the standpipe, the top one of which is crowned by a slightly overhanging steel roof that is encircled with a metal fence resembling a picket fence that provides protection for those inspecting and maintaining the roof.¹ Access to this roof is gained via a straight, almost full-height steel ladder that is attached to the west-facing side of the standpipe.² Inspection access to the interior of the base of the standpipe is provided at ground level by a small oval-shaped steel door that is set into the north side of the first course of steel sheets and which bears raised letters that read "Chicago Bridge & Iron Co., Builders, 1900." An overflow discharge pipe is attached to the southwest side of the standpipe by several steel brackets that hold it a few inches away from the side of the standpipe itself. This pipe originates near the top of the standpipe and it descends downward in a straight line until approximately six feet from the ground, whereupon it bends at a 45° angle and continues downward and away from the standpipe until reaching the ground, whereupon it discharges the water into a concrete drain.

Besides these original features, the top of the standpipe also now sports several small communication antennas that were added in 2006 to improve city communication facilities. Otherwise, the standpipe is still in almost entirely original condition today and it has been well maintained and has just recently been repainted.

¹ An historic postcard depicting the standpipe that is reproduced on p. 153 of Ruth Anne Montgomery's excellent history of Evansville entitled *Glimpses of the Grove* shows that this protective fencing is original to the standpipe.

² For safety's sake, this ladder is now surrounded by a steel cage-like enclosure. The historic photo referenced above shows that this cage was a later improvement.

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Evansville Standpipe
Evansville, Rock Co., Wisconsin

In addition to the standpipe itself there is also a small gable-roofed metal shed located immediately to the west of it that houses telephone and cable-related equipment. This shed is of recent date, it has no historic connection to the standpipe or to the city's water utility, and it is located where it is principally because the site on which it was constructed is public property. Consequently, this building is considered to be a non-contributing resource for the purposes of this nomination.

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Evansville Standpipe
Evansville, Rock Co., Wisconsin

Significance:

The Evansville Standpipe was built in 1901 and it is a highly intact and now very rare example of a type of historic water storage structure that was once frequently encountered in communities in Wisconsin and in many other states as well. The Evansville Standpipe is located three blocks northwest of the Evansville Historic District, which was listed in the National Register of Historic Places (NRHP) in 1978, and it was identified as a potentially eligible structure having local significance under National Register (NR) Criteria A (History) and C (Architecture) by the City of Evansville Intensive Survey, which was undertaken in 2005-2006.³ Research was undertaken to assess this potential utilizing the NR significance areas of Community Planning and Development and of Engineering, the former area being complemented by the Patterns of Community Development subsection of the Planning and Landscape Architecture Theme study unit that was identified in the State of Wisconsin's Cultural Resource Management Plan (CRMP), and the latter by the Utilities subsection of the CRMP's Commerce Theme study unit.⁴ The results of this research are detailed below and support the listing of this structure in the National Register of Historic Places (NRHP) using both Criteria A and C.

The Evansville Standpipe is locally significant under NR Criterion A because it is now the most intact remaining resource that is associated with the establishment of Evansville's historically significant municipal water system. Evansville's citizens first began to agitate for the establishment of such a system as early as 1885, but nothing was done until a series of disastrous fires in the years that followed finally persuaded the City Council to award a franchise to construct and operate a combined water and electrical supply system in 1901. The successful completion of this enterprise resulted in the City's purchase of the system in the following year and its subsequent successful and profitable operation did much to further the subsequent growth of the city. The Evansville Standpipe is also believed to be locally significant under NR Criterion C because it is a highly intact example of a type of water storage structure design that could be found in communities located throughout Wisconsin when it was built. Today, however, almost all of these structures have been superseded by structures serving a similar purpose but having larger capacities and more modern engineering and design. Consequently, simple turn-of-the-century standpipes such as this are now very rare, the Evansville example being Wisconsin's only known surviving example of this type.

³ Heggland, Timothy F. *City of Evansville Intensive Survey*. Evansville: 2006. Copy on file at the Division of Historic Preservation, Wisconsin Historical Society, Madison, WI.

⁴ Wyatt, Barbara (Ed.). *Cultural Resource Management in Wisconsin*. Historic Preservation Division, State Historical Society of Wisconsin, Madison, Wisconsin, 1986. Both the Utilities Study Unit and the Patterns of Community Development Study Unit are still being written at this time.

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Continuation Sheet

Section 8 Page 2

Evansville Standpipe
Evansville, Rock Co., Wisconsin

Historic Context:

A detailed history of the city of Evansville and its built resources is embodied in the *City of Evansville Intensive Survey Report*, printed in 2006. Consequently, the historic context that follows deals primarily with the history of the Evansville Standpipe itself and with the municipal water supply system of which it is a part. It should also be noted that an excellent general history of this system and its development up until 1920 is included in local historian Ruth Ann Montgomery's outstanding 1989 book, *Evansville: Glimpses of the Grove*, and much of what follows is taken directly from this history. Even more detailed is the series of local newspaper articles that Montgomery has written on the same subject, which cover the entire history of Evansville's water and light system from its beginnings up until the present day.⁵

Community Planning & Development:

The Evansville Standpipe is believed to be eligible for listing in the NRHP under NR Criterion A (History) for its local significance because of its importance to the history of the community's development. The Standpipe is now the most intact remaining resource that is historically associated with the establishment of Evansville's municipal water system. Evansville's citizens first began to agitate for the establishment of such a system as early as 1885, but nothing meaningful was done until a series of disastrous fires in the years that followed finally persuaded the City Council to finance the construction of a combined water and electrical supply system in 1901. The successful completion of this project resulted in the City's purchase of the system in the following year and its subsequent successful and profitable operation did much to further the subsequent growth of the city.

