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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 Neillsville Standpipe
other names/site number

2. Location

street & number	325 East 4th Street	N/A	not for publication
city or town	Neillsville	N/A	vicinity
state Wisconsin	code WI	county Clark	code 019
			zip code 54456

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.)

Jim Deegan
Signature of certifying official/Title
State Historic Preservation Officer - Wisconsin
Date 7/18/13
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

Neillsville Standpipe

Clark

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

9.9.13

for

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property
(check as many boxes as apply)

private
 X public-local
 public-State
 public-Federal

Category of Property
(Check only one box)

building(s)
 district
 X 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 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)

NO STYLE

Materials

(Enter categories from instructions)

foundation Concrete
 walls Concrete

roof Concrete/metal

other Metal

Narrative Description

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

8. Statement of Significance

Applicable National Register Criteria

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

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

Criteria Considerations

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

Property is:

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

Areas of Significance

(Enter categories from instructions)

- Architecture
- Community Planning and Development

Period of Significance

- 1926
- 1926 - 1968

Significant Dates

- 1926

Significant Person

(Complete if Criterion B is marked)

- N/A

Cultural Affiliation

- N/A

Architect/Builder

- Tierweiller Brothers (Concrete)
- Pittsburgh-Des Moines Steel Corporation (Metal Tank)

Narrative Statement of Significance

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

Neillsville Standpipe
Name of Property

Clark
County and State

Wisconsin

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	City of Neillsville	date	8-10-2012
organization		telephone	715-743-2105
street & number	118 W Fifth Street	zip code	54456
city or town	Neillsville	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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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

Site Description

The Neillsville Standpipe, constructed in 1926, is located within the corporate limits of Neillsville in Clark County, Wisconsin. The standpipe is situated on the highest point in Neillsville and is visible for several miles. The terrain rises sharply to the east of Hewett Street, Neillsville's main artery (Highway 73). It plateaus three blocks to the east ending at the site of the Neillsville schools and surrounding parking lots. The standpipe resides on a large lot on the north side of East 4th Street. The landscaping of the standpipe site exhibits a well maintained manicured lawn which is punctuated with numerous mature trees. The area on which the standpipe rests is flat, but the terrain of the remaining parcel drops sharply north of the tower. The entire lot is surrounded with chain-link fence (not included in the count). A small paved driveway enters the compound at the southeast corner through a locked gate. The driveway provides access to a small modern pump house (non-contributing) located southwest of the encased standpipe and the entry into the standpipe.

Late 19th Century and early 20th Century residences are located to the west and south of the standpipe. The downtown commercial center is located three blocks northwest of the standpipe. The standpipe has become a fixture of the Neillsville landscape and can be seen from a distance of three miles when entering Neillsville from the west on highway B. It can also be seen from State Highway 73 when entering Neillsville from the north.

Standpipe Description

Encasing concrete tower

The Pittsburgh-Des Moines Steel Company's cylindrical, riveted-steel 260,000 gallon suspended hemispherical bottomed water tank with domed roof rests on short steel supporting legs. The short steel legs of the tank are bolted to 48' tall concrete piers which are part of the interior walls of the encasing concrete tower. The entire tank and supporting structure is encased in a decorative concrete tower.

The slipform concrete encasing tower which is 95' tall and 36'in diameter was built by Tierweiller Brothers Concrete Company of Marshfield, Wisconsin. The concrete tower entirely encases the 260,000 gallon Pittsburgh-Des Moines water tank. The slipform technique of poured concrete was first used in 1905 in Kansas City in the construction of a rectangular grain tank. This type of concrete construction continued to be used primarily for the construction of silos during the first half of the twentieth century.¹ Slipform construction is a method of continuously pouring concrete into a form or

¹ Thomas W. Taylor, "Slipformed Core Construction," [www.datumengineers.com/assets/files/slipform%20Core\(1\).pdf](http://www.datumengineers.com/assets/files/slipform%20Core(1).pdf), page 1, accessed July 2012.

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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

mold that moves up vertically with the assistance of hydraulic or screw jacks. As the structure rises, the section of previously poured concrete hardens and forms a support wall that is strong enough to withstand the concrete poured over the top of it. Pouring continues until the desired height of the structure is reached. This method allows for a type of monolithic poured concrete structure which is completely hollow inside and smooth on the outside.² The Tierweiller Brothers wrote pouring notations on the inside wall of the tank. The custom shaping exhibited in the Neillsville Standpipe including exterior pilasters, interior piers, exterior battement cresting, narrow windows and quarter-moon designs can easily be formed using the slipform method.

The concrete cylindrical shape protects the interior tank from extreme winds. The tower also offers some insulation to the water tank in the winter. However, in extreme temperatures an ice dome still forms within the tank but does not adhere to the sides of the tank.³

At the base of the cylindrical concrete tower is a concrete ring which is 54" high and projects 4" from the main cylinder. Visually this ring anchors the encasing tower to the ground and provides decorative value. The concrete ring also provides additional support for the tower.

There is an opening on the south facing portion of the base ring and the cylinder which allows for entry into the tower. The original opening was 118" high and 77" wide. The large entry facilitated easier entry into the cylinder for the water tank sections. This opening has been partially enclosed to fit the current steel entry door which is 77" high and 42" wide. The door exhibits strap hinges and a steel lift handle. Electricity is brought to the water tank underground and enters the tower to the west of the entry door.

Six 36" wide and 7" deep pilasters rise from the top of the concrete strengthening ring culminating in a battlement ring of merlons and crenels which circles the top of the tower. These pilasters extend through the concrete wall of the tank becoming pier supports for the short legs of the water tank. The piers are 36" wide and 11" deep and extend six feet into the ground base acting as footings. Originally, the roof of the tower was flat. A low pitched steel dome has been placed on top of the concrete roof. This helps to keep water from ponding on the roof and promotes the rain and snow to shed over the sides of the tower.

Six smooth recessed panels appear between the six pilasters. Each panel has three narrow windows, located at various heights. The window which is closest to the top of the tank has a decorative quarter moon shape cast into the concrete which appears on each side of the window.

² SMA Associates Construction, "Slipform Concrete Silo Construction," smadesignbuild.com/Projects/SlipformSilos.php, page 1, accessed July 2012.

³ Mickey Marty, Neillsville Water Utility, ca. July 2012 interview by nomination author.

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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

Interior water tank

The interior water tank was designed, produced and constructed by the Pittsburgh-Des Moines Steel Company of Des Moines, Iowa. The water tank itself is 47' high and has a diameter of 32'. The 260,000 gallon water tank rests on six short legs which are anchored to bolts set into six 48' high concrete piers. The concrete piers are part of the walls of the concrete encasing tower. The tank has a suspended hemispherical bottom and a dome shaped roof. The tank is constructed with six levels of steel panels of various sizes and thicknesses. Level #1 is comprised of six panels that are 78 5/8" by 17' 2" with a thickness of 3/8"; level #2 is comprised of six panels that are 61 3/4" by 17' 1 5/8" with a thickness of 5/16"; level #3 is comprised of six panels that are 62" by 17' 2" with a thickness of 5/16; level #4 is comprised of six panels that are 61 3/4" by 17' 1 1/2" with a thickness of 1/4"; level #5 is composed of six panels that are 62" by 16' 11 5/16 with a thickness of 1/4"; and, level six is composed of six panels that are 61 7/8" by 16' 11 1/8" with a thickness of 1/4".

At the time of construction, the water tank held 250,000 gallons. The original riser pipe was 10" in diameter. In October of 1974, Lank Tank Company of Menomonie, Wisconsin replaced the 10" diameter riser with a 72" diameter riser pipe. This upsizing increased the capacity of the water tank to 260,000 gallons. It was felt that the additional width of the riser pipe would also take some of the weight off of the short legs of the water tank.⁴ An access ladder climbs the exterior of the riser pipe to a small catwalk located directly under the hemispherical bottom of the water tank. An overflow pipe comes out from the side of the tank and drops down along the east portion of the tower wall. It pierces the wall of the tower and empties outside the tank onto a concrete pad.

