

CONTRIBUTING RESOURCE
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property Name: Greensboro water tank Survey Number: NA/CAR-295

Property Address: 104 Academy Street, Greensboro

Project: Proposed replacement of water tank Agency: F/RECD

Site visit by MHT Staff: no yes Name _____ Date _____

District Name: Greensboro Historic District Survey Number: NA/CAR-264

Listed Eligible DOE by JEF/RLA in 1991 Comment _____

Criteria: A B C D Considerations: A B C D E F G None

The resource contributes/_____ does not contribute to the historic significance of this historic district in:

Location Design Setting Materials

Workmanship Feeling Association

Justification for decision: (Use continuation sheet if necessary and attach map)

Built in 1914 by the Pittsburgh-Des Moines Steel Company, the 50,000 water tank represents the early twentieth century growth of this rural Eastern Shore community. Serving a local market center in the nineteenth century, Greensboro improved its economy in the early twentieth century by attracting food processing plants and manufacturing. The water tank provided the expanding community with a reliable source of potable water and fire protection. In addition, the Greensboro tank embodies distinctive characteristics of elevated storage tanks of the early twentieth century (four post, steel construction, riveted riser pipe, and hemispherical bottom tank). In my opinion, the water tank contributes to the Greensboro Historic District.

Documentation on the property is presented in: compliance file "Greensboro Water Tank info on water storage in "The Architecture & Engineering of Elevation Water Storage Struct."

Prepared by: Diane Ewing, Town Manager, Carol Ann Dubie (MHT library J 5.11)

Lauren Bowlin 11/24/95
Reviewer, Office of Preservation Services Date

NR program concurrence: yes no not applicable

Peter A. Purdy 11/24/95
Reviewer, NR program Date

Smg

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

Eastern Shore (all Eastern Shore counties, and Cecil)
 Western Shore (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
 Piedmont (Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
 Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

Paleo-Indian 10000-7500 B.C.
 Early Archaic 7500-6000 B.C.
 Middle Archaic 6000-4000 B.C.
 Late Archaic 4000-2000 B.C.
 Early Woodland 2000-500 B.C.
 Middle Woodland 500 B.C. - A.D. 900
 Late Woodland/Archaic A.D. 900-1600
 Contact and Settlement A.D. 1570-1750
 Rural Agrarian Intensification A.D. 1680-1815
 Agricultural-Industrial Transition A.D. 1815-1870
 Industrial/Urban Dominance A.D. 1870-1930
 Modern Period A.D. 1930-Present
 Unknown Period (prehistoric historic)

III. Prehistoric Period Themes:

Subsistence
 Settlement
 Political
 Demographic
 Religion
 Technology
 Environmental Adaption

IV. Historic Period Themes:

Agriculture
 Architecture, Landscape Architecture, and Community Planning
 Economic (Commercial and Industrial)
 Government/Law
 Military
 Religion
 Social/Educational/Cultural
 Transportation

V. Resource Type:

Category: structureHistoric Environment: villageHistoric Function(s) and Use(s): elevated water storage tankKnown Design Source: Pittsburgh-Des Moines Steel Company

CAR - 295
Greensboro Water Tank
Parcel 1033, Academy Avenue
Greensboro
Caroline County

The Greensboro Water Tank is a 50,000 gallon steel tank constructed in 1914. It was part of the town's original water works system, engineered by H.T. Downing and installed by E.L. Jones & Company of Dover, Delaware. The tank itself was manufactured by Pittsburgh-Des Moines Steel Company. The tank sits just west of the town's main intersection, on a residential street. The structure is elevated 90 feet above ground, features a conical roof, and is made of riveted steel. It is supported on four concrete piers that support tall, braced legs. A concrete pad grounds the 36-inch central riser pipe. The riser pipe leads to the tank shell, also made of lap-riveted steel plates. The tank roof is made of riveted steel plates which have corroded severely, causing perforation in places. A small metal plaque at the base of the southwest leg identifies the date of construction and manufacturer of the tank. In the second decade of the 20th century, the town commissioners introduced electricity and water into Greensboro. These public works initiatives reflected the prosperity of the small town at a time when the canning industry was at its peak. The town's original pumps were modified in the 1930s due to flooding, but the system didn't receive a true overhaul until the 1970s, when pumping station equipment was replaced. In 1981, a larger tank was built farther west in the town and the original tank was taken out of service in 1993. With the construction of a second, 150,000 gallon tank on the east side of town scheduled for 1996-97, the original tank will be demolished.

Maryland Historical Trust State Historic Sites Inventory Form

MARYLAND INVENTORY OF
HISTORIC PROPERTIES

Magi No. DOE yes no

1. Name (indicate preferred name)

historic Greensboro Water Tank

and/or common Greensboro Water Tank

2. Location

street & number Academy Street, north of Sunset Avenue not for publication

city, town Greensboro vicinity of congressional district 1st

state Maryland county Caroline

3. Classification

Category	Ownership	Status	Present Use
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture <input type="checkbox"/> museum
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial <input type="checkbox"/> park
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational <input type="checkbox"/> private residence
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment <input type="checkbox"/> religious
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input type="checkbox"/> yes: restricted	<input type="checkbox"/> government <input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input checked="" type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial <input type="checkbox"/> transportation
	<input type="checkbox"/> not applicable	<input type="checkbox"/> no	<input checked="" type="checkbox"/> other: public

4. Owner of Property (give names and mailing addresses of all owners ^{works})

name Commissioners of Greensboro

street & number P.O. Box 340 telephone no.: 410-482-6222

city, town Greensboro state and zip code Maryland 21639

5. Location of Legal Description

courthouse, registry of deeds, etc. Caroline County Land Records liber 77

street & number folio 55

city, town state

6. Representation in Existing Historical Surveys

title

date federal state county local

pository for survey records

city, town state

7. Description

Survey No. CAR - 295

Condition		Check one	Check one	
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input checked="" type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site	
<input type="checkbox"/> good	<input type="checkbox"/> ruins	<input type="checkbox"/> altered	<input type="checkbox"/> moved	date of move _____
<input checked="" type="checkbox"/> fair	<input type="checkbox"/> unexposed			

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

See Continuation Sheets for Narrative.

8. Significance

Survey No. CAR-295

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

Specific dates 1914 **Builder/Architect** Pittsburgh-Des Moines Steel Co.

check: Applicable Criteria: A B C D
and/or
Applicable Exception: A B C D E F G
Level of Significance: national state local

Prepare both a summary paragraph of significance and a general statement of history and support.