What is now called Evansville was first settled as early as 1839, and by 1845 the settlement, which was originally called "the Grove" because of a large stand of timber that was then located just to the northwest of it, consisted of four or five log houses and a single frame house. In 1847 and 1848, a saw mill and grist mill were built by Erastus Quivey on Allen's Creek, a small river that runs diagonally through the community and which for many years thereafter was Evansville's source of water power.

In 1855, the community was finally surveyed, platted into lots, and renamed "Evansville," although by that time a number of buildings were already in existence in the community.

⁵ Montgomery, Ruth Ann. "Evansville's Water & Light — A Century of Service." *Evansville: The Evansville Review*: Nov. 28, 2001, pp. 3-4; Dec. 5, 2001, pp. 21-22; December 12, 2001, p.21; Dec. 19, 2001, p. 3; January 2, 2002, pp. 3-4; January 9, 2002, p. 8; January 23, 2002, pp. 3-4; January 16, 2002, pp. 3-4; January 30, 2002, p. 22.

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Evansville Standpipe
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The original plat consisted of a rectangular [shaped] elongated grid, and included Main, Church and Liberty streets crossed by Fourth Street on the west and extending to Railroad Street (now Maple Street) on the east side. Main Street continued eastward almost to Cemetery Road. There were no deviations provided for natural features such as winding Allen's Creek. Although there was no village green or town square, the ample square plot for the Methodist Seminary (built in 1855) provided a focal point at the [west] end of Church Street. Its site on a knoll, now obstructed by tree canopy and subsequent town development, also contributed to its importance on the plan. This aspect of the original plat is cultural as well as visual, as the early settlers were traditionally religious-centered New Englanders. However, the center of the town's activity, then as now, was at the corner of Main and Madison [streets].

The 1855 plat shows that Evansville's citizens were interested in town-building and future development; the right-of-way of a proposed railroad is clearly shown. But its delineated lots and streets do not reveal the town's true mid-nineteenth century spatial character. An 1858 map showing existing structures, in conjunction with research on land ownership at the time, does illustrate that Evansville's population of about 800-900 ca. 1860 was limited mainly to just Main and Church streets.⁶ Land was [typically] owned in several adjacent plots, and the distance between houses was relatively great. While development occurred by regular lot size accretions on the south side of Main Street, the north side of West Main was characterized by long linear strips of land stretching [north] to what is now Lake Leota. Thus village lots were contiguous to farm fields. This pattern of land utilization along the north side of West Main Street remained until the 1890's, when lots were gradually subdivided and sold as additions to the town plat.⁷

The railroad finally arrived in Evansville in 1864, augmenting Evansville's role as an area agricultural center. The coming of the Beloit and Galena Railroad (which almost immediately became a part of the Chicago & Northwestern Railroad system) also physically altered Evansville's built environment. This was especially noticeable in the area south of E. Main Street between the railroad tracks and Allen Creek, where almost all of Evansville's new industrial construction would be concentrated for the rest of the century.

⁶ Zellie, Carol and Gail Hunton. *Evansville Architectural Survey & Presentation Plan*. Evansville: 1976, p. 8. Map of Rock County, Wisconsin. Chicago: A. B. Miller & Orrin Guernsey, 1858. This map is also reproduced on p. 19 of *Evansville: Glimpses of the Grove*. The houses and other buildings shown on it, however, probably represent only the more prominent buildings in the village. Never-the-less, Zellie & Hunton's analysis is essentially accurate.

⁷ Ibid.

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Evansville Standpipe
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With growth came an increase in the danger posed by fires, a danger that for many years the village board was very reluctant to address. Special concern over the vulnerability of the long, dense rows of wooden commercial buildings that had been built on Main Street led their owners to request that the village install two cisterns at the intersection of Main and Madison streets in the heart of the downtown for use in fighting fires. These cisterns were built in 1872 and became both Evansville's first municipal water supply system and also its first fire-fighting apparatus. In July of 1874, a fire in the business district that destroyed one building and endangered several more prompted a public call for the establishment of a hook and ladder company and the purchase of fire-fighting equipment, including a \$1500 fire engine. The ever cautious village board, however, decided to put the matter of taxing the citizens for the purchase to a public vote and the proposal lost, the majority of voters having apparently decided that property owners should provide for their own fire protection.

Another disastrous fire occurred in December 1877 at the Spencer house stable owned by Martin Case. The cause of the fire was believed to be arson. The fire destroyed the stable of Mr. Case as well as the carriages and horses kept in the stable by Ed Fellows. Then the flames spread to the carriage shop of Stephen Baker and William Garfield and though some of their carriages were saved, the building was a total loss. The loss of two more buildings so close to business district prompted the village board into action and within two months the village board agreed to raise \$250 for a fire engine. The citizens donated \$100 to complete the cost of the equipment. A fire company formed and James Powles was appointed by the village board to be foreman of the company.⁸

The new machine proved to be a disappointment, however, being too small to do a satisfactory job, and its first trial by fire in April of 1878 was a comedy of errors that could have turned into a disaster had not the endangered building been saved by the use of an old fashioned bucket brigade.

By the early 1880s, Evansville had evolved into a prosperous village with a modest but growing manufacturing base that included: the Smith and Barnard tobacco warehouses [non-extant]; the Baker Manufacturing Co. (producers of windmills, pumps, and other machines); the Evansville Manufacturing Co., (producers of tacks and matches); and the Lehman Bros. furniture factory. There was good reason to be optimistic about the community's future. Even so, most of the village's residential, commercial, and industrial buildings were still being constructed of wood at this time and a more forward-looking village board could have looked at this situation and decided that investing in more and better fire-fighting equipment for its volunteer fire brigade was advisable. Such was not the

⁸ Montgomery, Ruth Ann. *Glimpses of the Grove*. Evansville, 1989, p. 61.