The field notes state that all of the rivets used in construction were to be inserted from outside of the tank. The tank was caulked on the inside and painted with one coat of paint on the inside and one coat of paint on the outside. An operational panel appears at the base of the riser pipe. A layer of sand covers the floor on the interior of the encasing tower.⁵

When the water tank is filled to the 46' level, which is just beneath the overflow pipe, 87.56 pounds of pressure is created.⁶

⁴ Lane Tank Company Proposal, September 16, 1974.

⁵ Pittsburgh, PA: Pittsburgh-Des Moines Co., Steel Tank on Concrete Tower Erection Diagram, June 2, 1926.

⁶ City of Neillsville, Chart of Capacity, Head feet and Pressure, July 23, 1945.

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Neillsville Standpipe
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High Zone Booster House - Non-Contributing, circa 1998

A side-gabled structure is located southwest of the standpipe. The booster pump house is constructed of rough-faced concrete block laid in a running bond pattern. The east facing elevation has two side-by-side metal doors which are centered on the wall of the building. They both open to provide access to three booster pumps and supporting apparatus. North of the entry doors is a large louvered panel which provides ventilation for the large generator which operates when electricity is interrupted. The west facing elevation has a large louvered panel located on the north portion of the wall which provides ventilation for the generator. The south and north walls have no openings. The booster station pumps water from the low pressure zone standpipe to the high pressure zone 200,000 gallon spheroid water tower located in the industrial park.

Integrity

The Neillsville Standpipe retains a high level of historic integrity. With the exception of the addition of the low pitched steel dome, no significant alterations have been made to the standpipe. Both the exterior concrete encasing tower and the interior Pittsburgh-Des Moines water tank remain in remarkable original condition. The interior water tank was recently repainted and was noted to be in excellent condition.

The larger entrance to the standpipe has been made smaller. It is thought that this was done immediately after the water tank was taken through the larger opening for installation. The style of the current door with strap hinges and lift handle would be correct to the period of time of erection.

The windows are visible to the viewer but have been blocked in to insulate the tank. For some time the top of the tower was used for communications. Currently, only a Christmas Star remains at the top of the tank. An iron railing, not original to the tank, surrounds the star. The standpipe has been painted with silver aluminum paint for many years.

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Neillsville Standpipe
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SIGNIFICANCE

The 1926 Neillsville Standpipe is nominated to the National Register of Historic Places for local significance under two criteria. It is significant under criterion C as a good example of the type of construction used in an early 20th century small town standpipe. As many Wisconsin cities grew in size they had to address the growing need for reliable water service. That need included adequate water storage and water pressure for fighting fires. Elevated water storage applies the scientific principles of gravity to serve the human need. The design of the standpipe is distinctive in that most people do not realize that what they see on the outside is the housing and structural support for an inner steel water tank. The Neillsville Standpipe's prominent location, adjacent to the entrance to the Neillsville schools, makes it a visible symbol of Neillsville's water distribution system.

The Neillsville Standpipe is also eligible for the National Register of Historic Places under criterion A for community planning and development and for its association with the growth and development of municipal water service in the City of Neillsville. The current standpipe was constructed as a replacement for a previous standpipe that was situated on the same location and which collapsed in early spring of 1926. The replacement standpipe, the subject of this nomination, allowed for the continuing expansion of Neillsville's water service. Today, the standpipe continues to provide pressurized water service to the community working in tandem with the 1968 elevated water spheroid (tower) located in Neillsville's industrial park. The period of significance is 1926 to 1968. It begins with the construction of the standpipe in 1926 and ends with the construction of the new, second water tower to serve the needs of the growing city in 1968. The standpipe was identified as a being potentially eligible for listing in the National Register by the intensive survey of Neillsville completed in 2003 to 2004.

To enhance its efficiency, the standpipe was placed on the highest point in Neillsville. The City of Neillsville chose a design which would be an attractive asset to the community as the standpipe could be viewed from the entire city. The book, The Engineering and Building Record and the Sanitary Engineer stated: "To any public-spirited person, the prominence of the water tower in the landscape would suggest the necessity of building something more pleasing to the eye than the now usual iron cylinder. Man should not erect structures placed on hilltops to be an offense to the eyes of this and future generations."⁷ The application of decorative architectural features also provided more acceptability by the public of a technological necessity.

⁷ Henry C. Meyer, The Engineering and Building Record and the Sanitary Engineer, Index to Volume XXI, "Competition for Pump Stations and Water Tower Design" (New York, N.Y.: Henry C. Meyer, 1890), page 4.

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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

History of Neillsville

Neillsville is located in southern Clark County and is situated at the junction of the O'Neill Creek and the Black River. Clark County was created from territory taken from Jackson County by legislation which was approved July 6, 1853.⁸ The Black River runs north to south and divides the county into two nearly equal parts. In the mid 1800s, the abundant virgin pine forests found in Clark County, much of which lined the Black River, drew lumbermen who harvested these resources.

James and Henry O'Neill cut the first road into Clark County. Starting in Black River Falls, in Jackson County, they traveled by oxen drawn wagon arriving in Neillsville in 1845. A cabin and sawmill were built and the first logging operation began.⁹ Over the next forty years logging concerns would cut 8,000,000,000 board feet from Clark County. This harvest was valued at \$12.50 per thousand feet for a total of \$100,000,000.¹⁰

James O'Neill had cleared 50 acres of timber in the area of the junction of the O'Neill Creek and the Black River by 1850. He made the decision, in April of 1855, to appropriate four acres of that land for the first village in Clark County, which was named in his honor. He instructed surveyor Allan Boardman to plat the village into lots.¹¹ The population in the village of Neillsville was fewer than 250 people in 1860.¹²

The surrounding pine forests continued to attract large logging concerns and the community expanded in size in support of that industry. The arrival of the Chicago, St. Paul, Minnesota & Omaha Railroad in 1887 signaled a guaranteed economic and population boom. A commercial district developed along Hewitt Street (State Highway 73) Neillsville's main artery. Several two story substantial brick commercial structures were built from 1872 to 1895 in Neillsville's downtown commercial district. The buildings, from the alley south of 5th street (both sides of the street) to 6th street, were listed in the National Register of Historic Places in 1999.

Organization and History of the Neillsville Fire Department

A prevalent concern for the population of Neillsville and for most other communities in the mid to late 1800s was the ability of their city to fight a fire. Lightning from a severe 1874 storm started a structure fire in the commercial area of the city. Although it was easily extinguished, the city leaders

⁸ A. T. Andreas, History of Northern Wisconsin (Chicago: Western Historical Co., 1881), page 230.

⁹ Franklyn Curtiss-Wedge, History of Clark County Wisconsin (Chicago and Winona: H. C. Cooper, Jr. & Co., 1918), page 37.

¹⁰ *Ibid*, page 117.

¹¹ *Ibid*, page 628.

¹² Clark County Press, July 1, 1982, "Keepsake Centennial Edition," page 2.

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came under pressure to increase the city's ability to fight a fire. The Neillsville Fire Department was immediately organized. Several men volunteered to be firemen and R.F. Kountz was appointed the chief. The city purchased a hook and ladder truck for \$500. It required several volunteer firefighters to operate and, in reality, it provided no more fire protection than a bucket brigade. In March of 1875, a chemical engine was purchased for \$750 and an engine-house was built in the spring of 1876 for \$1,100.¹³ Despite these efforts, many Neillsville citizens still had concerns as to whether the fire department had the resources to battle a severe structure fire.

