

NRHP Evaluation: *Red Wing Waterworks*

National Register of Historic Places Evaluation

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Property Address:
Red Wing Waterworks
935 Levee Road
Red Wing, Goodhue County, Minnesota



1. View to south from Levee Road

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Property Identification Number: 55-175-1060

UTM: 15 536327E 4934665N

Historic Use: GOVERNMENT: public works

Current Use: Unoccupied

Date of Construction: 1884, 1909

Architectural Style: LATE VICTORIAN: Romanesque

Owner: City of Red Wing

I. Introduction

Daniel Hoisington, principal of Hoisington Preservation Consultants, completed a historic resource evaluation of the Red Wing Waterworks, located on Levee Road in Red Wing, Minnesota, in order to determine if the property is eligible for the National Register of Historic Places (NRHP).

II. Criteria of Evaluation

The National Register of Historic Places is the official list of the nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.

To be considered eligible, a property must meet the National Register Criteria for Evaluation. This involves examining the property's age, integrity, and significance.

- **Age and Integrity.** Is the property old enough to be considered historic (generally at least fifty years old) and does it still look much the way it did in the past?
- **Significance.** Is the property associated with events, activities, or developments that were important in the past? With the lives of people who were important in the past? With significant architectural history, landscape history, or engineering achievements? Does it have the potential to yield information through archeological investigation about our past?

There are four criterion used to determine whether a property is significant. These include resources that are one or more of the following:

Criterion A: are associated with events that have made a significant contribution to the broad patterns of history (such as a Civil War battlefield or a Naval Ship building Center);

Criterion B: are associated with the lives of persons significant in our past (such as Thomas Jefferson's Monticello or the Susan B. Anthony birthplace);

Criterion C: embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (such as Frank Lloyd Wright's Taliesin or the Midwestern Native American Indian Mounds) or;

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Criterion D: have yielded or may likely yield information important in prehistory or history (such as prehistoric ruins in Arizona or the archaeological sites of the first European settlements in St. Augustine, Florida or at the Presidio of San Francisco).

A resource can also be listed as contributing to a group of resources that are listed on the National Register. In other words, the resource is part of a historic district as defined above.

III. Methodology

On October 30, 2011, Hoisington visited the site to document existing conditions. Research was conducted at the following repositories:

- Goodhue County Historical Society
- Minnesota Historical Society

Research conducted at the above repositories included a review of assorted clippings files and research collections for information about the property and associated persons.

IV. Narrative Description

The Red Wing Waterworks is located on a one-acre site near the Mississippi River, just northwest of the downtown commercial center of Red Wing, Minnesota, a city of 17,000 residents. The surrounding buildings are generally industrial in use, however a marina is located on the north side of Levee Road, just opposite the waterworks. Railroad tracks are located directly south and adjacent to the waterworks.

The property consists of three contributing buildings. The primary waterworks was constructed of rusticated stone in 1884.¹ Roughly rectangular in plan, the building is two stories high with a flat, composite roof. Most striking are the multiple arched windows, two each on the north and south elevations, now enclosed and stuccoed, except for the southwest door, which has a metal roll-up door. The ground floor features a raised red brick belt course that extends above the full arches. The west end of the building has been altered through the years, with Sanborn insurance maps showing the addition and removal of a coal storage bin. It is now stuccoed. No mechanical works remain in this building.

The other two resources were constructed in 1909, when the city upgraded its water system with the addition of a large 75,000 reinforced concrete reservoir and an attached cream-colored brick pump house. This rectangular, flat-roofed pump house was constructed in stages, with the first portion erected shortly after completion of the reservoir. It was extended in the period between 1917 and 1927, with another addition on the east end between 1927 and 1943. On the track side, there are two double-panel metal entry doors, plus six windows — now enclosed.

V. Historical Background

The Red Wing Waterworks provided its citizens a clean supply of water while supplying a ready source for the local fire department. It is significant for listing in the National Register of Historic Places under criterion A representing the civic development of the city through its public works. The Red Wing Waterworks, constructed 1883-84, is the earliest extant public works building constructed by the city water department. The period of significance for the Red Wing Waterworks, 1884-1962, represents the span of years of continuous daily operations of the water department in this building.

In the early morning hours of March 4, 1883, a disastrous fire swept through the Diamond and Red Wing Flour Mills. Its aftershock, with the loss of jobs and capital, brought a swift reaction. The Red Wing *Advance* stated: “The millers and coopers are out of a job. What greater calamity could happen to

¹ The date of a building is given as the year of completion rather than the date that construction began.