See Continuation Sheets for Narrative

9. Major Bibliographical References

Survey No. CAR-295

See Continuation Sheets

10. Geographical Data

Acreeage of nominated property 100' x 132' lot

Quadrangle name Denton

Quadrangle scale 1:24000

UTM References do NOT complete UTM references

A	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Zone	Easting	Northing

B	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Zone	Easting	Northing

C	<input type="text"/>	<input type="text"/>	<input type="text"/>
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D	<input type="text"/>	<input type="text"/>	<input type="text"/>
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E	<input type="text"/>	<input type="text"/>	<input type="text"/>
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F	<input type="text"/>	<input type="text"/>	<input type="text"/>
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G	<input type="text"/>	<input type="text"/>	<input type="text"/>
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H	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Verbal boundary description and justification

Parcel 1033 shown on the Greensboro Town Map 300, Grid 9

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 Elizabeth Jo Lampl, Architectural Historian

organization Lampl Associates date 8/5/96

street & number 5111 Allan Terrace telephone (301)-320-9054

city or town Bethesda state MD

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
Shaw House
21 State Circle
Annapolis, Maryland 21401
(301) 269-2438

MARYLAND HISTORICAL TRUST
DHCP/DHCD
100 COMMUNITY PLACE
CROWNSVILLE, MD 21032-2023

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM
CAR-295**

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 7.1

DESCRIPTION

The Greensboro Water Tank is a 50,000 gallon tank constructed in 1914 as part of Greensboro's first water works. The water works system was designed by H.T. Downing, a local engineer, and constructed and installed by E.L. Jones & Company of Dover, Delaware. The tank itself was supplied by the Pittsburgh-Des Moines Steel Company. The tank is located on Parcel 1033, just northwest of the main intersection of the town of Greensboro, in Caroline County. It stands on a residential street, surrounded by houses from the late 19th and early 20th centuries. The tank is part of a National Register-eligible district in the core part of town determined by the Maryland Historical Trust. In addition to the tank, a small brick pump house stands on the parcel, built in the 1970s.¹

The water tank is elevated 90 feet above ground, features a conical roof, and is made of riveted steel. (See Figure 1.) It is supported on four 3'-0" x 3'-0" concrete piers spaced 31'-6" on center. Four tank legs rise from the piers. At the base of the southwest leg is a small cast-iron plaque identifying the tank's manufacturer as the Pittsburgh-Des Moines Steel Company, and the date of construction as 1914. The tank's legs consist of two, 12" channels spaced 8" apart laced with 2"-wide flatbar. The legs feature three bays of both vertical and horizontal cross-bracing and all connections are riveted. A 5'-0" x 5'-0" concrete pad grounds the central riser pipe. The riser pipe is 36" in diameter and is fabricated from lap-riveted plates. The riser pipe leads to the tank element itself, also made of lap-riveted steel plates. The bottom of the tank is hemispherical. One-third of the way up the tank is a circumferential walkway with a trussed handrail. "Greensboro" is painted in white letters across the tank's walls. The tank roof is made of riveted steel plates which have corroded severely, causing perforation in places. A ladder accesses the tank's roof and is supposed to rotate around its finial, but is neither safe nor rotating properly. Other appurtenances at the tank level include a riveted nozzle near the top on the west side and a roof hatch which provides entry into the tank.

¹ According to the town's former engineer, this pump house and well were likely added to produce ground water to run through a disinfection tank. Currently, it is used as a back-up pump for the main, should the town's newer Hobbs Street pump break down.

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CAR-295

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 7.2

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA

HISTORIC CONTEXT:

Geographic Organization: Eastern Shore

Chronological/Development Periods: Industrial/Urban Dominance

Prehistoric/Historic Period Theme: Architecture, Landscape Architecture, and
Community Planning

Resource Type:

Category: structure

Historic Environment: village

Historic Function and Use: water tank

Known Design Source: H.T. Downing - (water works engineer); E.L. Jones &
Company (contractors); Pittsburgh-Des Moines Steel Company (tank constructing
engineers).

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM**

CAR-295

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 8.1

SIGNIFICANCE

Summary

The Greensboro Water Tank, erected in 1914, is the signature element in the town's original water works. The tank is historically significant for its association with the introduction of the first public water works system into the town in 1914. The tank reflects the need for public services for Greensboro residents during a period of growth spawned by the canning industry. The tank is eligible for listing on the State Inventory of Historic Sites under Criteria A at the local level. The 1914 water works originally consisted of two wells, a pumping station, a piping system, and an elevated water tower. Of these elements, one of the original wells is still in operation, pumping stations have been replaced with newer structures, piping has been changed, and the tank remains virtually unchanged from its original appearance. The tank reflects the workmanship of three parties: a local engineer who prepared the specifications, a Delaware engineering firm which served as contractor, and a large steel manufacturing concern which supplied the tank.

History of Greensboro

The town of Greensboro is situated in the northern sector of Caroline County on the Eastern Shore, near the headwaters of the Choptank River at the junction of Maryland Routes 313, 314, and 480. Greensboro's first white settlers established themselves as tobacco farmers in the mid-17th century. Most of the land comprising the town dates to patents granted between 1665 and 1695.² The first known bridge in the immediate area erected over the Choptank River was constructed prior to 1732, and was known as the Choptank Bridge. It likely facilitated the rolling of hogsheads of tobacco down to the river for transport. The area surrounding the bridge became known colloquially as "Choptank Bridge" although this settlement was undoubtedly too small to appear on maps of the area at the time. (See Figure 2.)

In 1732, the first attempt to lay out a town in the area took place. This urban settlement was to consist of 40 acres; 20 acres flanking each side of the bridge. This land was to be divided

² Eleanor F. Horsey, *Origins of Caroline County, Maryland, from Land Plats, Volume 1*, Denton, Mar.: 1974, pp. 37-43.

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM**

CAR-295

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 8.2

into one-acre lots for sale. The town was to be known as "Bridge Town." The declining tobacco market proved deadly to the hopes of the town's planners, however, and very few lots were purchased, or houses erected, within the 18-month period set for creation of the town. Thus, "Bridge Town" at this site never materialized.