The December 1914 Sanborn Fire Insurance Map stated that the city volunteer fire department was comprised of 32 men who were paid for the fires that they attended. The inventory of equipment included: one hook and ladder truck, two hose carts, 1000 feet of 2½ inch C.R.L. hose, and a Champion four wheel 100 gallon chemical engine. An alarm bell was located on a steel tower on the south side of O'Neill Creek and a whistle was located at the Electric Plant on the north side of O'Neill Creek.¹⁴

Neillsville Municipal Water Works History

Neillsville had always prided itself as being a progressive community. Electricity was provided to several downtown commercial businesses in 1882, the same year that the United State's first commercial electric plant began operation in Appleton, Wisconsin.¹⁵ Succumbing to continuing pressure, the Neillsville Council voted on July 12, 1883 for the first bonding of the city; \$12,000 worth of \$1,000 bonds were issued to provide revenue for the building of a city water works to upgrade Neillsville's fire fighting abilities. The levels of O'Neill Creek and the Black River were monitored in December of 1884 as part of the city's ongoing fire protection plans.¹⁶ In 1885, a dam was built across the O'Neill creek.¹⁷ C. M. Breed, D. Lindsay and W.W. Taplin were appointed the first waterworks commissioners for the City of Neillsville. A lot was purchased from the estate of Chauncey and Maria Blakeslees in 1885 for \$260 and a pumping station was built on that lot on the north side of the O'Neill creek.¹⁸ The city then purchased 1,500 feet of fire hose. The leaders of Neillsville convinced the citizens that if fire broke out, water could be pumped from the river pumping station to almost any structure within the city.¹⁹

¹³ A. T. Andreas, History of Northern Wisconsin (Chicago: Western Historical Co., 1881), page 238.

¹⁴ December 1914 Sanborn Fire Insurance Map for Neillsville, WI.

¹⁵ Wisconsin Historical Society, "The Introduction of Electrical Power," http://www.wisconsinhistory.org/turningpoints/tp-041?action=more_essay, page 1, accessed July 2012.

¹⁶ Clark County Press, "Keepsake Centennial Edition," July 1, 1982, page 52.

¹⁷ Franklyn Curtis-Wedge, History of Clark County, Wisconsin (Chicago and Winona: H. C. Cooper, Jr. & Co., 1918), page 63.

¹⁸ Clark County Press, "Keepsake Centennial Edition," July 1, 1982, page 52.

¹⁹ Wisconsin State Journal, "The Story of a Wisconsin Community," October 3, 1930.

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Neillsville Standpipe
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In 1886, Tom Hommel was given oversight responsibility for the water works. Hommel also oversaw early installation of the city's water system.²⁰ The Neillsville Council voted in July of 1886, to lay water pipes and place fire hydrants from the water works along East Street ending at 3rd Street. Then, in June of 1887, the fear of fire was exacerbated after a devastating fire broke out in neighboring Marshfield. The fire destroyed the entire commercial district and left 2,000 people homeless.²¹

In 1888, because of continuing community fire concerns, \$2000 was appropriated for the extension of water mains.²² The editor of the Republican and Press newspaper demanded that the water mains be extended to provide fire protection to Neillsville's manufacturing industries. He pointed out the most important duty of public officers was the protection of property from fire. As the length of the water mains were expanded, the aging pumps at the pumping station failed and the station went out of service one day in March of 1889. Again the editor of the Neillsville Republican and Press became outraged and took the City Council to task over not erecting a standpipe.²³ The editor stated in February of 1890 that the construction of a standpipe would be the cheapest and most effective way to update Neillsville's water system. A standpipe would provide constant pressure for fighting fires and a standpipe could be refilled at night when the demand for electricity was at its lowest point.²⁴

In 1890, the population in Neillsville had grown to 1,936.²⁵ The year's prospects for additional residential and commercial building expenditures were expected to exceed \$100,000.²⁶ Acquiescing to criticism in May of 1890, Mayor Pennock appointed Aldermen Johnson, Lowe and Jones to become the Standpipe Committee. They were directed to study and ultimately decide on the best location in the City of Neillsville to erect a standpipe. They were also asked to investigate the cost for this endeavor.²⁷ At the May 17, 1890 Council Meeting, the decision was made to condemn out-lot 100 of Hewitt's Addition for the purpose of the erection of a standpipe reservoir.²⁸ Property owners James and Emiline Hewett were notified and publication of said property condemnation was placed in the newspaper. The property condemnation stated that the said property was condemned for the construction of a standpipe and that the entire lot 100 was needed as to provide an entry from both 4th and 5th Street.²⁹

²⁰ John W. "Tom" Hommel, <http://www.spanamwar.com/3rdWischohommel.html>, pages 1-3, accessed June 2012.

²¹ New York Times, June 28, 1887.

²² Clark County Press, "Keepsake Centennial Edition," July 1, 1982, page 52.

²³ Neillsville Republican and Press, April 27, 1889.

²⁴ Neillsville Republican and Press, February 22, 1890.

²⁵ Clark County Press, July 1, 1982, "Keepsake Centennial Edition," page 2.

²⁶ Neillsville Republican and Press, March 26, 1891.

²⁷ Neillsville Republican and Press, May 15, 1890.

²⁸ Neillsville Republican and Press, May 22, 1890.

²⁹ Neillsville Republican and Press, May 29, 1890.

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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

Nine bids for the construction of the standpipe were opened by the City Council on May 27, 1890. Each company was to provide costs estimates for the erection of the standpipe above a stone foundation. The Porter Boiler Manufacturing Company was awarded the contract.³⁰ Aldermen Johnson, Lowe and Jones were entrusted with the task of purchasing the materials for the standpipe and overseeing the construction and connecting the water mains. The committee appointed then city engineer John W. (Tom) Hommel to supervise the erection of the standpipe.³¹

The excavation of out-lot 100 immediately ensued. While preparing the ground for the foundation of the standpipe several bodies were discovered from an old cemetery. They were exhumed and moved to the newly established Neillsville cemetery northeast of the city.³²

As the construction of the foundation continued, eight iron anchor-rods were embedded into the rock and concrete foundation.³³ The 1890 standpipe was sixteen feet in diameter and one hundred feet high. The first five feet of the standpipe were made of steel $\frac{3}{4}$ of an inch thick; the next fifteen feet the steel was $\frac{5}{8}$ of an inch thick; the next fifteen feet the steel was $\frac{1}{2}$ of an inch thick; the next fifteen feet the steel was $\frac{3}{8}$ of an inch thick; the next fifteen feet the steel was $\frac{5}{16}$ of an inch thick; the next fifteen feet the steel was $\frac{1}{4}$ of an inch thick and the steel found in last twenty feet was $\frac{3}{16}$ of an inch thick. Total capacity of the standpipe was 150,000 gallons of water.³⁴ The cost of construction was \$6,001.75 which included \$500 compensation for the lot, \$586.50 for the stone foundation; \$365.25 for the pipe and connections, and \$4,550.00 for the standpipe.³⁵

Once completed, the Neillsville standpipe was evaluated in the Manual of American Water Works in 1897 as providing 90 pounds of domestic pressure to 60 taps and 16 fire hydrants. Water was pumped into the standpipe from a nearby well and from the O'Neill Creek.³⁶ Five miles of water mains were laid beneath the city.³⁷ The approximate one-acre parcel on which the standpipe rested was directed to become a park once the construction of the standpipe was complete. This never came to fruition.³⁸

³⁰ Neillsville Republican and Press, June 5, 1890.

³¹ Ibid.

³² Neillsville Times, June 5, 1890.

³³ Clark County Press, "Good Old Days," June 28, 2000, page 9.

³⁴ Moses Nelson Baker, The Manual of American Water Works (New York: Engineering News Publishing Co., 1897), page 406.

³⁵ Neillsville Press, March 25, 1926.

³⁶ Sanborn Fire Insurance Map for Neillsville, WI, October 1892.

