FHR-8-300 (11-78)

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Madison Water Works

and/or common Nichols Station

2. Location

street & number North Hancock Street ___ not for publication

city, town Madison ___ vicinity of congressional district Second

state Wisconsin code 55 county Dane code 013

3. Classification

Category	Ownership	Status	Present Use	
___ district	___ public	___ occupied	___ agriculture	___ museum
_x_ building(s)	___ private	_x_ unoccupied	___ commercial	___ park
___ structure	_x_ both	___ work in progress	___ educational	___ private residence
___ site	**Public Acquisition**	**Accessible**	___ entertainment	___ religious
___ object	___ in process	___ yes: restricted	___ government	___ scientific
	___ being considered	___ yes: unrestricted	___ industrial	___ transportation
		___ no	___ military	_x_ other: being developed for multi-use

4. Owner of Property

name City of Madison, Joel Skornicka, Mayor

street & number Room 403, City-County Building, 210 Monona Avenue

city, town Madison ___ vicinity of state Wisconsin 53709

5. Location of Legal Description

courthouse, registry of deeds, etc. Register of Deeds, City-County Building

street & number 210 Monona Avenue

city, town Madison state Wisconsin 53709

6. Representation in Existing Surveys

title Wisconsin Inventory of Historic Places has this property been determined elegible? ___ yes _x_ no

date 1974 ___ federal _x_ state ___ county ___ local

depository for survey records State Historical Society of Wisconsin

city, town Madison state Wisconsin 53706

7. Description

Condition		Check one	Check one
___ excellent	___ deteriorated	___ unaltered	_x_ original site
_x_ good	___ ruins	_x_ altered	___ moved date _____
___ fair	___ unexposed		

Describe the present and original (if known) physical appearance

The Madison Water Works building is a reinforced concrete and brick industrial-type structure approximately 134 feet by 109 feet in area. The easternmost third of the building, the boiler room section, is approximately sixty feet tall, twice as tall as the remaining two thirds. The building occupies the block bounded by Johnson, Gorham, Hancock, and Franklin Streets, in a primarily residential neighborhood. The building has an uninterrupted view of Lake Mendota across James Madison Park.

The building is veneered with tan brick. Horizontal joints are of raked colored mortar, while vertical joints are narrower and of flush neutral mortar. False turret gables, copings, guttae and many other trim pieces are of stone. Doors as well as window frames and mullions are of metal; all windows have multiple panes. The entire building rests on a battered foundation of concrete, 2½ feet of which is visible above ground. With the exception of the monitor above the boilerroom section, all roofs are concealed from view from ground level behind parapets, decorative gables, and false turrets. All roofs, including the monitor, are shallow-pitched and supported by steel trusses. A smokestack that stood in an alcove on the Franklin Street side of the building was removed several years ago.

The main, Hancock Street, facade is organized symmetrically into five bays, with a central entryway flanked by two windows on a side. The windows are set in larger panels of recessed brickwork. The entryway projects slightly from the plane of the facade. Stone capped pilasters and a lintel of vertically coursed brick frame the doorway of multiple-paned windows and paired doors. Above the entryway, a decorative gable is set off from the parapet by crenels. Similarly, crenels set off the false turrets at the corners of the building. Distinctive triplets of guttae that flare at the foot accent the turrets. Above the outer bays, and turning the corners of the building, are decorative horizontal bands of brick and stonework that terminate in tees. The vertical portions of the tees are repeated across the facade, accenting the window panels of the other bays. These stylistic elements are repeated in the other facades, although in these, symmetry often is sacrificed to utility.

The taller boiler room section dominates the entire building. Its monitor roof gives it distinct gable ends facing Hancock and Franklin Streets. The gables are flanked by false turrets that are separated by crenels. The sides of the monitor are entirely fenestrated. Between turrets, parapets decorated with brick and stonework run uninterrupted the length of the section. Beneath the turrets, this decoration becomes horizontal bands that turn the corners to terminate in tees on the gable ends. The Gorham Street side of the boiler section has eight tall narrow windows in recessed panels; these are organized symmetrically in pairs. The Johnson Street side has no windows, but has three squat recessed panels.

Inside the boiler section, the reinforced concrete coal hopper runs the length of the Johnson Street side of the section, supported thirty to forty feet above the floor of concrete pillars. Of the boilers that lined the other side of the room, only one remains.

The pump room, on the Gorham Street side of the building, originally contained a a pair of twin Allis-Chalmers corliss-type steam powered pumping units, each having a rated capacity of eight million gallons per day. One of the engines recently was removed to the House on the Rock, a tourist attraction in Iowa County, where it will be on public display. The remaining engine is approximately twenty-six feet long and twelve feet wide; its flywheel is about ten feet in diameter. The engine weights about 105 tons. At full throttle it demands 150 psi of live steam and is capable of 40 rpm.