The farmers that lived in the countryside surrounding the bridge turned to wheat exporting as an alternative to tobacco at this time. Residents developed a system for moving the area's inland wheat to market. Wheat from Choptank Bridge was moved first to Delaware by overland trade routes, or "portage," then taken up to Philadelphia via boat on the Delaware Bay. From Philadelphia, it was exported to Europe, New England, and the West Indies. This portage trade proved to be a stable mid-18th century economy for the region.

Between 1781 and 1794, 22 lots on the west side of the Choptank River were sold, sparking the first urban growth pattern in the Choptank Bridge landscape. With the Napoleonic Wars in Europe causing a rise in the price of grain, Choptank residents prospered and the town's first substantial houses were built. Despite this permanent settlement and after several years of hosting the County Court, the residents failed in their bid to become the county seat in 1791. They were successful, however, in petitioning the legislature that same year to create the "Village of Greensborough," an entity with police and taxation powers. At the time of petition, Greensboro was populated enough to have a regular packet boat in operation between it and Baltimore.

War and market forces at the start of the 19th century, however, made the prosperity rather short-lived. The War of 1812, the end of the Napoleonic Wars in 1815, and the "Panic of 1819" each contributed to a financial depression on the entire Eastern Shore. The town of Greensboro experienced very slow growth between the third and eighth decades of the 19th century, with a population of only 561 people reported in the 1870 census. Grain merchants turned to new trades, such as lumber and, eventually, ship building, in an effort to diversify the narrow economic base.

Beginning in the late 1880s, a new industry came to the region and caused a resurgence in the local economy. It was canning, and within the next thirty-odd years, over 150 canneries operated in Caroline County. Several successful ventures located in Greensboro itself. New construction took place in the heart of the town, and the area around the central core grew. (See Figure 3.)

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM**

CAR-295

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 8.3

The second decade of the 20th century, and especially the onset of the First World War in Europe, saw strong growth in the canning industry on the eastern shore. The town found itself modernizing its municipal services as a result. In 1911, electric lamps were supplied in the streets, and in 1914, the water works arrived. In 1920, Pet Milk opened a plant in the town, west of Main Street, and hundreds of residents began long careers as employees there. In addition, the many dairy farmers of the area who came to town to deliver milk to Pet also partook of the local Greensboro economy.³ By the 1930s, there were five canneries in town, along with clothing stores, a five-and-dime, and a furniture store.

History of Water Works Construction in Greensboro

As mentioned above, prior to the 20th century, Greensboro had no public water system. In May of 1914, under an Act of the Legislature, the town held an election to determine whether or not to install water works. A majority of votes were cast in favor of the improvement. The Commissioners of Greensboro - John M. Dill, President; F.P. Roe; T.C. Horsey; Carroll Pippin; and Temple Smith - voted to issue water works bonds to pay for the construction and installation of the system. The Commissioners pledged to issue 40 bonds, valued at \$500 each, to be redeemable on July 1, 1944 at the Caroline County Bank in Greensboro. The interest on the bonds was set at the rate of five cents per annum. The town's annual levy on assessable property would provide the sinking fund for payment on the bonds.⁴

On June 12, 1914, the Commissioners voted to hire H.T. Downing as engineer for the water works construction. His job was to develop the plans and specifications for the water works. As his place in business is not mentioned in the Commissioner's Minutes, we may infer that Downing was a local man.⁵ He worked quickly, and, on June 20, 1914, was authorized to advertise for bids on the water works in an engineering paper.

³ The Pet plant closed in 1971, causing significant unemployment and a transition in many farms from dairy to grain.

⁴ Information on the construction and installation history of the water works is derived from the Minutes of the Commissioners of Greensboro.

⁵ "Local man" implies one who lives in the vicinity of Greensboro, but not necessarily in the town itself.

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM**

CAR-295

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 8.4

On June 26, 1914, Commissioner Horsey was authorized to purchase a lot from Shockless Current Electric and Manufacturing Company on behalf of the Commissioners to serve as the pumping station site. This site was a parcel of land just beside the Choptank River on its west bank, on Sunset Avenue. In a second vote, Commissioner Dill was authorized to buy a lot between the property of R.L. Hicks and N. Horsey on Academy Street from J.H. Bernard for \$150 to house the future water tower.

On July 9, 1914, the Commissioners opened bids for the water works construction. They received six bids in all, selecting E.L. Jones & Company of Dover, Delaware, the lowest bidder at \$15,475.00, to execute the project per Downing's contract and specifications. The Commissioners also decided that the tank would be furnished by Pittsburgh-Des Moines Steel Company. G.A. McDaniel was selected to drive the wells and Harry Richards to wire the pumping station. Products were selected as well: Thomsen Chemical Company would provide chloride of lime, Fairbanks/Morse the combustion engines (gas and oil) for the pumping station, and Gould Manufacturing Company the pumps themselves.

In mid-July, the town received approval from the Public Service Commission of Maryland to erect the water works. Also in July, the Commissioners were instructed to advertise the sale of \$8,000 worth of bonds in two issues on the 22nd of July, 1914. The bonds were sold to the German Savings Bank of Baltimore.

Construction began in September 1914, and appears to have been completed by October. The system specified for Greensboro included the following four elements: 1) two, 8" diameter, cased wells - one of 144' depth and the other of 275' depth - located 30' apart; 2) a gas/oil-fired combustion engine; 3) a 50,000-gallon, elevated steel storage tank on Academy Street; and 4) an underground distribution system made of cast iron piping. The tank was necessitated by the flat, level character of the Greensboro terrain since elevated storage reservoirs are necessary on flat land to avoid continuous pumping. The size and shape of the tank depended on peak demand, fire flow, the distribution system, and cost factors.⁶

⁶ Today, there are many more tank shapes to choose from than were available in 1914.

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM**

CAR-295

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 8.5

The water works system appears to be the second major public works initiative taken by the town in the early 20th century. In 1911, gas street lamps apparently were replaced with electric lights.⁷ Pumped-in gas has yet to be provided to the town.

The Pittsburgh - Des Moines Company and Water Works Technology

The water tank portion of the water works was purchased from Pittsburgh-Des Moines Steel Company, undoubtedly from a company catalog. This company had its beginnings as a water tank construction outfit, growing, over the years, to become one of the country's largest steel products manufacturers. The company's founders were William H. Jackson and Berkley. N. Moss, both engineers who had studied at Iowa State College. In 1893, they formed a partnership, called Jackson and Moss, Engineers, and were awarded their first project: the water system for Boone, Iowa. The Jackson-Moss water tank specified for the project was typical of late 19th century tanks in that it was fabricated entirely of wood.