³⁷ Moses Nelson Baker, The Manual of American Water Works (New York: Engineering News Publishing Co., 1897), page 406.

³⁸ Neillsville Republican and Press, June 5, 1890.

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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

In 1896, the increased need for a reliable water supply necessitated the moving of the water works to the banks of the Black River.³⁹ A substantial brick building was constructed that pumped water from the Black River, filtered it, and pumped it to the standpipe.⁴⁰

In 1914, the city operated a gravity system water works. The pumping station had a Buffalo Compound Duplex Steam pump, size 10" X 18" X 18" X 18", which had a capacity of pumping 250 gallons per minute. Two 6" inlets drew water from the Black River and discharged it directly into the city mains. The well above the standpipe had a Worthington Compound Duplex Steam pump, size 12" X 6" X 12", that had a capacity of pumping 500,000 gallons in twenty-four hours. This pump also discharged water directly into the mains. A reserve of 150,393 gallons of water was available within the sixteen foot wide by one hundred foot tall standpipe located on a 70' elevation. The standpipe was filled by the surplus of the domestic water supply. Domestic pressure was 60 pounds and fire pressure was 60 to 100 pounds. Four and one half miles of cast iron water mains that were laid in 1885 serviced the public. The city had 58 double fire hydrants. The average daily water consumption was 70,000 gallons.⁴¹

The aging plant was updated with a pressure water filter, pump and meter in May of 1917. Even though these measures were taken, the need for substantial updates had the city entertaining thoughts of building a new plant; however, several thousands of dollars of improvements were instituted instead. The Layne Bowler Company was hired in 1924 by the city to manage the city's water supply and furnish clean pure drinking water for residents.

The 1890 standpipe provided water pressure for the City of Neillsville until the early spring of 1926. At 1:30 pm on Saturday, March 20th, 1926, the standpipe collapsed and fell to the southwest of its foundation. The crash was heard throughout the city. It looked as though it had exploded with the lower portion breaking into many pieces and being tossed in all directions. The middle and upper portions of the standpipe remained intact with the top portion being bent in the fall.

It was ascertained that the large ice cap, which always formed in the top part of the pipe, had become stuck to the side of the cylinder, instead of floating on the top of the water. The ice cap was potentially nine to twelve feet thick. As water was pumped to the community, a void was created between the water and the ice cap at the top. Saturday, March 20th, 1926, was an unseasonably warm day and the sun heated the sides of the pipe, freeing the several ton ice cap, which then plummeted to

³⁹ Neillsville Times, "27th Anniversary Issue," January 4, 1906.

⁴⁰ Ibid.

⁴¹ December 1914 Sanborn Fire Insurance Map for Neillsville, WI.

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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

the water below. The inertia of the event burst the sides of the standpipe, sending water and ice chunks down 4th Street to the houses below. No one was injured and property damage was minimal.⁴²

A similar instance occurred in Collingwood, New Jersey in January of 1900. The evaluation of their standpipe collapse indicated that there was an accumulation of ice in the top of the pipe. When the city demand for water drew the water in the tank down and away from the ice cap, it caused a vacuum and the tank collapsed.⁴³

The Mayor and members of the Neillsville City Council immediately began to pursue the re-building of the standpipe. On May 14, 1926, P. M. Warlum was given a contract of \$120, plus the salvage, to remove the old standpipe.⁴⁴ Several companies directed bids to the Neillsville Council. Four bids were received and opened at the June 4, 1926 council meeting. The bids for the steel: 1. Chicago Bridge and Iron Works \$12,900 - 165 days to complete, 2. Pittsburgh Des Moines Steel Company \$12,696 - 160 days to complete. The bids for the concrete: 1. Ring Construction Company, Minneapolis, \$12,897 - 60 days to complete, 2. Tierweiller Brothers, Marshfield, Wisconsin \$12,650 - 60 days to complete. The Council voted to accept the bids of Tierweiller Brothers, Marshfield, Wisconsin for the concrete and Pittsburgh-Des Moines Steel Company for the steel body.

The First National Bank of Neillsville was appointed trustee to secure the monies for the standpipe construction in accordance to the plans and specifications that had been agreed upon. Mortgage certificates were issued at a rate of 5%, payable semi-annually. The certificates would be retired as follows: \$1,000 per year for five years, \$2,000 per year for eight years, and \$3,000 per year for two years for a total of \$27,000 over 15 years.⁴⁵

The Pittsburgh-Des Moines water tank for the Neillsville standpipe was constructed in Des Moines, Iowa. City inspector J. Brahtz went to Des Moines to inspect the tank prior to its delivery to Neillsville.⁴⁶ Once the concrete work was completed, the tank was delivered and during the month of September of 1926 was assembled inside the encasing concrete tower.⁴⁷ Once activated, the standpipe provided constant water pressure and serviced the water needs of Neillsville.

⁴² Neillsville Press, March 25, 1926.

⁴³ Henry Harrison Suplee, The Engineering Magazine, An Industrial Review – The Engineering Index 1896-1900 (New York: The Engineering Magazine, 1901), page 857.

⁴⁴ Clark County Press, "Keepsake Centennial Edition," July 1, 1982, page 6.

⁴⁵ Neillsville Press, June 10, 1926.

⁴⁶ Neillsville Press, August 12, 1926.

⁴⁷ Neillsville Press, August 26, 1926.

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Neillsville Standpipe
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Many in Neillsville would have preferred that their water came from a well rather than from the Black River. The area in and around the city was notorious for poor producing wells. In 1931, a search was launched to find a well near Neillsville that could supply the city with water. The WPA joined the search in 1935. To improve the purity of the city's water, Neillsville purchased a chlorinator for the water plant in July of 1940. The well near the standpipe was taken out of service in June of 1946 after it began to put air into the system. Improvements again were made to the aging water plant in 1946. The City of Neillsville could no longer put off the construction of new water filtration and pumping plant. In November of 1949, the city decided to construct a new water plant. The plant opened in February of 1954. A new sewage treatment facility was constructed in 1955 costing \$131,765.

The search for a well to supply the water needs for the City of Neillsville continued well into the 1970s. The city was advised that for a well to be appropriate for the needs of the city it would have to pump 600 gallons per minute twenty-four hours a day. The Wisconsin Department of Natural Resources became involved in 1978 and provided a \$100,000 grant to Neillsville for water improvements. Finally, a well area was located eight miles southwest of Neillsville in a gravel quarry on the west side of the Black River. In April of 1978, \$876,630 was appropriated for drilling wells and installing the piping which would bring the water to Neillsville.⁴⁸ A filtration and chlorination station was built on Opelt Avenue near the well site.

The Neillsville Standpipe continues to provide pressurized water service to homes, businesses and fire hydrants in Neillsville. The Neillsville Municipal Water Utility operates four wells located eight miles southwest of the city. The wells range in depth from 38 feet to 42 feet and all operate through a 16" casing. The wells have a combined capacity of 830 gallons per minute. The water is pumped from the wells into 12" pipes which travel underground on the west side of the Black River to an iron and manganese treatment facility. After treatment, the water continues its journey on the west side of the Black River until the pipes are north of State Highway 10. Then the piping turns to the east and travels under the Black River to the city.

After arriving into the city the water is distributed and also pumped into a ground storage reservoir. The water from the ground storage reservoir is boosted into the low level distribution system by two 560 gallons per minute booster pumps. The Neillsville Standpipe provides service to the low level pressure zone area. Booster pumps located adjacent to the standpipe boost water to the 200,000 gallon spheroid 1968 water tower located in the industrial park. The spheroid services the high pressure zone area. Approximately 26 miles of water main ranging in size from four inches to twelve inches are located below the city.⁴⁹ The standpipe and the industrial park spheroid work together fulfilling the water storage and water pressure needs of Neillsville.

