FHR-8-300 (11-78)

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

For HCRS use only
received APR 28 1982
date entered MAY 27 1982

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

1. Name

historic Marston Water Tower

and/or common

2. Location

street & number Marston Drive, Riggs Street, Iowa State University ___ not for publication

city, town Ames ___ vicinity of congressional district 5

state Iowa code 19 county Story code 169

3. Classification

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

4. Owner of Property

name Iowa State Board of Regents

street & number 6th Floor, Lucas Building

city, town Des Moines ___ vicinity of state Iowa

5. Location of Legal Description

courthouse, registry of deeds, etc. Registry of Deeds

street & number Story County Courthouse

city, town Nevada state Iowa

6. Representation in Existing Surveys

title Iowa Windshield Survey; Historic American Buildings Survey has this property been determined elegible? ___ yes _x_ no

date 1976; 1971 _x_ federal _x_ state ___ county ___ local

depository for survey records Division of Historic Preservation; Historic American Buildings Survey

city, town Iowa City; Washington state Iowa; D.C.

7. Description

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

Describe the present and original (if known) physical appearance

Since its construction in 1897 the Marston Water Tower has been an Iowa State University at Ames landmark. This 168 feet tall edifice is not only the oldest structure on campus, but the tallest as well. Its superstructure rests on concrete piers that have limestone capstones. Dimensions from capstones to balcony are 110 feet; balcony floor to top edge of tank, 40 feet; and from top edge of tank to center point of roof, 18 feet. The diameters of the base and tank are 62 and 24 feet respectively. A rather unique feature of the tank is the frostproofing apparatus for the inlet pipe to the tower. It features a heating chanber in which a fire can be built. The smoke and hot air heat the air in the dead space around the pipe and is vented at the base of the tank. Water storage capacity is 162,000 gallons.

The utilitarian function of the water tank is belied by the curved outlines of the tower proper, balcony, hemispherical bottom, roof cornice, and curved roof, all constructed of iron and steel, which unify and enhance it architecturally. Changes to the tower over the years have been minimal. In 1916 a water filtration system was added, and in 1973 it was cleaned, welded, and coated on the inside, as well as scraped and painted outside. Since 1978 the tower has set empty, but there is a proposal currently under discussion to clean, weld, coat, and paint the tower, leaving it fit to use in emergencies.

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		
_x_ 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ theater	
_x_ 1900–	___ communications	___ industry	___ politics/government	___ transportation	
		___ invention		___ other (specify)	

Specific dates 1897-present **Builder/Architect** Anson Marston

Statement of Significance (in one paragraph)

The Marston Water Tower is belived to be one of the earliest, if not the first, steel water tower constructed west of the Mississippi River. Professor Anson Marson, first dean of Iowa State's College of Engineering, was the person most responsible for the tower's erection. After the college's wells began drying up in 1892, Marston prepared plans for a waterworks system, but the legislature turned a deaf ear. Four years later, however, when the college closed due to water shortages, enough money was appropriated to begin construction of Marston's system.

Professor Marston was design engineer for the water tower, and he planned it to "serve as an object lesson, both to citizens of the state and to hundreds of young engineers." Its height and capacity were monumental for that time, but were considered necessary for a thriving campus. To provide a durable structure Marston built the tank of steel instead of the wood usually used at that time, and he doubled the minimum strength of the tower for stability. All materials and methods used in construction were subjected to complete testing before, during, and after erection to permit excellence in performance. In order to prevent freezeups, Marston designed a frostproofing apparatus for the inlet pipe to the tower, which was considered quite an innovation for the time.

Marston was assisted on the project by C. W. McMeekin, who acted as consulting engineer. Crellin & Lovell of Des Moines were contractors for the foundation which cost $1,150.42. The King Bridge Company of Cleveland, Ohio, contracted for the rest of the work, for which they recieved $8,966.

9. Major Bibliographical References

Chapman, Sue, "A Towering Achievement," Iowa Engineer (October 1980), 18-19, 30.

Day, H. Summerfield, The ISU Campus and its Buildings, 1859-1979 (Ames: Iowa State University, 1980).

10. Geographical Data

Acreage of nominated property less than one acre

Quadrangle name Ames West **Quadrangle scale** 1:24,000

UMT References

	Zone	Easting	Northing
A	15	446110	4652710
B			
C			
D			
E			
F			
G			
H			

Verbal boundary description and justification NE 1/4 of the SW 1/4 of Section 4 T83N R24W

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

state	N. A.	**code**	**county**	**code**
state		**code**	**county**	**code**

11. Form Prepared By

name/title Ralph J. Christian, Architectural Historian

organization Division of Historical Preservation **date** April 1982

street & number 26 East Market Street **telephone** 319/353-4186

city or town Iowa City **state** Iowa

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 Adrian D. Anderson

title Director **date** April 14, 1982

For HCRS use only

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

William H. Brannan **date** 5-27-82

Keeper of the National Register

Attest: **date**

Chief of Registration

GPO 938 835

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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Major Bibliographical References cont.

Iowa State Daily, June 29, 1972; August 7, 1975.

Marston, Anson, "Engineer's Report on Waterworks" in 17th Biennial Report of the ISU College of Agriculture and Engineering Sciences (Des Moines: FR. R. Conaway, Printer, 1896-1897), 39-37.

_____, Engineering News and American Railway Journal, June 9, 1898, 371-73.