Jackson went on to create innovative products for water tank construction. He developed a flat support platform for erecting a wooden tank on top of a steel tower. In order to erect this product, the partners found a fabricator of steel towers in Pittsburgh, the Keystone Bridge Company (later, the American Bridge Company), and teamed up with the firm to produce tanks with steel towers. The firm's first steel tower with wood tank was erected in Union, Iowa in 1893, and the partners received a patent on the tower's platform design in 1896. That same year, Jackson and Moss patented their own water tank design, illustrating their role as innovators within their field. (See Figure 4.) By 1897, the two men had erected their first all steel tank and tower in Scranton, Iowa. It held 40,000 gallons and had a hemispherical bottom.

The small company soon became experts in municipal water works. On a 1915 map that the company exhibited at the San Francisco Panama Pacific International Exposition, the firm identified 43 states, the District of Columbia, eight provinces in Canada, and several foreign countries as sites where Pittsburgh-Des Moines towers and tanks had been installed.

⁷ Minutes of the Commissioners of Greensboro, May 6, 1911. (Town of Greensboro Offices)

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Greensboro Water Tank
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Caroline County

SECTION 8.6

By 1901, Jackson and Moss added a third partner to their enterprise. His name was Edward Webster Crellin, and he was a small steel fabricator in Des Moines. They renamed the company the Des Moines Bridge and Iron Works and broadened their product line. They offered bridges, water tanks and standpipes, water distribution systems, electric lighting plants, turntables, roof trusses, and structural iron and steel parts for buildings. They also developed street improvement plans. Because much of the firm's steel was being ordered from Pittsburgh, the men decided to open a plant there, buying land on Neville Island, west of the city, along the Ohio River. In 1910, the company's headquarters were moved to downtown Pittsburgh as well.

By the mid-1920s, forty percent of the company's profits were in water tank and tower construction. After the Depression, the company diversified its product line, building wind tunnels, bridges, industrial and office steel products, and power plant equipment. The firm's most well-known works are the St. Louis Arch, fabricated and constructed in 1962-66, and the 1978 Francis Scott Key Bridge in Baltimore, which, as a three-span, continuous through truss bridge over a four-lane highway, is the longest bridge of its kind in the country.

Alterations to the Water Works System After 1914

As fabricated by Pittsburgh-Des Moines and erected by E.L. Jones & Company, the water tank in Greensboro worked well in its initial years. The tank was painted in 1933 and again every two years or so thereafter. The first indication of problems in the system as a whole occurred in 1935, when a flood on the river caused the malfunctioning of the pumping apparatus. The well casings had to be extended ten feet above ground and new, electrically driven, deep well turbine pumps had to be installed to rectify the problem. In 1948, everything appeared in order, but the tank needed to be "reconditioned."⁸

In 1971, a new water supply control house was built on Sunset Avenue at the Choptank River to insure control and chlorination of the wells. A third well was built on Hobbs Street, at the northwest end of town, due west from the tank by six blocks. The shallower of the two original wells was removed from active service and was eventually shut down entirely. Also

⁸ Minutes of the Commissioners of Greensboro for the year 1914. (Town of Greensboro Offices.)

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM
CAR-295**

Greensboro Water Tank
Parcel 1033, Academy Street
Caroline County

SECTION 8.7

in 1971, 4,200 linear feet of cast-iron main pipe was installed to extend the water distribution area and to replace worn-out main piping.

In the 1970s, the town's water system was upgraded with construction of a new pump and pump house at the Academy Street site, and new pumping station structures at the Greensboro Bridge. In 1980, with a population of 1,207 residents in 526 dwellings, the town's water system was beginning to be overtaxed. The average daily water pumped for the residents that year was 200,000 gallons. In 1981, a new tank and pumping operation were put in place on Hobbs Street, to the west of the original tank. This tank had a capacity of 100,000 gallons. With the population in 1990 at 1,441 people, the town required additional water storage and water works improvements. In 1991, the water main system was overhauled, new hydrants were placed throughout the town, and water meters were installed in homes. Funds for a new tank were unavailable at that time, so the project was delayed. In 1994, a water tank inspection report by an engineering firm recommended removal of the Academy Street tank based on the fact that suitability for continued service depended on a cost-prohibitive lead abatement process. The town concurred in the recommendation and plans to demolish the tank and construct a new, 150,000 gallon tank on the other side of the Greensboro Bridge (off Route 313) in 1997-98.

**MARYLAND HISTORICAL TRUST
HISTORIC SITES INVENTORY FORM**

CAR-295

Greensboro Water Tank

Academy Street

Caroline County

SECTION 9.1

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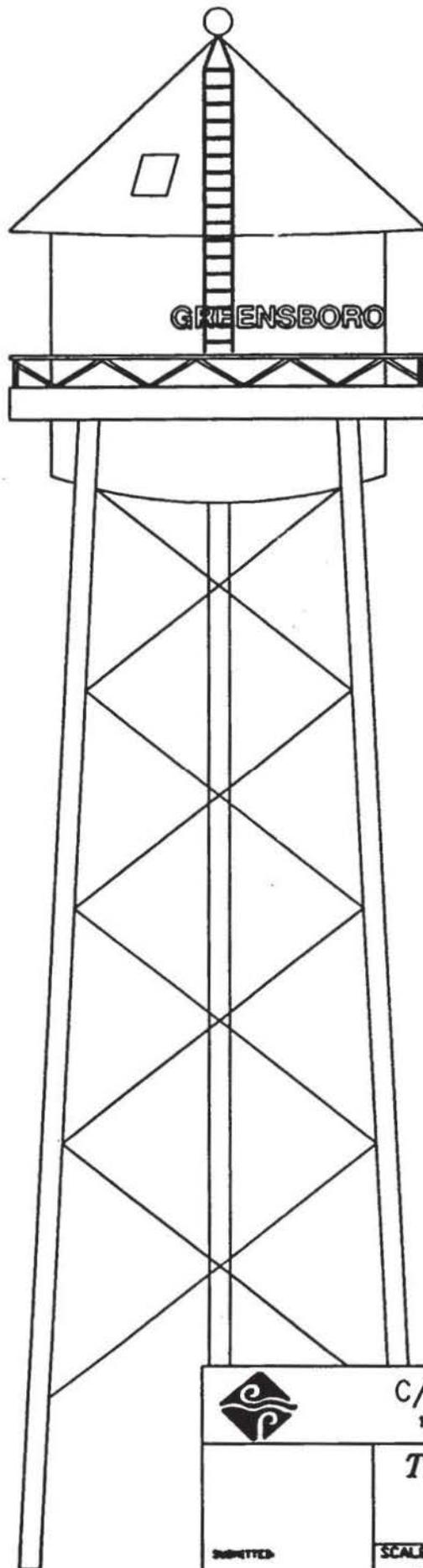
Horsey, Eleanor F. *Origins of Caroline County, Maryland, From Land Plats, Volume I*. Denton, Mar.: Eleanor F. Horsey, 1974.

