

United States Department of the 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 National Register Bulletin, How to Complete the National Register of Historic Places Registration Form. If any 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 certification comments, entries, and narrative items on continuation sheets if needed (NPS Form 10-900a).

1. Name of Property

historic name Heaton & Cowing Mill
other names/site number Douglas and Daniels, Heaton and Cowing Mill Company, Geneva Worsted Mill, Geneva Mill of the Wanskuck Company

2. Location

street & number 1115 Douglas Avenue
city or town Providence
state Rhode Island code RI county Providence code 007 zip code 02908

not for publication
vicinity

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this X 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 at the following level(s) of significance: X national X statewide local
Signature of certifying official/Title Date 4/20/2012
RI Historical Preservation & Heritage Commission
State or Federal agency/bureau or Tribal Government

In my opinion, the property meets does not meet the National Register criteria.
Signature of commenting official Date
Title State or Federal agency/bureau or Tribal Government

4. National Park Service Certification

I hereby certify that this property is:
entered in the National Register determined eligible for the National Register
determined not eligible for the National Register removed from the National Register
other (explain:)
Signature of the Keeper Date of Action

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5. Classification

Ownership of Property
(Check as many boxes as apply.)

Category of Property
(Check only **one** box.)

Number of Resources within Property
(Do not include previously listed resources in the count.)

- private
- public - Local
- public - State
- public - Federal

- building(s)
- district
- site
- structure
- object

Contributing	Noncontributing	
1	1	buildings
		district
		site
		structure
		object
1	1	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing)

Number of contributing resources previously listed in the National Register

N/A

0

6. Function or Use

Historic Functions
(Enter categories from instructions.)

Current Functions
(Enter categories from instructions.)

INDUSTRY/manufacturing facility

VACANT/not in use

INDUSTRY/industrial storage

7. Description

Architectural Classification
(Enter categories from instructions.)

Materials
(Enter categories from instructions.)

MID-19th-CENTURY/Italianate

foundation: stone, concrete

NO STYLE

walls: stone, brick, cement block

roof: asphalt

other:

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Narrative Description

Summary Paragraph

The Heaton & Cowing Mill is a small, two-story, mid-19th century, rubblestone mill with an early 20th century brick addition that occupies a riverside location at the edge of a larger industrial complex on the east side of Douglas Pike at the Providence-North Providence boundary. The site, bounded by Douglas Pike (1807) on the west and the West River on the south, was rural when the mill was built in 1832, but assumed its present mixed-use urban character with Providence's expansive growth in the late 19th and early 20th centuries. While the mill was modified incrementally during its active period of industrial use, it still conveys the distinct character of a small mid-19th century factory with its small scale and form, rough-textured masonry and its site on the north bank of the river.

Main block (1832 et seq., Contributing)

The Heaton & Cowing Mill's primary block is a coursed rubblestone masonry structure, 44' wide by 52' deep, with a shallow end gable roof facing Douglas Pike. Its fenestration pattern features five bays, including two standard doorways and a double-width doorway, on the front (west) elevation and six bays on the flanks. It has two stories above grade and a basement that is fully exposed on the south elevation. There is also a light well along the east end of the addition ⁱ

There is little known about the mill's original appearance. Other than the small nearly square footprint that appears on period maps beginning in 1835, the earliest known image is a simplified 1889 insurance drawing that shows the stone building in the current configuration, but with a garret under a standard pitch gable roof. (See *Additional Information*, Figure 6). The mill suffered a fire in 1861; the extent of the damage is unknown, but it is likely the brickwork incorporated into the rubblestone masonry dates from the subsequent rebuilding. This brickwork, which takes the form of quoining on the main block and rusticated surrounds and segmental arches on the door and window openings, gives the building an Italianate aspect.ⁱⁱ The current heavy timber shallow-pitched gable roof is the result of a rebuilding ca. 1896.

Although there has been minor late-20th-century subdivision for vestibules, office space and a bathroom, the building is generally open plan. It has heavy timber framing typical of mid-19th century mill construction, with a single central row of chamfered timber posts; the beams have been cased, apparently in the late 19th century. In the basement, a second row of wooden posts was added in the mid-20th century. On the first and second floor, plank flooring is cement-surfaced in parts of the mill and exposed elsewhere. A few small openings created for belting to transmit power between floors are found between the first and second floors. The basement floor is poured concrete. A modern stairway with a pipe rail in the southwest corner leads to the second floor; the basement stairs are underneath it.