⁴⁸ Clark County Press, "Keepsake Centennial Edition," July 1, 1982, pages 52, 54 – 59.

⁴⁹ Neillsville Municipal Water Study, prepared by Rust Engineering, April 1998, pages 1-26.

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Pittsburgh-Des Moines Steel Corporation

The Pittsburgh-Des Moines Steel Corporation was founded in 1892 by William H. Jackson and Berkley N. Moss. Both were engineers who graduated together from Iowa State College. Their early days were spent building water tanks and water towers out of wood. In 1900, Edward W. Crellin who owned and operated a small steel fabricating shop in Des Moines joined in partnership with Jackson and Moss. They formed two corporations: The Des Moines Bridge and Iron Works and the Des Moines Bridge and Iron Company. These companies offered steel bridges, water tanks, water distribution systems, standpipes, railroad turntables, roof trusses, and structural iron and steel components for all types of structures.

In March of 1907, Jackson traveled to Pittsburgh to look for a site for their business. They then moved their headquarters to Pennsylvania. At the 1915 San Francisco Panama Pacific International Exposition, the company exhibited a large map showing the locations of their water towers and tanks. Forty-three states, the District of Columbia, eight provinces of Canada and several foreign countries were represented on that map. By 1915, the company had built over 1,200 water towers and standpipes.⁵⁰ In 1916, a complete re-organization took place whereby they dissolved the former two corporations into the Pittsburgh-Des Moines Steel Company.

The Pittsburgh-Des Moines Steel Company went on to provide the steel for the 1,354 foot Prairie du Chien, Wisconsin to Marquette, Iowa Bridge in 1932. They built the Miraflores Bridge over the Miraflores locks of the Panama Canal in 1942. The Daniel Hoan Memorial Bridge in Milwaukee won an award from the Steel Bridge Alliance in 1975 for the longest span.⁵¹ The Francis Scott Key Bridge in Baltimore, Maryland was built in 1978. In 1967, they fabricated forked shaped 56' X 10' steel panels, with an average weight of forty-one tons, which formed the exterior support wall columns from the 4th to 9th floor of the World Trade Center. In 1957, they constructed the first commercial nuclear power plant containment vessels in the United States for the Duquesne Light Company in Shippingport, Pennsylvania. NASA commissioned the company to build a high vacuum space facility in the early 1960s, which was used in the Gemini and Apollo programs.

Perhaps the structure for which the Pittsburgh-Des Moines Steel Company is the most famous is the St. Louis Arch. They brought contest winner Eero Saarinen's design to life. Pittsburgh-Des Moines

⁵⁰ Jim Foster, Towering Over America, An Illustrated History of Pitt-Des Moines, Inc. (Pittsburgh, PA.: Pitt-Des Moines, Inc., 1992), page 19.

⁵¹ National Steel Bridge Alliance Award Winners, www.aisc.org/contentNSBA.aspx?is=21370, page 1, accessed June 2012.

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Company fabricated and erected the 630' wide by 630' tall stainless steel arch from 1962 to 1966. The company also designed and built the sophisticated arch erection system.⁵²

Standpipes and Water Towers

The earliest examples of water towers appear in the United States coinciding with the invention of the first American steam powered locomotive, "Tom Thumb", in 1829 for the Baltimore & Ohio Railroad. Elevated wooden water towers constructed with cooperage technology began to appear across the country adjacent to railroad tracks. These elevated tanks were constructed to supply the boilers of steam engines with water. The early water technology of the trackside elevated tank was refined and then applied to city water service.

Milwaukee was the first Wisconsin city to construct a water works system. In 1870, a pump house was built along the shore of Lake Michigan. The pumps forced the water from Lake Michigan through cast iron pipes up the slope to the Kilbourn Park Reservoir one mile west of the pump site. Water then flowed by gravity to users.⁵³

Most citizens of the mid to late 1800s had cistern collectors or wells of their own so the demand for a water reservoir came about primarily for fire protection. People did not understand that their well could be contaminated by their privy or even the neighbor's privy. Few, if any, associated dysentery and typhoid with contaminated water.

A standpipe provided the reserve water supply and the proper pressure to deliver it, supporting the efforts of the fire fighter. John Goodell in his book, Waterworks for Small Cities and Towns, noted the importance of the standpipe as a fire fighting tool: "Fire protection demands a concentration of *all* the water the water works can furnish to one point."⁵⁴ This principle became very important in Neillsville when, on January 16, 1939, the J. B. Lowe Furniture Store, on the east side of Hewett Street became engulfed in flames. The two-story structure had common walls with the buildings to the north and to the south. It was a miracle that the entire commercial area was not destroyed. The city's reserve water supply, the standpipe, was emptied and it became necessary to pump raw river water into the city's water system to continue to fight the blaze. These valiant efforts saved the buildings located on either side of the furniture store and a terrible calamity was avoided. The important element of being able to save downtown Neillsville was the ability to knock down most of the fire with the

⁵² Jean D. Versteeg, The History of the Pittsburgh-Des Moines Corporation 1892-1981, (Pittsburgh: The Corporation, 1982), pages 1-49.

⁵³ City of Milwaukee, "Historic Design Study Report North Point Water Tower," 1982, www.city.milwaukee.gov/imageLibrary, pages 1-3.

⁵⁴ John Goodell, Waterworks for Small Cities and Towns (New York: McGraw Hill Book Co., 1899), page 252.

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water supply held in the standpipe. Without that initial supply of pressurized water, the river water pumps alone could never have supplied that early amount.⁵⁵

Water tower forms changed over time. At first the iron standpipe, like Neillsville's first standpipe, gained popularity. Appearing as a chimney protruding from the ground, it was less popular aesthetically with citizens than the elevated water tower. By 1880, it was common for communities to construct some type of water storage. If a large elevated in-ground water reservoir was impractical due to topography of the area, the standpipe or water tower became the most cost effective solution. The elevated tank became the preferred choice over the standpipe, especially for capacities exceeding 40,000 gallons.⁵⁶ As F. E. Turneaure pointed out, water in the lower portion of a standpipe below a certain elevation is of no use in producing water pressure. It only supports the water above it.⁵⁷ This understanding of gravity and elevation working together to produce water pressure is what brought about placing the tank on such a level that all of the water in it is producing pressure.

The steel hemispherical bottom water tank was considered the standard of the industry from the late 1890s to 1940. The hemispherical form had the significant advantage of reducing stress. The tank shape made it easier to secure it to a tower or, as in this case, be connected to supporting concrete piers. The earliest examples of the hemispherical bottom tank were constructed of riveted plates, as is the case of the Neillsville tank. Steel tanks were recommended, as they are easily inspected, cleaned and painted. It was recommended in Public Water Supply, by F. E. Turneaure, that the elevated steel water tank had less trouble with ice sticking to the sides of the tank if it was encased in masonry or wood.⁵⁸ That is an important consideration due to the severity of Wisconsin's winters, and that recommendation was instituted by the City of Neillsville.

J. T. Fanning, in his book, A Practical Treatise on Hydraulic and Water Supply Engineering, suggested that a standpipe should be enclosed because it is vulnerable to high winds and tornadoes. The smooth cylindrical concrete encasing tower for the Neillsville water tank sheds wind and its in-ground construction prevents lift. Proof of Fanning's theory was seen in Barneveld, Wisconsin on June 8, 1984 when an F5 tornado leveled the community. The only structure that remained standing was the pedestal sphere water tower built by the Pittsburgh-Des Moines Steel Company.⁵⁹

⁵⁵ Clark County Press, Neillsville, Wisconsin, July 1, 1982, "Keepsake Centennial Edition," page 14.

⁵⁶ Edward Wegmann, Conveyance and Distribution of Water for Water Supply (New York: D. Van Nostrand, 1918), page 384.

⁵⁷ F. E. Turneaure, Public Water-Supplied (New York: John Wiley & Sons, 1910), pages 711-712.