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

Figure 1: Tank Profile
 CAR-295
 Greensboro Water Tank
 Caroline County



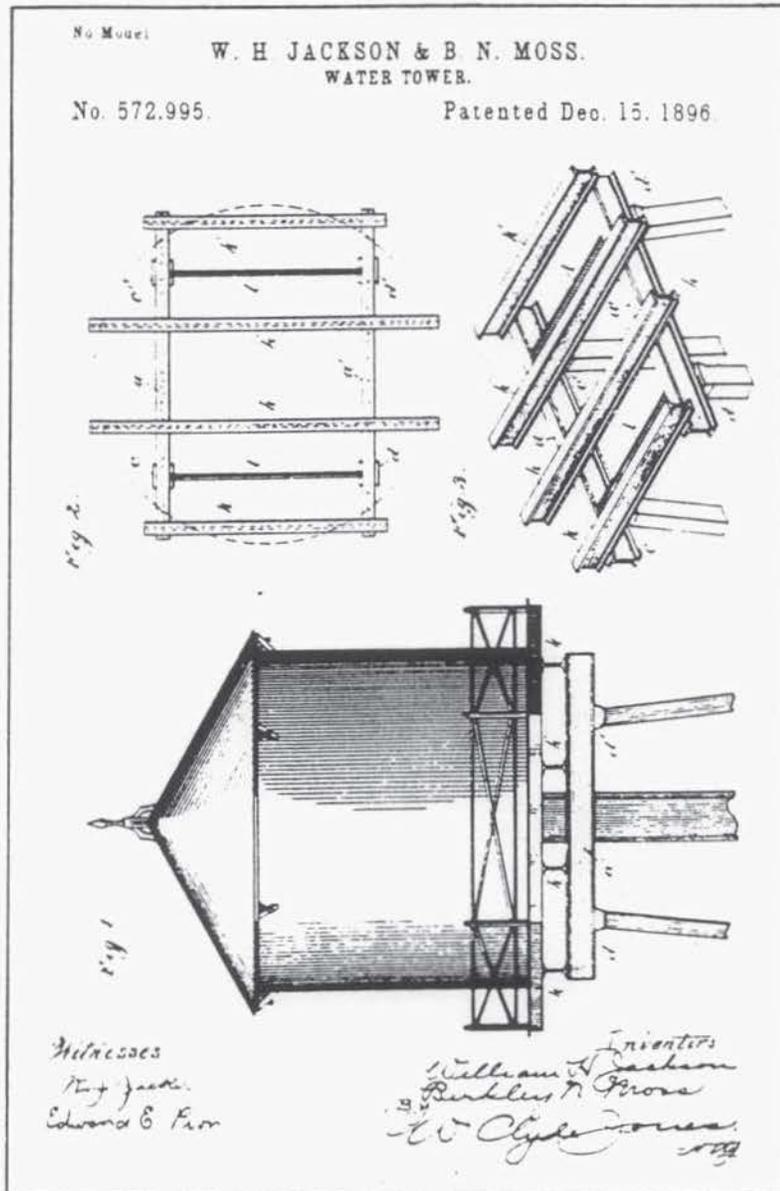
	C/P UTILITY SERVICES COMPANY 119 SANFORD STREET HAMDEN, CONNECTICUT			
	Town of Greensboro, MD 50,000 Gallon Water Tank Tank Profile			
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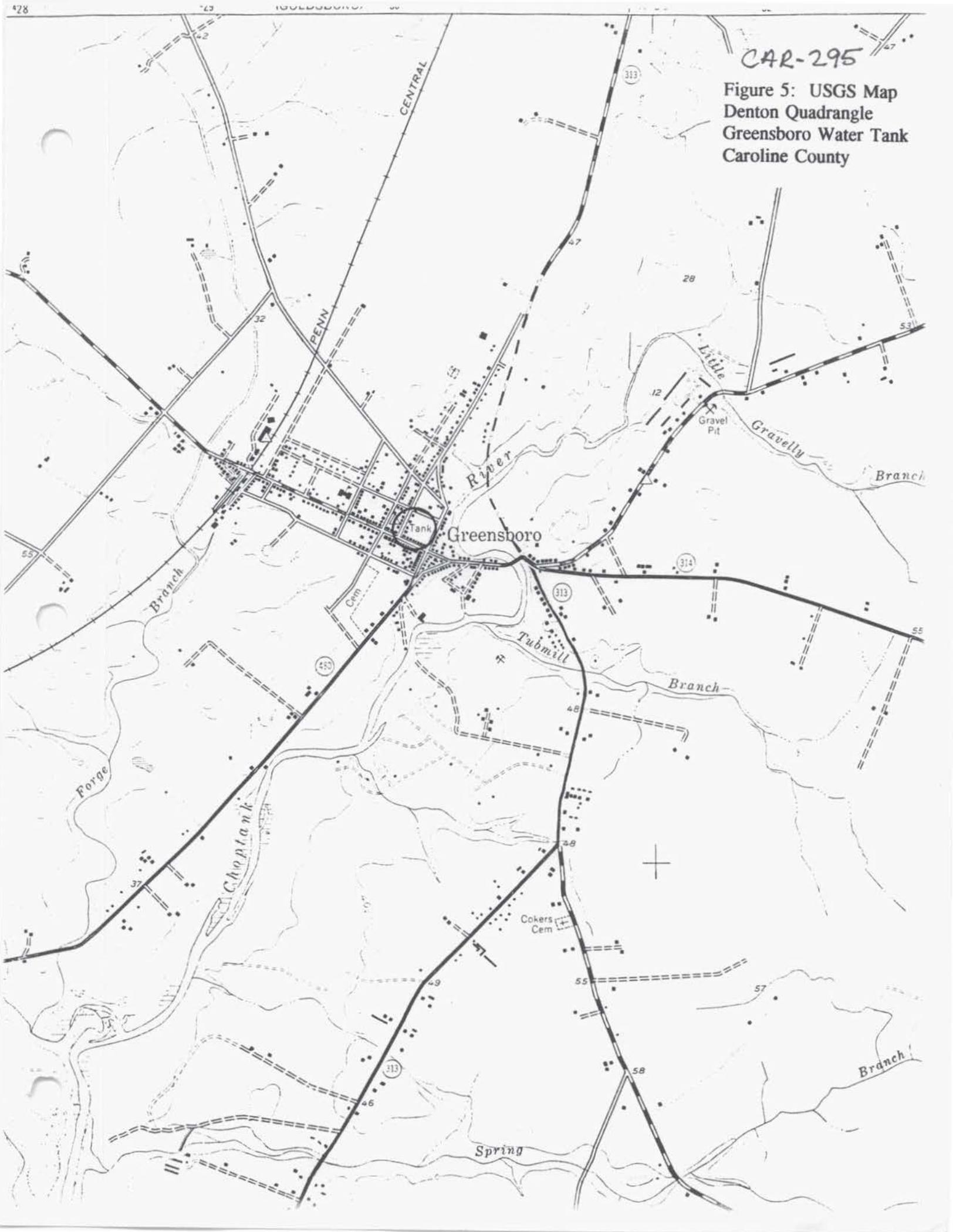
Figure 42. Charles Mason and Jeremiah Dixon, *A Map of that Part of America where a Degree of Latitude was measured . . .*, 1768, from *Transactions of the Royal Philosophical Society of London* 58, between p. 324 and p. 325, MdHR G 1213-484.