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National Register of Historic Places Inventory—Nomination Form

Madison Water Works, Madison, WI

Gary Divall
Gary G. Divall Company
111 North Pinckney Street
Madison, Wisconsin 53703

Val Dunis
Bruce Zahn
Space Partnership
110 King Street
Madison, Wisconsin 53703

Gary Graham
Madison Water Utility
523 E. Main Street
Madison, Wisconsin 53703

8. Significance

Period	Areas of Significance—Check and justify below				
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion	
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science	
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture	
___ 1600–1699	___ architecture	___ education	___ military	___ social/ humanitarian	
___ 1700–1799	___ art	X engineering	___ music	___ theater	
___ 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ transportation	
X 1900–	___ communications	___ industry	X politics/government	___ other (specify)	
		___ invention			

Specific dates 1917 **Builder/Architect** Balch & Lippert; Mead & Seastone, engineers

Statement of Significance (in one paragraph)

The Madison Water Works (Nichols Station) is significant to the public works history of Madison as a facility that played an important role in the development of the city's water supply system. The building is of architectural interest as its design reflects the influence of the Prairie School employed in an industrial-type structure. Its stylistic elements have become a kind of architectural trademark for the city's water supply system as they have been employed in most of the system's later buildings. The Nichols Station building is little altered from the time of its construction. The station retains one of its original twin Allis-Chalmers steam-driven pumping engines, a massive machine which has been described by the Historic American Engineering Record (HAER) as "of great significance in representing Wisconsin's municipal engineering heritage. . . . There are relatively few examples of large steam pumping engines that still survive in the United States, and every effort should be made to preserve those that remain" (letter, Douglas. L. Griffin, Chief, HAER, to Richard Erney, Wisconsin SHPO, May 2, 1979). Because of the importance of the engine, the station is nominated at the state level of significance.

The planning of a new water works for the City of Madison began in 1914 when the inadequacy of the existing water supply system became apparent. The plan called for the replacement of the previously used artesian wells with water from Lake Mendota as the primary supply, and for the erection of a new pumping station on the site of the existing station. The project became a major turning point in the development of Madison's water utility. Also, it was of such technological importance that it was written up in Power a national engineering professional journal (Power, L:4, July 22, 1919).

The architectural firm of Balch & Lippert, which had offices on State Street in Madison between 1917 and 1919, designed the water works building. Construction began in May 1917 (ibid., p. 130). The new structure was built around, and eventually enclosed the still-operating old pumping station. Balch & Lippert employed stylistic elements suggestive of the Prairie School in the utilitarian structure. The parapeted roofline is broken by decorative gables and false turrets that suggest low-pitched rooflines. The turrets are accented by stone guttae, as was the smokestack which has since been removed. The tan brickwork suggests horizontality through the contrast of raked horizontal joints of colored mortar with narrower flush vertical joints of neutral mortar. The stylistic influence of Balch & Lippert's design is evident in the designs of most subsequent water utility facilities built in Madison until recently.

Daniel W. Mead and Charles V. Seastone, of Madison, were selected as project engineers. (Mead, an expert in hydraulic engineering, later advised the federal government on the construction of the Hoover Dam; Lake Mead, which was created by the dam, is named in his honor.) Their task was complicated by the need to construct an entirely new facility on the site of the old pumping station without seriously interrupting the supply of water to the city. A pair of Allis-Chalmers steam-driven pumping units, of eight-million gallon per day capacity each, were selected as the main pumps. The first went into operation in 1918, and the second three years later. Coal-fired boilers fed from a huge hopper supplied steam to the engines. The spent steam was used to heat municipal buildings north of the Capitol. The new Madison Water Works was the sole pumping station for the city until 1923 when the first of a series of local unit pumps was added to the system. The main works, later renamed Nichols Station, continued in operation until 1976.

Although the city itself had no further use for Nichols Station, it recognized its

9. Major Bibliographical References

(see continuation sheet)

10. Geographical Data

UTM NOT VERIFIED
ACREAGE NOT VERIFIED

Acreage of nominated property .393 acres

Quadrangle name Madison West Quadrangle scale 1:24000

UMT References

	Zone	Easting	Northing
A	16	306000	4771260
B			
C			
D			
E			
F			
G			
H			

Verbal boundary description and justification
the nominated property is the building and equipment and 10 feet of land extending in all directions from the building, located in Block 264 of the original plat of the city of Madison, Wisconsin.

List all states and counties for properties overlapping state or county boundaries

state	code	county	code
state	code	county	code

11. Form Prepared By

name/title David Donath, Historian

organization date April 1980

street & number General Delivery telephone 414/526-3551

city or town Greenbush state Wisconsin 53026

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national _X_ state ___ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature Richard Rumy

title Director, State Historical Society of Wisconsin date 4/28/80

For HCRS use only

I hereby certify that this property is included in the National Register

for Keeper of the National Register W. Ray Luce date 8/18/80

Attest: Kristin T. O'Connell date 8/8/80

~~Chief of Registration~~

GPO 938 835

8. SIGNIFICANCE, continued

historic and architectural value and sought a developer with a plan to reuse the station in a sensitive manner. The developers that the city selected plan to convert the interior space to office, residential, and recreational use while making few exterior alterations. They intend to keep the remaining pumping engine in place. Listing in the National Register will enable them to apply for the benefits of the Tax Reform Act of 1976.

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Allis-Chalmers Manufacturing Company, Horizontal Pumping Engines: Details and Parts, Bulletin #1645, May 1929.

Brania, Jerzy W., interview, February 11, 1980.

_____, "Pumps from the Past," This is Madison, July 1976.

Griffin, Douglas L., to Richard Erney, May 2, 1979.

Madison Water Utility, original architectural plans and engineering studies for the Madison Water Works, 1916-1919.

"The New Madison Water Works," Power, L:4, July 22, 1919.

Nichols Station, prospectus, Real Estate Division, City of Madison, n.d. (1978?).

Smith, Leon Albert, A Brief Historical Sketch of the Madison Waterworks (Madison, 1939).