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Continuation Sheet

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Evansville Standpipe
Evansville, Rock Co., Wisconsin

case, however, and the fire-fighting capabilities of Evansville, which at that time were typical of most other contemporary communities of its size, remained unchanged.

In the 1880s fire, floods and blizzards were destructive forces and the police and firemen were poorly equipped to handle a crises. Church bells and factory steam whistles served as alarms to bring volunteers to help in emergencies. However, once the volunteers reached the scene, inadequate water supplies and obsolete fire fighting equipment offered little protection for burning buildings.⁹

It was not as though the village board had had no forewarning of the dangers Evansville faced, either, since disaster had nearly struck just four years before.

In the spring of 1880, a pile of sawdust near a machine at the Baker Manufacturing plant caught fire. It was a Sunday morning and many people were at church. At the sound of the alarm, people rushed out of the service to help fight the fire. Fortunately the blaze was put out before it could do much damage. *"The loss could have been greater as the facilities which Evansville has for suppressing such a blaze are not as would have prevented the destruction of the entire factory."* the Janesville Gazette recorded. The reporter's assessment of the village's resources to fight fires was an accurate one and the small blaze should have been a warning to the village to make preparation for major fires. However, the village trustees continued to ignore the requests from the volunteer firemen for proper equipment.¹⁰

Another warning came on January 26, 1882, when the railroad depot in Evansville caught fire. Despite the efforts of the firemen, the depot was a total loss, but worse was to come.

Though they were concerned about the new depot, the village trustees ignored requests for more equipment and a new fire engine. They relied on the engine purchased in the 1870s, though it had proven less than adequate. This disappointed some of the villagers, especially those on the fire department. Without proper equipment, the firemen were helpless in the face of real disaster. The wooden buildings of the factories, the coal-fired steam engines, blacksmith's forges and the foundry created potential fire danger to the entire village.

Finally, in 1884, the firemen's worst fears were realized. On April 16, 1884, the village lost its two largest factories in a raging fire that started in the foundry of the Baker Manufacturing Co. and quickly

⁹ Montgomery, Ruth Ann. Op. Cit., p. 79.

¹⁰ Ibid.

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Evansville Standpipe
Evansville, Rock Co., Wisconsin

spread to other company buildings and to the adjoining buildings of the Lehman Bros. furniture factory. Once again, efforts to fight the fires were thwarted by the limitations of the equipment and resources that were available.

The firemen decided to try and save the furniture factory that had caught fire from the flying debris from the Baker building. The largest and most dependable water source was Allen's Creek so the horse-drawn engine was driven to the Church Street bridge. From the creek, the firemen ran out 350 feet of hose to reach the furniture shops and aimed their hoses at the factory. Just as the steam engine had reached full power and the water was being pumped onto the building, a section of the fire hose burst and the men could not mend the break. They discovered that the remaining hose was too short to reach the furniture factory buildings.¹¹

Other firefighters came by train from Madison, bringing with them one of their own fire engines, but they were too late to be of any real assistance. By the time the fires were finally extinguished, both the Baker and Lehman factories were in ruins for a combined loss valued at \$20,000, and while the Baker factory would be rebuilt (out of brick this time), the Lehman factory closed for good.

The total destruction of two important factories employing nearly fifty men, finally convinced the village trustees that the fire fighting equipment was in need of upgrading. Just two weeks after the fire, the trustees held a special meeting and heard a request for a \$1,500 fire engine. Unwilling to make a decision before hearing from the village taxpayers, the Board called a special election in May. The vote was 173 for the purchase of the new engine and twenty-five against the proposal. Following the election, Village Board President, Almeron Eager authorized the purchase of the new steam engine.

However, the Board flatly refused to put in a water system that would have included a tower, deep wells, water mains and fire hydrants and would not issue municipal bonds to fund the water works for a fire protection system. After all, the village had just purchased an expensive fire engine and built new cisterns near the schools and residential areas.

The Board members believed the water supply from the creek and the cisterns was sufficient. However, the Village Board was concerned enough about the rows of wooden buildings in the business district to establish a fire district in the area bordered by the Chicago & Northwestern tracks, Church Street, First Street and Mill Street. Any new construction within these

¹¹ Montgomery, Ruth Ann. Op. Cit., p. 82.

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Evansville Standpipe
Evansville, Rock Co., Wisconsin

boundaries had to be of brick or stone. There was good reason to be concerned about the business district.¹²

For the next several years the village managed to make do with the new fire engine it had bought and with its system of public cisterns. In fact, the village's investment in its fire-fighting capacity was considered to be important enough to include space for the engine and its attendant apparatus in the plans for a new \$7,000 village hall that the village board presented to the voters for approval in 1892. Also on the same ballot was another more expensive proposal that was sponsored by a petition from seventeen of Evansville's most prominent citizens.

The men wanted the community to build a water works system at a cost of \$25,000. One of the principal reasons for promoting a water works system was for fire protection but many wanted the new project because of their concerns about the contamination of the village's water supplies. As the village became more populated, houses were built closer together and the space between residences decreased. In most cases, each house had its own privy and well. Doctors and other informed citizens were becoming aware of the health dangers of contamination of well water from human and animal wastes. As the distance between houses became smaller, there was more danger that the outhouse and the family well would be located within a few yards of each other. If wells were shallow and cesspools deep, the chance of contamination was even greater. Garbage and animal wastes were dumped in alleys, behind barns, and in hollow ground near bridges along Allen's Creek. Poor drainage, together with decaying manure in the streets and in the barn yards near the houses also posed a problem of contamination seeping into the water supplies. Those who supported the water works agreed that it should provide a deep artesian well, water piped into businesses and houses, and a fire protection system for the village to replace the deteriorating cisterns built in the 1870s and 1880s.