⁵⁸ F. E. Turneaure, Public Water-Supplied (New York: John Wiley & Sons, 1910), page 714.

⁵⁹ Jim Foster, Towering Over America: The 100 Year History of Pitts-Des Moines, Inc. (Pittsburgh, PA.: Pitts-Des Moines, Inc., 1992), page 1.

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Neillsville Standpipe
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As cities and industry required larger and larger water supplies, the elevated water tower evolved into the pedestal sphere, the two million gallon spheroid elevated tank with multiple columns, and the hydropillar water tower which has one large pillar support. The hydropillar water tower can offer a capacity of up to four million gallons. The hydropillar design also offers inside space which can be used for multiple floors of offices with exterior windows.⁶⁰

Area of Significance: Architecture

The Neillsville Standpipe is locally significant because it embodies the distinctive characteristics of an early 20th century concrete encased standpipe which houses an elevated steel water tank. Placing a water vessel on elevated land in order to pressurize a community's water system through the use of gravity was a common practice in small towns in Wisconsin and across the nation. Neillsville's first standpipe held water throughout the pipe. However, after collapsing, a new design of standpipe was selected. Engineers recognized that water needed to be at a certain elevation in order for that water to provide pressure. All of the water below that designated level acts merely as a support for the water above,⁶¹ thus the Pittsburgh-Des Moines Steel Company recommended the selection of an elevated steel tank encased in a concrete shell. The shell furnished protection from the cold and also protected the interior tower from the pressure of the wind.

The interior cylindrical hemispherical bottomed water tank was the standard water tank being used in communities in their water systems from the 1890s to approximately 1940. Although the evolution of community water storage would continue into the 21st century, the hemispherical bottom water tower dominated the water works industry for nearly fifty years

In the late 19th and early 20th century the standpipe was the most economical and most commonly utilized water storage method in Wisconsin. The standpipe is significant as a town landmark and as an historic remnant which symbolizes community growth and prosperity. The Neillsville Standpipe continues to provide the water pressure necessary for both the consumer and the fire protection needs of the City of Neillsville. Once common landmarks in Midwest landscapes, these early standpipes are vanishing and are being replaced with larger double ellipsoidal, spheroid, pedestal sphere, and hydropillar tanks.

⁶⁰ CB&I Technologies & Services, "Hydropillar Elevated Tanks," www.cbi.com/technologies-services/hydropillar-elevated-tanks, page 1, accessed July 2012.

⁶¹ Frederick Eugene Turneause, Public Water Supplies: Requirements, Resources, and the Construction of Works (New York: John Wiley & Sons, 1914), pages 711-712.

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Neillsville Standpipe
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Area of Significance: Community Planning and Development

As populations of communities such as Neillsville expanded, it became necessary for elected officials to oversee the establishment of utilities such as electricity, water and sewer service. Citizens began to expect decent roads, fire and police protection and snow plowing. This need required governments to expand their role in the lives of their citizens. Taxes were levied, budgets were created, and regulations were established in order to provide the services that the tax payer expected.

The development of a municipal water works system was often the first public utility that required a city to levy property taxes. When a community developed water service it illustrated the progress that the community was making and dramatically changed the way people lived. The standpipe, as part of a water works system, was a symbol of municipal improvement and reflected the progressive outlook of its leaders.

The construction of the Neillsville Water Works accompanied by the erection of a standpipe as part of that water works system created an atmosphere of stability and safety. The Neillsville Standpipe is locally historically significant because of the role it has played in providing pressurized water service for both domestic use and for the fighting of fires.

Conclusion

The Neillsville Standpipe retains its historic components and historic integrity of design which represents a specific period in the evolution of water tower design and engineering. The water works system has played an important role in the growth and development of Neillsville. By its very visible nature the Neillsville Standpipe contributes to the identity of the community and is worthy of recognition by the State of Wisconsin and the National Park Service.

Preservation Activity

In 2002, the City of Neillsville received a grant from the National Parks Service to conduct an intensive survey of the city to determine what buildings and districts were considered to be potentially eligible for the National Register.⁶² In 2012, the city again received a Certified Local Government grant, this time to prepare National Register nominations based on the results of the 2003-2004 survey. Therefore, this nomination along with two other individual nominations was instructed to be prepared by the Neillsville Historic Preservation Commission with the support of the City of Neillsville.

⁶² Rebecca Bernstein, Neillsville Architectural Survey 2003-2004, pages 63, 64.

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Books

Andreas, A. T. History of Northern Wisconsin. Chicago: Western Historical Co., 1881.

Baker, Moses Nelson. The Manual of American Water Works. New York: Engineering News Publishing Co., 1897.

Curtiss-Wedge, Franklyn. History of Clark County Wisconsin. Chicago and Winona: H. C. Cooper, Jr. & Co., 1918.

Foster, Jim. Towering Over America, An Illustrated History of Pitts-Des Moines Inc. Pittsburgh, PA.: Pitt-Des Moines Inc., 1992.

Hill, William R. Some of the Early Methods of Collecting, Storing and Distributing Water. Syracuse, NY: E. M. Grover Printer & Binder, 1898.

Meyer, Henry C. The Engineering and Building Record and the Sanitary Engineer, Index to Volume XXI, "Competition for Pump Stations and Water Tower Design." New York, N.Y.: Henry C, Meyer, 1890.

Turneure, Frederick Eugene. Public-Water Supplies: requirements, resources and the construction of works, "Encased Standpipes." New York: John Wiley & Sons, 1914.

Suplee, Henry Harrison. The Engineering Magazine, an Industrial Review – The Engineering Index 1896-1900. New York: The Engineering Magazine, New York, 1901.

Versteeg, Jean D. The History of the Pittsburgh-Des Moines Corporation, 1892-1981. Pittsburgh: The Corporation, 1982.

Newspapers

Clark County Press, July 1, 1982, "Keepsake Centennial Edition," page 2, 6, 14, 52, 54-59.

Clark County Press, "Good Old Days," June 28, 2000, page 9.

Neillsville Press, March 25, 1926.

Neillsville Press, June 10, 1926.

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Neillsville Press, August 12, 1926.

Neillsville Press, August 26, 1926.

Neillsville Republican and Press, April 27, 1889.

Neillsville Republican and Press, February 22, 1890.

Neillsville Republican and Press, May 15, 1890.

Neillsville Republican and Press, May 22, 1890.

Neillsville Republican and Press, May 29, 1890.

Neillsville Republican and Press, June 5, 1890.

Neillsville Republican and Press, March 26, 1891.

New York Times, June 28, 1887.

Neillsville Times, June 5, 1890.

Neillsville Times, "27th Anniversary Issue," January 4, 1906.

Wisconsin State Journal, "The Story of a Wisconsin Community," October 3, 1930.

Bulletins, brochures, booklets, bids, blueprints, journals, maps

City of Neillsville, Chart of Capacity, Head Feet and Pressure, July 23, 1945.

Lane Tank Company Proposal, September 16, 1974.

National Steel Bridge Alliance Award Winners, www.aisc.org/contentNSBA.aspx?is=21370, page 1, accessed June 2012.

Neillsville Municipal Water Study, prepared by Rust Engineering, April 1998.

Steel Tank on Concrete Tower Erection Diagram, June 2, 1926. Pittsburgh, PA: Pittsburgh-Des Moines Co.

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Sanborn Fire Insurance Map for Neillsville, WI, October 1892.

Sanborn Fire Insurance Map for Neillsville, WI, December 1914.

Sources Specific to Wisconsin Historical Society, National Parks Service

Bernstein, Rebecca, Neillsville Architectural Survey 2003-2004.

Wisconsin Historical Society, "The Introduction of Electrical Power,"
http://www.wisconsinhistory.org/turningpoints/tp-041?action-more_essay, page 1, accessed July 2012.