Figure 2: Mason and Dixon's Map of the Eastern Shore, 1768
 CAR-295
 Greensboro Water Tank
 Caroline County

Figure 4: Patent for Water Tower by
W.H. Jackson & B.N. Moss, 1896
CAR-295
Greensboro Water Tank
Caroline County





CAR-295

Figure 5: USGS Map
Denton Quadrangle
Greensboro Water Tank
Caroline County



CAR 295
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CAROLINE COUNTY, MD
EIZABETH JO LAMPL
JULY 1996
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ELIZABETH JO LAMPL

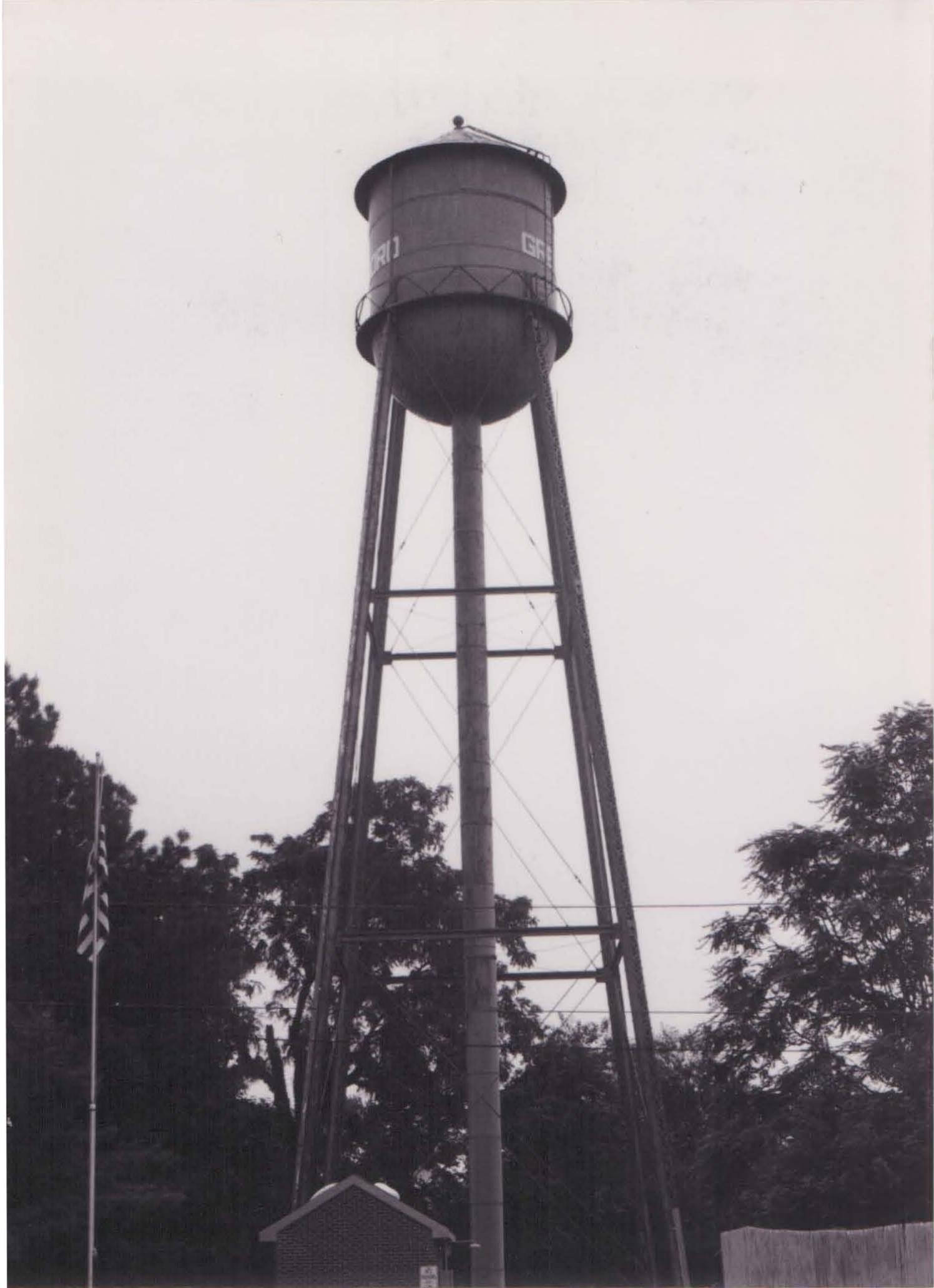
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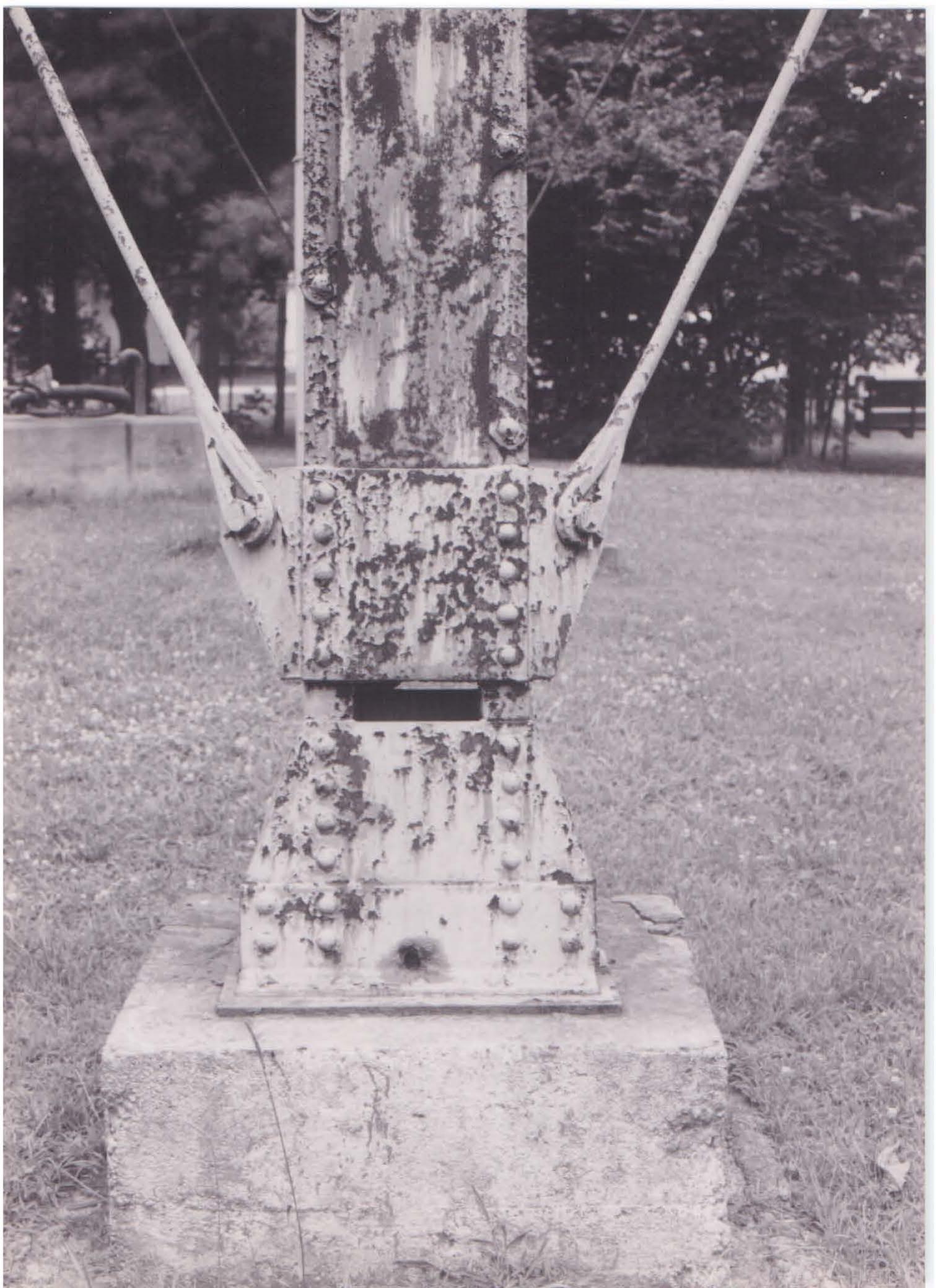
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JOHN MANNES