However, as with any public improvement that threatened to raise taxes, some citizens felt there were cheaper ways to solve the problem. Others did not think there was an immediate danger to their health or welfare.¹³

The upshot was that the bonds for the new village hall passed by a substantial margin while the proposal for a water works system was defeated by an equally large one.

¹² Montgomery, Ruth Ann. Op. Cit., pp. 82-83.

¹³ Montgomery, Ruth Ann. Op. Cit., p.101.

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It would take another major fire to finally convince Evansville's citizens to act in their own best interest. By 1895, Evansville had a population of 1716 and it had been reincorporated as a city.

In the fall of 1896, the City Council was still struggling to rewrite ordinances and had ironically, just completed the writing of the requirements for buildings and fire safety in the city when a disaster that was called "The Great Fire" destroyed thirteen buildings. The fire wiped out nearly every building on the south side of the first block of the business district on West main Street.¹⁴

Fortunately, no lives were lost, but the loss of just the burned out buildings alone amounted to \$15,900 and the contents of the stores that were lost added a still larger sum to this total. The most immediate effect of the fire was that the City Council passed and then rigorously enforced a new building ordinance for the business district that mandated that all new buildings in the district had to be of fireproof (i.e. masonry) construction. True to form, however, the real solution to the problem had to wait a few more years. By 1900, Evansville had a population of 1864 and a telephone system and the new century was about to bring forth even more important changes.

In 1901, leaders were working towards getting a water works system and sewers for the city. Nearly ten years earlier, in April 1892, voters rejected a proposal to build a water works system for \$25,000. Now they were about to look at a proposal from a private company that would cost over \$50,000. Although residents and businesses could pipe into the water supply, its primary purpose was for fire protection. Ray Gillman, the fire chief, urged support of the system in an open letter to the citizens of Evansville. He explained the lack of water resources for fighting fires. Lake Leota [the former mill pond] was little more than a puddle since the dam had not been kept up and if the firemen pumped water from Allen's Creek it would last no more than 20 minutes, according to Gillman's calculations. The cisterns that were located at various strategic spots around the city would be dry in 30 minutes. As fire chief, Gillman felt that the department had good fire fighting equipment. Now they needed an adequate water supply.

No one in Evansville came forward to build or finance the water works system so when a group of outside businessmen, W. H. Wheeler, J. P. Miller and John H. Brown, offered a franchise to build and maintain the system, the city council agreed to put it before the voters. The city had

¹⁴ Ibid, pp. 121-122.

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the option to buy the water works and electric plant at anytime within the thirty year contract period.

The water works system included a steel standpipe with the dimensions, 100 feet high and twelve feet in diameter, water mains, fire hydrants, pumping station, two wells (one for emergency use), and two engines with the pumping capacity of 50,000 gallons of water every twenty-four hours. For power, two boilers of 120 horsepower each would provide electricity for the water pumps and for the city.

The franchise and list of fees was published in each of the four local papers. Brown's company would charge the city an annual rental of \$44.25 for each hydrant. If home owners decided to install water to their residence, the cost was five dollars a year for each faucet; three dollars a year for one bath tub, and two dollars a year for each additional tub. The rates for commercial users varied according to the type of business. ...

When the citizens voted on the new water works system in July 1901, they approved the Brown franchise by a two to one vote. There were 265 votes for the water works and 126 votes against. The City Council signed the franchise with John Brown at their August meeting and work began on the project in September. The company agreed to hire as many local men as possible for the construction, with the understanding that they could not form a union or strike for higher wages. By November there were more than sixty men working on the project.¹⁵

Work on this project progressed with great speed considering the equipment available in that day. The contract called for the laying of 18,131 feet of 4-inch cast iron pipe as a distribution system and fifty hydrants having double 2½-inch hose connections were positioned along the way for fire protection. The pump house and its associated wells were located at 147 Exchange St. in a two-story-tall, cream brick-clad Astylistic Utilitarian form building. This location placed the pump house building just to the east of the city's industrial area and parallel to the railroad tracks that ran in a northwest-southeast direction between the industrial area and Exchange St.¹⁶ The system's associated standpipe was located on what is now N. Fourth Street on a high hilltop location that is one-half-mile from the city's main business district. Work on the standpipe began in late November.

¹⁵ Montgomery, Ruth Ann. Op. Cit., pp.152-153.

¹⁶ This building is still extant today but its windows have now been altered, its original boilers and pumping equipment have now been removed, and the tall brick chimney that was originally associated with it has been demolished. The building is still municipally owned and is now used for storage and as a garage.

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The material for the waterworks standpipe is arriving and the work on it will be pushed rapidly; the laying of the pipes is almost completed, and no doubt we will have the system in operation by the first of the year.¹⁷

By December 7, 1901, James Powles, an Evansville diarist, noted that the standpipe had been completed to a height of 30 feet, and by January 1, 1902, both the water works and the electrical plant system had been completed. The city's street lights were first lit on January 1 and after a three-week testing period, the waterworks underwent its first public test on January 22.

The testing of the new facility attracted a large audience. Firemen hooked up hoses to the hydrants and found them all to be in working order. From the hydrant at the South Madison and Church Street corner [this being the corner where the city hall and firehouse is located], the pressure of the water through the fire hoses sent out a stream that went as high as the Methodist Church steeple. Everyone seemed satisfied with the new system. For the next several months, private homes and businesses installed pipes to hook up to the water works. In March 1902, the voters agreed to buy the water works and electric plant for \$51,000.