Wyatt, Barbara, ed. Cultural Resource Management in Wisconsin. Madison: State Historical Society, 1986.

Web addresses

CB&I Technologies & Service, "Hydropillar Elevated Tanks," www.cbi.com/technologies-services/hydropillar-elevated-tanks, page 1, accessed July 2012.

City of Milwaukee, "Historic Design Study Report North Point Water Tower," 1982,
www.city.milwaukee.gov/imageLibrary, pages 1-3.

John W. "Tom" Hommel, <http://www.spanamwar.com/3rdWischommel.html>, pages 1-3, accessed July 2012.

Tayler, Thomas W., "Slipformed Core Construction,"
[www.datumengineers.com/assets/files/slipform%20Core\(1\).pdf](http://www.datumengineers.com/assets/files/slipform%20Core(1).pdf), page 1, accessed July 2012.

SMA Associates Construction, "Slipform Concrete Silo Construction,"
smadesignbuild.com/Projects/SlipformSilos.php, page 1, accessed July 2012.

Individual recounts

Mickey Marty, Neillsville Water Utility, ca. July 2012 interview by nomination author.

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Neillsville Standpipe
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Verbal Boundary Description:

Lot 100 EX E 70' Hewett's Addition of Out lots City of Neillsville

Boundary Justification:

This correlates to the Neillsville Republican and Press May 29, 1890 newspaper notice for the condemning of Lot 100 of Hewett's addition of out lots owned by James and Emiline Hewett for the purpose of the erection of a standpipe. This continues as the parcel associated with the standpipe.

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Neillsville Standpipe
Neillsville, Clark County, Wisconsin

Name of Property:	Neillsville Standpipe
City or Vicinity:	Neillsville
County:	Clark
Name of Photographer:	Patricia Lacey
Date of Photographs:	July 2012
Location of Original Digital Files:	W5055 US HWY 10 Neillsville, WI 54456
Number of Photographs:	8

Photo #1 of 8
Southeast facing elevation, camera facing northwest.

The information for the following photographs is the same as the above, except as noted.

Photo #2 of 8
Northeast facing elevation, camera facing southwest.

Photo #3 of 8
South facing entry, camera facing northwest.

Photo #4 of 8
Suspended hemispherical tank bottom, 72" riser pipe, camera facing northwest.

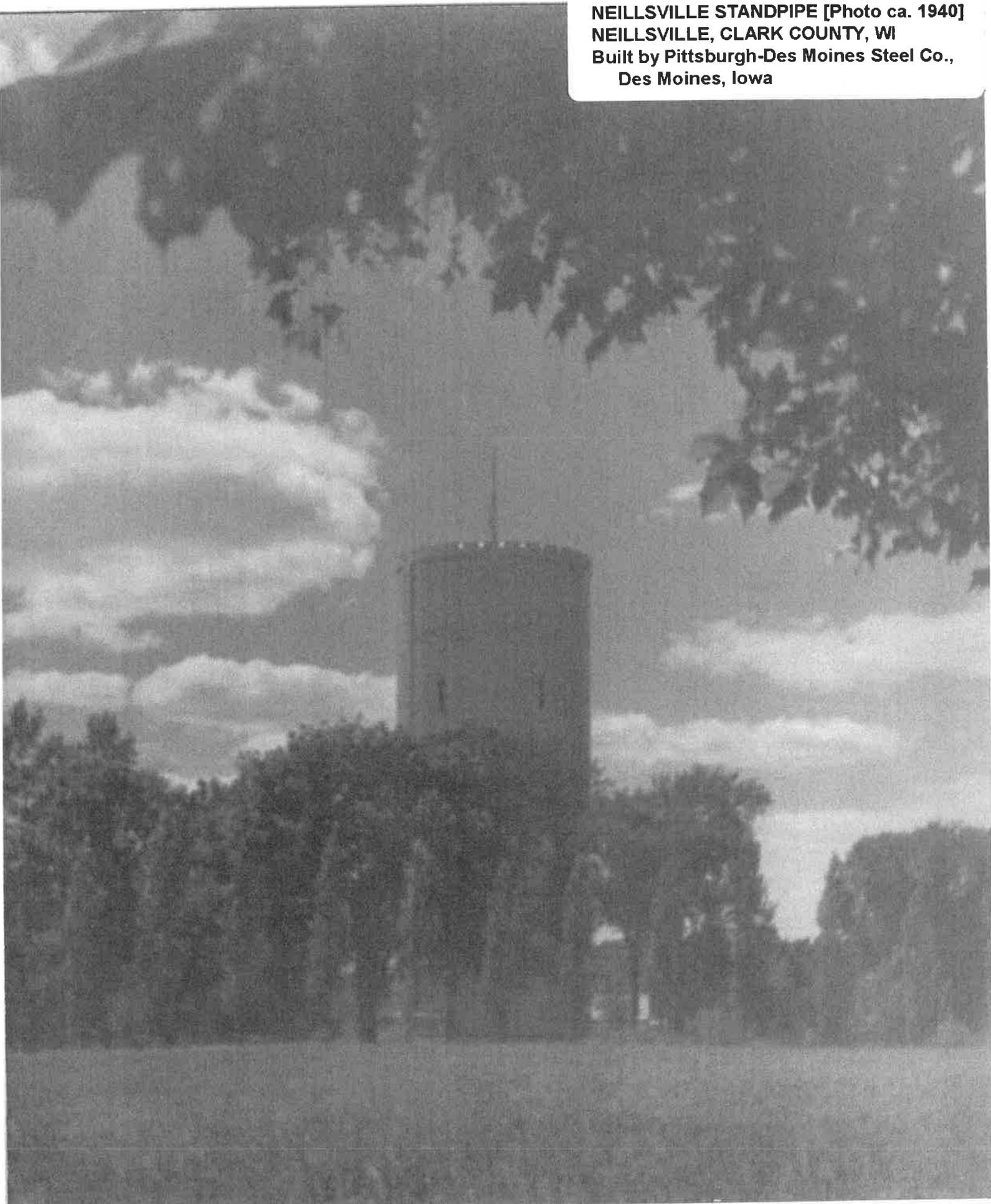
Photo #5 of 8
Short leg of tank resting on concrete pier, camera facing northwest.