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a city than the burning up of a large manufacturing establishment? By the burning of the mills, the water supply for fighting fires in the business portion of the city is diminished one half, and by that much of the demand for water works increased.”²

Within days, the city council passed a resolution to form a committee to “examine, devise and recommend the best plan for an efficient system of water works for the city.” Its members visited Decorah, Iowa, Stillwater, Faribault, Minneapolis and St. Paul to examine similar water works. Among the early choices were “the construction of a reservoir on Barn Bluff, and supplying it with water from the Mississippi by means of steam power; the furnishing of a supply of water by means of one or more artisan wells; the purchasing of the Taylor grist mill property on Hay Creek, and utilizing the water power to pump water from Hay Creek into a reservoir to be located on Jennison’s bluff; an artisan well on College Bluff, to afford water by a pump worked by a wind mill; the increasing of fire cisterns at the intersection of the streets at suitable localities, etc.”³

Unlike many other towns, including Stillwater, the city determined to maintain ownership of the water system. Early water works systems in the United States were usually privately owned and operated. Following the Civil War, as the field of engineering boomed and urbanization swept the country, the construction of water works systems began on a large scale. With the growth of cities and towns came the need and desire to develop adequate water supply which would, in turn, provide high standards of living and sanitation. By 1875, 422 water works were in operation, 46.2 percent of which were privately owned.

The issue seems to have been widely discussed in Red Wing, with at least one letter to the editor warning about the dangers of private ownership. “I intend to vigourly kick against any proposition looking to a private corporation coming here and owning the works. . . . The city does not want a repetition of an ‘St. Paul’ here -- having certain parties put in the works, and then . . . pay five times as much for them as they cost.” A local newspaper noted, “It is, perhaps, one of the most important questions, involving as it does the interests of every citizen of our young city. . . . The management of these works will be under the exclusive control of the city council, who are your servants and are subject to your instruction from time to time.”⁴ Authorization of a bond issue was approved at a public referendum by a vote of 493 to 151, with the Third Ward providing the only close vote (88-78).⁵

Local civic leaders saw the waterworks as “more than the simple matter of water works. It means more than all else, perhaps, that we are now on the road to become that manufacturing centre to which we have been looking forward to with so much gratification and pleasure. . . . It places our city in better standing in the markets of the world; it gives it a name that will stand as a synonym of go ahead-iveness that it had not had before.”

The waterworks were developed under the direction of an innovative engineer, H. H. Harrison, who was involved in a large number of such constructions across the country. A native of West Virginia, Harrison moved to Missouri as a young man and found employment as an engineer in a local mill. In 1875, his expertise won him contracts with the McGowan Pump Company of Cincinnati, Ohio, to develop waterworks for Cedar Rapids and Marshalltown, Iowa. He was then hired by Fruin and Company, a nationally-recognized firm in the burgeoning market of municipal waterworks. In 1880, Harrison came to Minnesota to assist the city of Stillwater in construction of their water system. He decided to remain there and opened his own firm. Harrison went on to a long and profitable career in waterworks and pumping

2 Red Wing *Advance*, March 7, 14, 1883.

3 Red Wing *Advance*, March 21, 1883.

4 Red Wing *Advance*, June 13, 1883.

5 Red Wing *Advance*, July 4, 18, 1883.

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station development, designing systems in at least ten Minnesota cities and several more throughout the Midwest. These included the Cloquet pumping station and the 1890 Owatonna Water Works pumping station, a cottage-style building listed on the National Register of Historic Places.⁶

The contract was awarded August 28, 1883, to the Northwestern Water and Gas Supply Company of Minneapolis, for the sum of \$80,400. Later that fall, the *Red Wing Advance* reported:

Our water works are progressing finely. A visit to the scene of operations, at the foot of Hill street, near C. Betcher's mill, disclosed the fact that the works there are being pushed to completion as rapidly as possible. The filtering wells and cistern are completed, and the building to be used for a boiler and pump house is nearly ready for a roof. The building is constructed of stone and brick and when completed will be a very substantial and convenient structure. The work of digging trenches for the mains commenced Monday, and a large number of men are employed for that purpose. When completed Red Wing will have water works second to none in the State.⁷

The new water system was turned over to the city on May 20, 1885.

The pump house was constructed on Levee Street, measuring forty by fifty-two feet, and divided into a pump room and a boiler room. A brick coal shed adjoined the main building. The plant used steam-powered pump to take water from the Mississippi River, passing through a fourteen-inch cast iron intake pipe to the main pump house. There, the water was sent through two wells. The first used screens to clear the water of large impurities (leaves, small fish, while the second had a sponge barrier to further filter it. The water was then pumped into the street mains and to the main reservoir on Sorin Bluff. This reservoir held around one million gallons in a holding area excavated into a rock bluff, then lined with brick in cement. A series of water mains — nearly seven miles worth — distributed the water throughout the city.⁸

The new water system spurred further changes within the city. The first water commission met in 1884. The following year, the Red Wing Fire Department reorganized, with the City Council awarding charters to four hose companies and one ladder company. A city-wide alarm system went into operation. Finally, the city authorized construction of sewers in 1885.⁹