While the many houses and businesses were enjoying the new water service, it was more than a year before the system was used for its primary function, to fight fires. In April 1903, a gasoline stove exploded and a fire started in a restaurant just east of the Magee Opera House. The firemen used six streams of water from the nearby hydrants and extinguished the blaze in about five minutes. There was less than \$1,000 damage, but the fire chief estimated that if it had not been for the water works system, at least four businesses, all dry wood buildings, would have been lost.¹⁸

Remarkably, public ownership of Evansville's water and light system proved to be a good thing for the city. Most municipally owned systems of this kind suffered from flawed economics and poor management, and municipally owned electrical supply systems were especially prone to problems that led to their being absorbed into much larger privately-owned utility companies. Such was not the case with Evansville's system, however, which was especially fortunate to have, in Edwin Cary, an exceptionally able and fore-sighted superintendent. Under Cary's model administration, the water distribution system was gradually expanded as citizens petitioned the city council for service, and the

¹⁷ *Evansville Enterprise*, November 22, 1901, p. 3. Note: the actual built height of the standpipe is 80-feet, not the 100-feet that was called for in the franchise acceptance ordinance.

¹⁸ Montgomery, Ruth Ann. *Op. Cit.*, p.153. The Methodist Church is located next to the city hall and both are still extant.

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city's electrical service was expanded in much the same way. Steady improvements were also made to both the water and electrical supply systems themselves, one of which was the creation of the city's first municipal sewer system in 1911. Interestingly, most of this improvement occurred within the already existing boundaries of the city. Evansville's population finally stabilized at about 2300 in the 1920s and it remained essentially unchanged until after the end of World War II. In addition, the new buildings that were built in Evansville in the first three decades of the twentieth century were almost all either replacements for older buildings or examples of infill. As a result, the boundaries of the city remained essentially unchanged during this period and Evansville's Water and Electric Commission could concentrate on improving the existing system rather than finding themselves constantly dealing with an expanding service area. A good example of this staged improvement occurred in 1929, when a new deep well was dug to replace the two shallow original wells. To pump the water from this new well a new pump house was built across Exchange St. from the original pump house and a 400,000 gallon concrete reservoir was built along side it. All went well until it transpired that the water from the new well was hard, not soft as promised, and it also contained high concentrations of iron and hydrogen sulphide. To solve these problems the city built Wisconsin's first municipal water softening plant next door to the well in 1933, which solved the problem.¹⁹

At the end of World War II, Evansville began to grow once again and new subdivisions have been added to the city. Evansville's population has grown from 2269 in 1936 to 3000 in 1976, and to 4039 today, the last fifty years having been one of the largest single periods of growth in its history. This growth has primarily happened in new subdivisions that have expanded the boundaries of the city further to the west and south on the west side of town, and further to the north and east on the east side of town. In addition, several large new factories have been constructed south of E. Main St. and new schools and churches have also been constructed in the new areas of the city. Throughout this period, the city's water supply system has steadily improved and it has kept pace with the growth that has occurred. This has come at the expense of almost all the original components of the system, however. Today, the Exchange Street pump house/power plant building and the N. Fourth Street standpipe are the only components of the original 1901 system that are still extant, and of these, only the standpipe still retains integrity. Consequently, it is believed that the Evansville Standpipe is eligible for listing in the NRHP under NR Criterion A (history) because it is now the most intact remaining resource that is associated with the establishment of Evansville's historically significant municipal water system, the establishment of which was an essential component in the future growth of the city.

¹⁹ Montgomery, Ruth Ann. *Evansville Review*, January 16, 2002, pp. 3-4.

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Architecture:

The Evansville Standpipe is also believed to be eligible for listing in the NRHP under NR Criterion C in the area of engineering as a locally significant, highly intact, and early example of an all-steel water storage structure, examples of which could once have been found in communities located throughout Wisconsin at the beginning of the twentieth century. Today, however, almost all of these historic structures have been superseded by structures serving a similar purpose but having larger capacities and more modern engineering and design. Consequently, simple turn-of-the-century standpipes such as the one in Evansville are now very rare, this one being Wisconsin's only surviving identified example of this type, and it is believed to be of engineering significance as both a representative example of its type and as a rare surviving example that helps illustrate the design evolution of these important components of civic water supply systems.

In the last half of the nineteenth century, communities of every size in the United States found themselves dealing with an ever increasing demand for reliable and safe supplies of water for human consumption, for use in the processing of resources and the manufacturing of goods, and to aid in the disposal of sewage and in the fighting of fires. Not surprisingly, the difficulties of providing for these multiple needs were especially great in the nation's largest cities but these same needs had to be met by smaller communities as well. Regardless of the size of a given community, water supply systems involve tapping surface or subsurface sources of water, which is then typically transmitted to the consumer through a distribution system of underground pipes. In order for this to happen, water is either pumped up to the surface from a well or it is pumped from a surface source such as a river or lake into the distribution system. At its simplest, a water supply system can serve just a single building and can consist of a shallow well that is dug by hand down to a point where water is available. The water can then be brought to the surface by hand and can be used by the consumer as needed or stored in a cistern at the point of use. Just such a system existed in Evansville and in most other small Wisconsin communities until the very beginning of the twentieth century, but such systems had inherent problems. The first problem was that as a community grew, more and more of these individual wells had to be dug, which tended to gradually diminish the amount of water that was available at those depths to which it was feasible to hand-dig a well. A more serious problem was that the proximity of these wells to the individual outdoor privies that were also in use in those days made these wells highly susceptible to contamination. In addition, such a system was of little use when called upon to aid fire-fighting efforts.

The answer to these problems was the development of municipal water systems. The country's largest cities were already addressing their water supply needs using systems that were often composed of

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multiple large-scale surface reservoirs from which water was then conveyed via aqueducts or equally large-scale tunnels to their consumers. Fortunately, by the 1890s, the rapid advances that had been made in all branches of civil engineering both here and abroad since the end of the Civil War had made it feasible for even small communities such as Evansville to create systems of their own. In these systems, the many shallow individual surface wells that comprised a community's original water supply system were replaced by one or more deep municipal artesian wells that were drilled down into layers of stone that contained plentiful and uncontaminated water supplies. This water was pumped to the surface and into the distribution system by large municipal pumps and was distributed throughout the community through a system of what at first were usually cast iron pipes. If the water source was high enough in elevation, water could be made to flow by gravity through such a distribution system. If not, pumps had to be used. In either case, though, some means had to be devised to pressurize the system so that the water could be made to flow reliably to its ultimate point of use.