STEEL CO.

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CAROLINE COUNTY, MD

ELIZABETH JO LAMPL

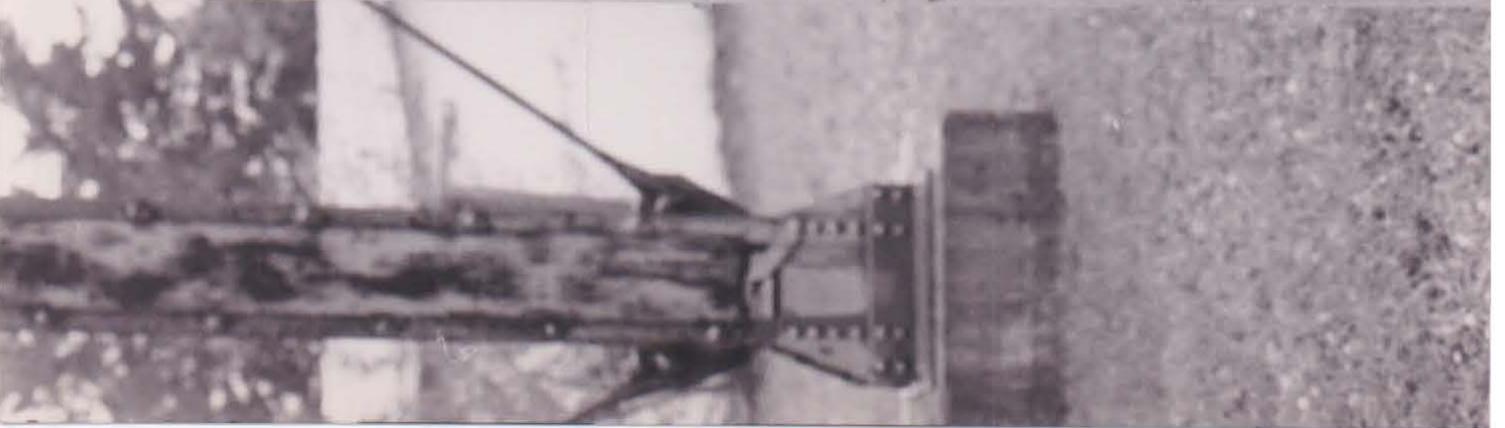
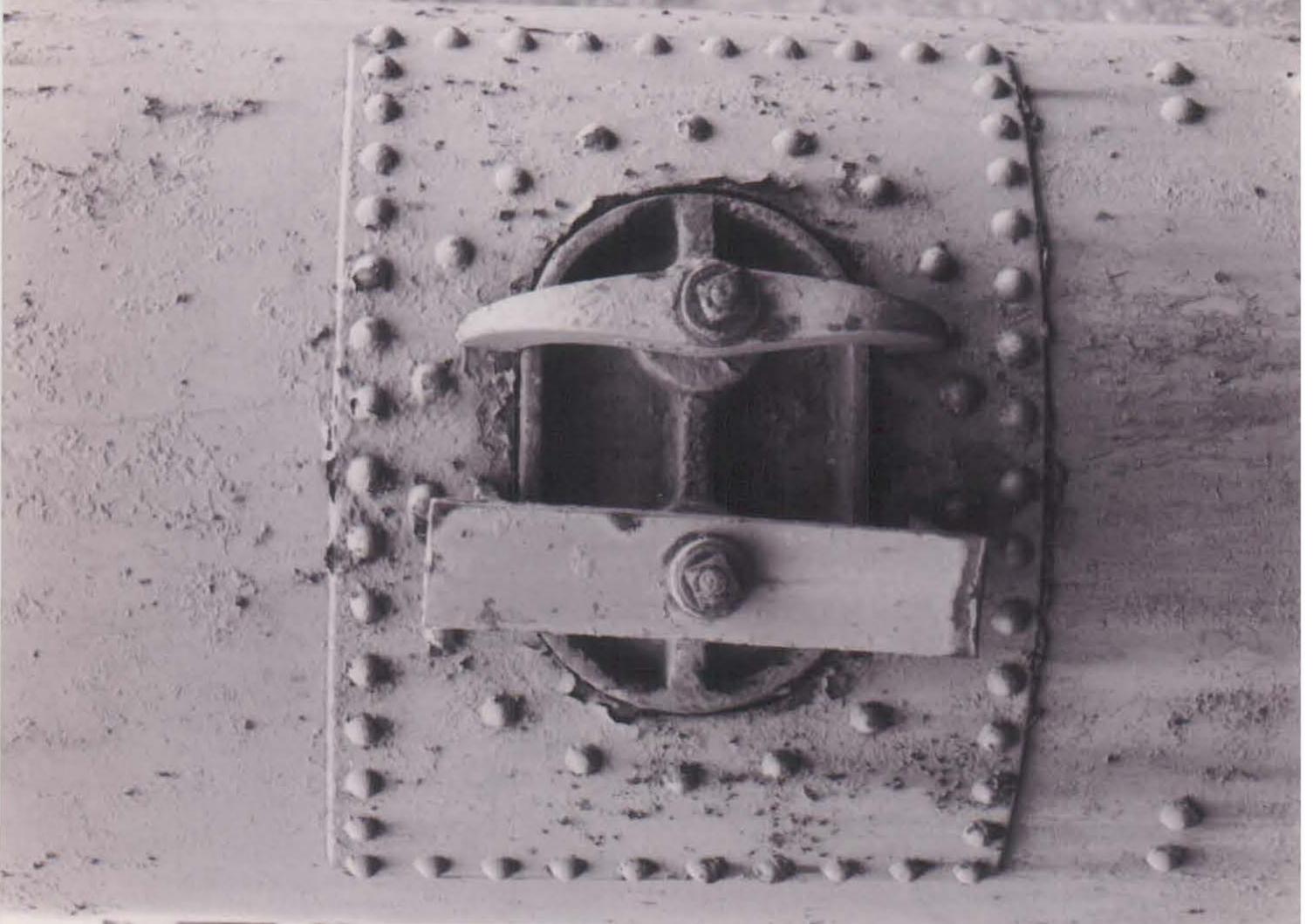
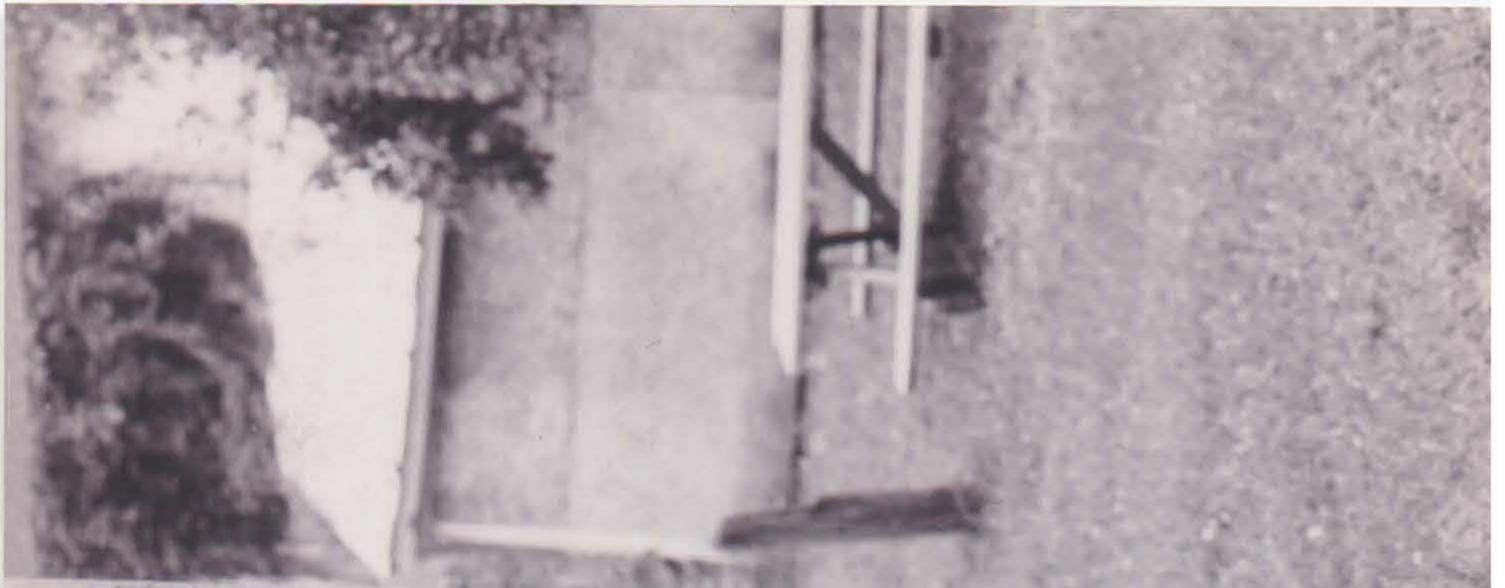
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MARYLAND SHPO

DETAIL OF MANUFACTURER'S PLAQUE, SW LEG

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DETAIL OF RISER PIPE

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