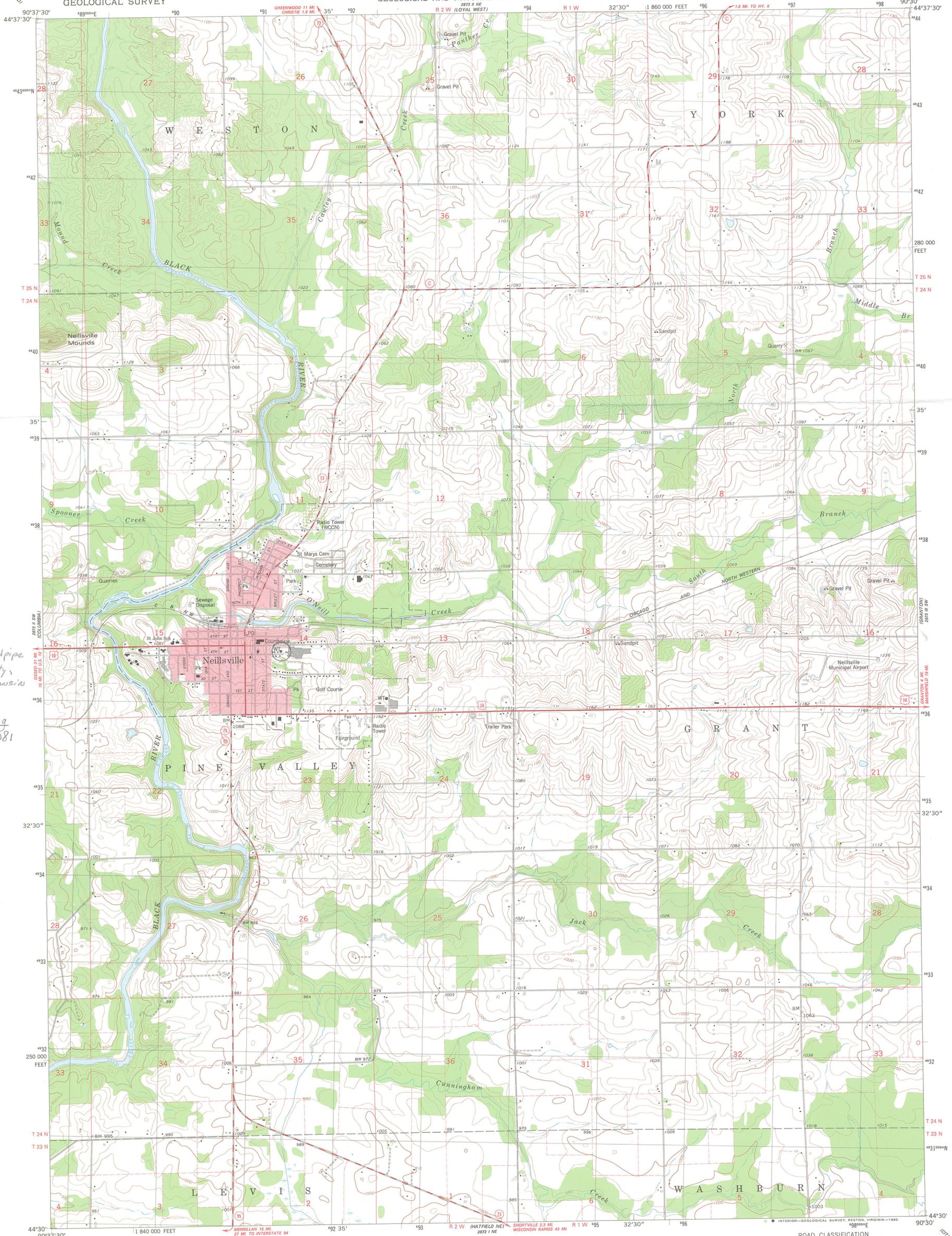
Photo #6 of 8
Slipform notations, camera facing northeast.

Photo #7 of 8
East facing elevation Booster Station, camera facing west.

Photo #8 of 8
Booster Pumps, camera facing southwest.

EXHIBIT #1:
NEILLSVILLE STANDPIPE [Photo ca. 1940]
NEILLSVILLE, CLARK COUNTY, WI
Built by Pittsburgh-Des Moines Steel Co.,
Des Moines, Iowa

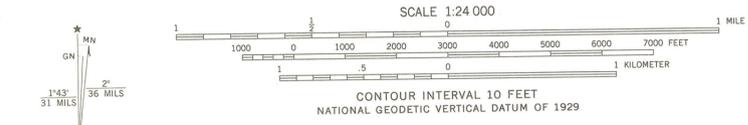




Neillsville Standpipe
Neillsville, Clark County,
Wisconsin

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Mapped, edited, and published by the Geological Survey in cooperation with the Wisconsin Division of Highways and Wisconsin Geological and Natural History Survey. Control by USGS and NOS/NOAA. Topography by photogrammetric methods from aerial photographs taken 1976. Field checked 1977. Map edited 1979. Projection and 10,000-foot grid ticks: Wisconsin coordinate system, central zone (Lambert conformal conic) 1000-meter Universal Transverse Mercator grid, zone 15 1927 North American Datum. To place on the predicted North American Datum 1983 move the projection lines 6 meters north and 11 meters east as shown by dashed corner ticks. Red tint indicates area in which only landmark buildings are shown. Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked.



ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route
	State Route

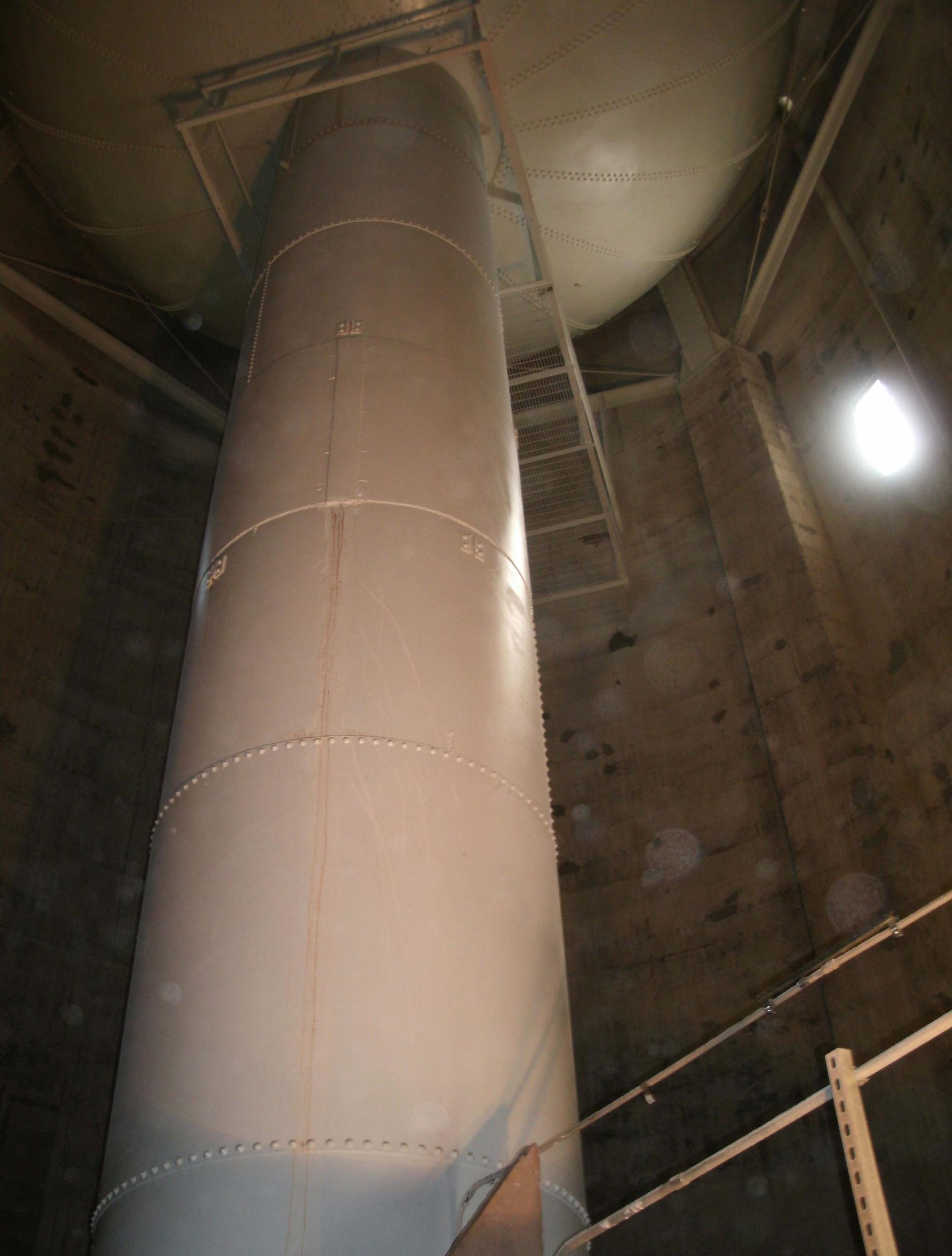
NEILLSVILLE, WIS.
86/4 NEILLSVILLE 15' QUADRANGLE
N4430-W9030/7.5
1979
DMA 2873 11 8E-SERIES V861

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092 AND WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY, MADISON, WISCONSIN 53706 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST











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