Two principal types of structures were developed in the last half of the nineteenth century to solve the water pressure problem in smaller municipal water systems: the standpipe type, and the elevated tank type. Both types also functioned as reservoirs that provided limited reserve water storage capacity that could be used to supplement the main supply during periods of peak use or during the fighting of fires. Both of these structural types were invariably circular in plan because this shape ensured that the pressure of the water against the outside walls was uniform in all directions and this shape also eliminated any corners, which would have been especially prone to failure. Both types were meant to take the place of the large surface reservoirs that furnished water for cities whose topography favored their use. As one early twentieth century engineer noted:

When a town is situated in a level region, where no point can be found for a reservoir at a sufficient elevation to give a necessary pressure for fire purposes, etc., a stand-pipe, or a tank supported by a trestle, may be used. A stand-pipe is a vertical pipe, made of wrought-iron, steel, or reinforced concrete, resting on a masonry foundation, and built up sufficiently high to obtain the desired pressure.

If the pipe is merely to form a cushion for a pumping engine, it may have a small diameter; but if it is to provide storage, its diameter may be 50–100 ft. A stand-pipe, built at Wichita, Kansas, was 2½ ft. in diameter and 150 ft. high. The stand-pipe at Youngstown, Ohio, is 100 ft. in diameter and 50 ft. high. These pipes may be regarded as about the extremes as regard diameters.²⁰

²⁰ Wegmann, Edward. *Conveyance and Distribution of Water for Water Supply*. New York: D. Van Nostrand Co., 1918. page 357.

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Standpipes appear to have been the earlier of these two types to be developed and the earliest examples were often housed within masonry shells and were encircled by internal stairs that allowed for maintenance and also for ascending to the top of the structure, which were often outfitted with balconies or other features that allowed visitors to enjoy what were frequently beautiful panoramic views of the community. These masonry shells served two principal purposes; they protected the tall, thin, cylindrical iron or steel standpipes inside from the wind and weather, and they could also be designed so as to give a more decorative appearance to what were otherwise very plain industrial-looking structures. Two of the Midwest's oldest surviving masonry-enclosed standpipes are also two of its most ornate. The older of the two is the Chicago Water Tower, a superb 154-foot-tall stone-clad Gothic Revival style structure that was built in 1869 at 806 N. Michigan Blvd. to house a 138-foot-tall steel standpipe.²¹ A similar 175-foot-tall stone-clad Gothic Revival style example is the North Point Water Tower in Milwaukee, Wisconsin, which was built in 1874 to a design by Charles A. Gombert. This tower houses a four-foot-diameter metal standpipe that is encircled by a spiral staircase that leads up to a small room at the top of the tower.²² Another less elaborate, non-extant example was built in Madison, Wisconsin's capitol city, in 1889.²³

These masonry-clad shells were expensive, however, and were beyond the means of a community like turn-of-the century Evansville, whose population in 1900 was 1864. Fortunately, the advances in technology and in engineering theory that had been made during this period meant that both standpipes and elevated water tanks could now be built for a fraction of the cost of masonry-clad shell examples, and while these newer types may have lacked any aesthetic distinction, they worked. The Evansville Standpipe represents the simplest solution to the pressurizing of a municipal water system using a standpipe. Fabricated by the Chicago Bridge & Iron Co. out of riveted steel plates, the bottom of this cylindrical 80-foot-tall by 12-foot-diameter structure is located at ground level and rests on a poured concrete foundation. As is typical of standpipes in general, the entire interior of the Evansville Standpipe was originally used for water storage, the water being pumped up to it from the municipal pumping station.

²¹ This structure and the adjacent pumping station, built in 1866, were both designed by William W. Boyington and both are listed in the NRHP.

²² This structure is located at E. North Ave. and was listed in the NRHP 2-23-74.

²³ The Madison Water Tower, a 125-foot-tall brick-clad example, was built in the center of E. Washington Ave. a half a block from the Capitol Square and was demolished in 1921. Photos of this structure can be found in David V. Mollenhoff's *Madison: A History of the Formative Years, 2nd Edition*. Madison: University of Wisconsin Press, 2003, pp. 175, 243.

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Within just a few years after its construction, steel standpipes like Evansville's had all but ceased to be built, either in Wisconsin or elsewhere. What took their place instead were either standpipes built out of reinforced concrete or elevated tanks. Early examples of the elevated tank type consisted of cylindrical wood or steel tanks with conical metal roofs that were raised up off the ground on wood or steel legs. Small elevated tanks made of wood with open roofs had first been used to provide water for steam locomotives and the practicality of this general concept soon led to their being used to supply water pressure to tall buildings and ultimately, when made of more permanent materials such as iron and steel, to municipalities and other large users of water such as industries. The advantages of the elevated tank type over the standpipe type were described by other early twentieth century engineers as follows:

Standpipes or tanks on towers or buildings are necessary to store water at elevations required for fire pressure where topographical or other conditions prevent use of shallow reservoirs. They take less area, and may be near the high value district, thus cutting down friction losses. Steel standpipes were much used until 1910, but not in recent years due to lack of economy and to great danger of failure in high standpipes. Very tall standpipes of small diameter lack economy because the useful capacity is only that above the required elevation; water below serves only as support, but demands an expensive shell for its retention; a steel tower is cheaper and more suitable support. The higher the storage elevation the more expensive the standpipe. An extremely high standpipe may cost several times a tank on a tower. Standpipes are economical only where relatively large capacity is needed and elevation of the ground permits the whole capacity to useful.²⁴