In the first decade of the twentieth century, Red Wing went through an extraordinary period of civic investment, spurred by a booming economy and a leadership cadre with a strong sense of responsibility. Within this decade, Red Wing opened a new city hall, consolidating administrative offices, a jail, and the fire station in one building. The Chicago, Milwaukee, St. Paul, & Pacific Railroad built a striking Classical Revival depot near the levee that same year, followed quickly by Great Western Railroad, which erected a spacious depot and division office on Main Street. The T. B. Sheldon Memorial Auditorium was completed in 1904. In 1906, John Rich donated funds for the improvement of Broadway, hiring landscape architect William Finklenburg to create a mall up from the Milwaukee Road Depot near the river to the heart of the “intellectual center of town” — as the *St. Paul Dispatch* called the blocks that held the Sheldon Auditorium, Christ Church, and the Carnegie Library. Soon after, the federal government committed to build a new post office on the mall. The St. James Hotel underwent a substantial expansion. Two religious organizations joined the construction wave, with the Methodist Episcopal Church and

6 Augustus B. Easton, editor, *History of the Saint Croix Valley* (Chicago: H. C. Cooper, 1909), 186-87.

7 *Red Wing Advance*, August 15, October 31, 1883.

8 *Manual of American Waterworks* (New York: 1889), 430.

9 Franklyn Curtis-Wedge, editor, *History of Goodhue County, Minnesota* (Chicago: H. C. Cooper, 1909), 561-62.

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Trinity Lutheran erecting beautiful new stone edifices that still grace the city. In 1907, two businessmen, W. C. Krise and E. H. Foot, donated \$10,000 for construction of a wing to the Red Wing City Hospital in memory of Joshua Pierce, a prominent banker.

This wave of investment became a common point of the city's self-identification. The *Red Wing Republican* proudly reprinted an editorial from the *St. Paul Dispatch*, labeling the community as "The Desirable City." The capital city newspaper praised marvelous blending of commerce and charity in the making of "a live, livable, lovable city," and attributed it to the "private generosity, the gratitude of rich men and women to the city that has made their wealth possible, [in] so shaping and developing Red Wing, with continual gifts of parks and boulevards, theaters and libraries and hospitals, as well as the more basic improvements."¹⁰

As part of this sense of civic responsibility, the city approved a major upgrade of its infrastructure in 1909. It included miles of new cement walks and curbs (\$31,000), expanded sewer lines (\$12,000), and improvements to Levee, Broadway, City and Colvill Park. The city council also approved a bond issue for \$25,000 for "installing a means for purifying the water of system," including a new reservoir and pump house at the Levee Street site, as well as a new pump and pumphouse on College Hill. It marked a transition from the use of water from the Mississippi River to well water.¹¹

The new system was designed by engineer Louis P. Wolff. Although his firm was located in St. Paul, Wolff was well-known to local commissioners since he served as Red Wing City Engineer for many years. He was widely respected and two of his water towers — in Brainerd and Pipestone — are listed in the National Register of Historic Places. He is buried in Oakwood Cemetery.

Following the construction of a new water treatment plant, the building was used by the city water department for storage, and as the city dog pound. It is now vacant.

VI. Evaluation of Integrity

The period of significance is a benchmark for determining whether subsequent changes contribute to or detract from its historic integrity. Alterations introduced after the period of significance generally detract from integrity. Historic integrity is the composite of seven qualities: location, design, setting, materials, workmanship, feeling, and association. The main building is relatively intact, except for the enclosure of windows and replacement of doors. The reservoir is virtually unchanged since its construction in 1909. The deep pump house has been altered, notably the two additions noted in the description. However, it retains the basic plan and look that it had in 1942. The property retains integrity of location and setting,

VII. Evaluation of Significance

Criteria A:

The waterworks is representative of Red Wing's growth in the late nineteenth-century, as money was invested in civic improvements. In addition, it was an essential part of the reorganization and development of the city's fire department, providing ready access to a reliable water supply.

Criteria B:

The Red Wing waterworks represents the work of two important civil engineers. Henry H. Harrison was one of the state's foremost waterwork engineers in the years immediately following the Civil War. Louis

10 St. Paul *Dispatch*, December 13, 1906.

11 *Red Wing Daily Republican*, December 29, 1909; Minutes of the City Council, August 6, 1909.

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P. Wolff's work is already represented in the National Register of Historic Places by two water towers, located in Brainerd and Pipestone. Wolff's significance is enhanced by his local connections. Significance for this criteria should be studied and would require a comparison with other work by the two engineers.

Criteria C:

The original building dates from 1883. However, age alone is not sufficient to qualify it for the National Register of Historic Places and lacks the distinctive qualities needed for eligibility under Criteria C. The mechanical works have been removed.

Criteria D:

This criterion is generally used for archeological findings, which was not part of this evaluation.

VII. Conclusion

The Red Wing Waterworks is recommended for listing in the National Register of Historic Places as locally significant under Criteria A. The property reflects the city's investment in infrastructure during an important era of business expansion and community growth. All three resources are considered contributing to the nomination.