Fortunately, the Evansville Standpipe did have the necessary high elevation over its "high value district" to permit its entire capacity to be used, and it continued to be successfully used for its original purpose until at least the 1980s. Never-the-less, steel standpipes such as this represented a technological dead end in terms of their usefulness for water supply systems. Because of their greater cost and their material deficiencies, iron and steel standpipes were soon supplanted by other types.²⁵ As a result, any examples of this type that have survived to the present in an intact state have done so only because they have either continued to perform their original function satisfactorily, or because some special feature of their location has kept them immune from demolition. Few if any are thought

²⁴ Flinn, Alfred Douglas; Robert Spurr Weston; & Clinton Lathrop Bogert. *Waterworks Handbook of Design, Construction and Operation*. New York: McGraw-Hill Book Co., 1927, p. 535.

²⁵ Ironically, the Chicago Bridge & Iron Co., which fabricated the Evansville Standpipe was already a leader in the design of elevated tanks at that time, having also fabricated the first elevated tank with a full hemispherical bottom in Iowa in 1893.

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to have survived because of any public respect for their design qualities. As Flinn, Weston & Bogert wrote in 1927 in their *Waterworks Handbook*:

There is always opposition to bare steel standpipes because of ugliness and depreciation of real estate values. Cincinnati Water Department built concrete shells around steel standpipes. Four tanks at Eastern hills were interconnected by concrete diaphragms to give the effect of giant chessmen. The Mt. Auburn tanks 40 ft. in diameter, 70 ft. high, for many years an eyesore, were likewise encased in concrete.²⁶

Given this mindset by professionals in the waterworks field eighty years ago it is hardly surprising that so few intact examples of this structural type are still extant today, the Evansville example being the only one that has been identified so far in Wisconsin. Fortunately, the Evansville Standpipe's continued usefulness and its location on a hill on the outskirts of the city that was far enough away from the residential and commercial parts of the city to have protected it from would-be city beautifiers preserved it, and today it now serves a new civic function as a host for several municipal communications antennas.

Chicago Bridge & Iron Co.

The Chicago Bridge & Iron Co. (CBI) was founded in Chicago in 1889 and represented the merger of three independent bridge builders: Horace E. Horton of Rochester, Minnesota; George E. King of Des Moines, Iowa; and George & William Wheelock's Kansas City Bridge and Iron Co. of Rosedale, Kansas. The most important of the three was Horton (1843-1912), who had been born in Norway, New York in 1843 and had moved to Rochester, Minnesota with his family in 1858. After returning to New York to study engineering and surveying, Horton returned to Rochester once again and formed a bridge-building company. His first bridge (non-extant) was built in 1867 across the Zumbro River in Oronoco, Minnesota and his independent work culminated in the construction of his Dubuque High Bridge across the Mississippi River in 1887.²⁷ Upon completion of the merger that created CBI, Horton became its president and he presided over the company until his death in 1912.

Soon after the merger, Horton acquired land for a new plant in Washington Heights, which was then located just south of the city of Chicago. In 1893, CBI's first standpipe for water storage was built in Lake City, Iowa, with George T. Horton, Horace Horton's oldest son, serving as the construction

²⁶ Flinn, Alfred Douglas; Robert Spurr Weston; & Clinton Lathrop Bogert. Op. Cit., p. 561.

²⁷ Much of the historic information about CBI contained in this nomination came from the company's excellent web site, which also contains photos of some of its more important projects: <<http://www.cbi.com/about/history.aspx>>

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foreman.²⁸ The following year, CBI built its first steel plate elevated water storage tank in Fort Dodge, Iowa, which was the first such tank anywhere to be built with a full hemispherical bottom. During this period, CBI was also slowly beginning to move away from the bridge design and construction activities that had characterized its early years. As CBI's own history states:

While initially involved in bridge design and construction, we turned our focus to bulk liquid storage in the late 19th and early 20th centuries, coinciding with the western expansions of railroads across the United States and the discovery of oil in the U. S. Southwest. CBI quickly became known for our excellent design engineering and field construction of elevated water storage tanks, aboveground tanks for storage of petroleum and refined products, refinery process vessels and other steel plate structures.²⁹

This shift in CBI's manufacturing and design emphasis appears to have been driven by a desire to increase and diversify the company's product line and the list of services it could provide at a time when competition in the bridge construction industry was intensifying. In 1900, for instance the newly created U.S. Steel Co. had formed the American Bridge Co. as a subsidiary. Within a few years, U.S. Steel bought out 25 other bridge companies and folded them into American Bridge, forming what was for all practical purposes a bridge-building trust.³⁰ Another CBI goal was to become less dependent on the seasonal nature of bridge fabrication and construction. By offering more services and products, CBI was able to make better use of its engineering staff and skilled labor force and it could also provide a range of products that kept the company active year round.

Under Horace and George Horton's guidance, CBI prospered. By 1910, CBI was employing 600 workers in its two plants in Washington Heights and in 1913 it opened its first subsidiary plant, which was located in Fort Erie, Canada. In 1919, the company built its first steel plate oil storage tanks for the Sinclair Refining Co. in Glenrock, Wyoming, which were the first of the innumerable projects that it would subsequently produce for the petroleum and petrochemical industries. In 1923, CBI engineers designed the first floating roof tanks for the oil industry, which quickly became (and still are) the industry standard for safe and economical storage of petroleum products, and in the same year CBI also designed and constructed its first Hortonsphere®, a spherical steel pressure vessel that is used for the storage of volatile liquids and gases. In 1927, the company established a subsidiary in Venezuela, which was its first subsidiary outside of North America, and this would later be followed by the

²⁸ Although taller, the steel plate Lake City standpipe was almost identical in design to the Evansville standpipe that was built eight years later (a photo can be found on the web site listed above).

²⁹ See Footnote No. 27 for CBI's web site address.

³⁰ Jackson, Donald C. *Great American Bridges and Dams*. Washington D.C.: The Preservation Press, 1988, p. 30.

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establishment of overseas subsidiaries located in Brazil, England, Argentina, Germany, the Netherlands, Australia, and elsewhere.

By the early 1930s the company was pioneering the development of all-welded steel construction and in 1934, supplied the first all-welded steel penstocks to the Tennessee Valley Authority for use in the TVA's first hydroelectric plant at the Norris Dam. In 1939, CBI was fifty years old and in that year it sent its first construction crew to Saudi Arabia and it also built its first all-welded Watersphere® elevated tank in Longmont, Colorado, the first of these now ubiquitous examples of this type of water storage structure that feature a hollow steel column crowned by a large steel sphere.

When the U.S. entered World War II, CBI temporarily become a major defense contractor, building floating dry docks and landing ship tanks (LST's) at its plants in Louisiana, California, Illinois and New York, and employing over 12,000 persons. After the war, CBI once again resumed its place as one of the country's leading engineering and construction companies and the next forty years saw it develop offices and subsidiaries throughout the U.S. and around the world. In the process, the company also became a leading producer of industrial gases, a status that was enhanced when the company purchased the Liquid Carbonic Corporation in 1984, which was then the world's largest supplier of manufactured carbon dioxide. In 1994, CBI merged with the Connecticut-based Praxair, Inc., a major manufacturer of industrial gases. Praxair then merged its operations with CBI's Liquid Carbonic subsidiary and CBI's engineering and construction subsidiaries were then spun off as a separate Netherlands-based, publicly traded corporation called Chicago Bridge & Iron Company N.V.

The new company (now known as CB&I) is organized into two operating subsidiaries, one of which is devoted to the company's North American operations and the other to its non-North American operations. Today, CB&I has sales of several billion dollars a year and is, according to the company:

One of the world's leading engineering, procurement and construction (EPC) companies, specializing in lump-sum turnkey projects for customers that produce, process, store, and distribute the world's natural resources. With more than 60 locations and approximately 12,000 employees throughout the world, we capitalize on our global expertise and local knowledge to safely and reliably deliver projects virtually anywhere. We are a fully integrated EPC service provider, offering a complete package of conceptual design, engineering, procurement, fabrication, field construction, mechanical installation and commissioning. We serve customers in a number of key industries including oil and gas; petrochemical and chemical; power; water and wastewater; and metals and mining. Our projects include hydrocarbon processing plants liquid natural gas (LNG) terminals and peak shaving plants, offshore

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structures, bulk liquid terminals, water storage and treatment facilities, and other steel structures and their associated systems.

During the course of our history, we have developed many innovative technologies and achieved a number of industry milestones, including the first floating roof tank for the oil industry (1923), the first spherical pressure vessel (1923), the first double wall LNG storage tank (1958), the first site-assembled thick wall steel nuclear reactor vessel, the first marine LNG storage and distribution terminal in the U.S. (1971), the world's largest steel water reservoir (1986) and the world's largest vacuum distillation tower (1999), to name just a few.³¹

The utilitarian nature of even the most elaborate of this important company's structures makes it unlikely that more than a handful of those that were built in the company's first decade of existence are still extant and even fewer are likely to still be intact. Consequently, CBI's Evansville Standpipe, which was fabricated in 1900 and erected in 1901 at a cost of just a few thousand dollars, is now, in all likelihood, one of this company's oldest surviving historic water storage structures.

Conclusion:

The Evansville Standpipe is therefore being nominated to the NRHP for its architectural significance because it is a highly intact example of a type of historic water storage structure that was once found in communities throughout Wisconsin and elsewhere but which today are very rare. The all-steel construction that typifies this type of standpipe was itself a notable technological improvement over earlier masonry and wood examples. Today, however, most standpipes of this design have long since been superseded by more modern structures that serve the same purpose but which have larger capacities and utilize more modern materials and designs. The Evansville Standpipe is thus believed to be eligible for inclusion in the NRHP at the local level because of its individual architectural significance as a now rare and highly endangered resource type that represents an important period in the history of water storage design. The Evansville Standpipe also is eligible for listing in the NRHP under NR Criterion A (history) because it is now the most intact remaining resource that is associated with the establishment of Evansville's municipal water system, the establishment of which was an essential component in the future growth of the city.

³¹ See Footnote No. 27 for CBI's web site address.

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United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section 10 Page 1

Evansville Standpipe
Evansville, Rock Co., Wisconsin

Boundary Description

Assessors Plat Sheet 6, Part 1, NE¼ Section 28, T4N, R10E: Part of Outlot 14 Desc. Vol.331-387;
Part of Outlot 16 Desc. Vol. 496-26; All of Outlot 17; and Part of Outlot 18 Desc. Vol.328-505.

Boundary Justification

These boundaries describe all the land that has historically been associated with the nominated resource.

United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Evansville Standpipe
Evansville, Rock Co., Wisconsin

Section photos Page 1

Items a-d are the same for photos 1 – 5.

Photo 1

- a) Evansville Standpipe
- b) Evansville, Rock County, WI
- c) Timothy F. Heggland, November 2006
- d) Negative located at Wisconsin Historical Society.
- e) General View looking N up N. Fifth St.
- f) Photo 1 of 5

Photo 2

- e) View looking N
- f) Photo 2 of 5

Photo 3

- e) Detail View Looking SSW
- f) Photo 3 of 5

Photo 4

- e) Detail View looking NW
- f) Photo 4 of 5

Photo 5

- e) Detail View looking S
- f) Photo 5 of 5