The windows contain replacement 6/6, double-hung, frame sash. Three of the basement-level windows in the south elevation and all in the north elevation have been bricked-in. Door openings on the front elevation include a 5'-wide, central, round-arched entryway with a modern, steel and glass insert and, flanking this central door at the ends of the building, a 6'-wide round-arched freight doorway with a steel door (right) and flat-headed doorway with a 32'-wide steel door (left). From ca. 1862 to ca. 1918, there was a wheelhouse addition attached

ⁱ The grade on the north side of the building was raised in the mid-20th century; more of the basement level was exposed originally as the bricked-in windows and capped-over exterior stone stairway in the north wall indicate.

ⁱⁱ Similar, although more ornate, brick window enframements are found in Italianate-influenced RI textile mills of the period. These include the Phenix (West Warwick), Georgiaville (Smithfield), Anthony Mills (Coventry) and the Jas. Hilton Bleachery (North Providence).

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to the building below this freight door. There is no visible evidence remaining of the wheelhouse (though there may be buried remains) or the two engine houses that were formerly attached to the mill on the south and north flanks.

Rear addition (Ca. 1930, Contributing)

Between 1926 and 1937 the Wanskuck Company built a 44' by 53', brick, 4-bay by 5-bay rear addition to the older mill. This structure, used as a machine and carpenter shop, was in the location of a succession of earlier frame additions that had served the main mill in different industrial uses since the 1850s. The foundation of this addition is concrete. The roof is shallow-pitched gable with a frame cornice. Framing is heavy timber/mill construction with a central row of columns and floors of heavy plank set on timber beams. There is roughly 4' of difference in height between the lower masonry front block and this addition. That height difference is addressed by a couple of steps at the communicating doorways on the second floor and, at the roof, a brick firewall parapet.

Typical of industrial construction of the period, this pier and spandrel addition has large nearly square windows with steel-frame, multi-light sash with eight-light hoppers.ⁱⁱⁱ Sills are concrete; lintels are steel. At the east end of the north elevation there are large, round-arched freight doors on both floors; the upper doorway has a granite sill. The lower door is modern steel; the double-leaf wooden door on the second floor appears to be of original construction. Metal-clad factory fire doors close off the wide doorways into the stone mill on all three levels. A steel staircase with a pipe railing enclosed in a frame stairwell runs along the east end of the addition. Internal access to the basement level is only through the stone addition. In the basement, the windows on the east and south elevations have been covered with plywood, the windows and freight doorway on the north elevation have been bricked in. There is a double-leaf steel door set in a former window opening at the east end of the south elevation. As in the stone mill, a second row of wooden posts was added in the mid-20th century.

Rear Building (After 1985, Non-Contributing)

After 1982, a 35' x 34', freestanding, single-story, shallow-pitched gable-roofed, cement block building was built behind the rear block. It is attached to this block by means of an enclosed walkway. This structure dates to the post-Wanskuck Company period when the mill housed various jewelry-related companies (1957-2000).

Setting

The mill lot to the north is presently paved with asphalt which extends up to the Geneva Mill complex; the southern, lower, portion along the West River is vegetated open space. The West River's channel is lined with stone walls for a short section alongside the mill; natural banks continue up and downstream. There is no visible evidence of the original raceways which have been filled.

ⁱⁱⁱ Some of these hoppers have been replaced with single-pane aluminum inserts.

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8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for 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.

Areas of Significance

(Enter categories from instructions.)

Industry

Period of Significance

1832- 1957

Significant Dates

1832, 1861, 1879, 1896

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 old or achieving significance within the past 50 years.

Significant Person

(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder

unknown

Period of Significance (justification) The period of significance represents the period of time during which the Heaton & Cowing Mill functioned as a part of the regional textile economy.

Criteria Considerations (explanation, if necessary) N/A

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Statement of Significance Summary Paragraph

The Heaton & Cowing Mill is significant under **Criterion A** as a representative example of the small-scale, early- to mid-19th-century textile factories that were built to utilize the water power of Rhode Island's smaller rivers and streams. Mills of this type were an integral part of early industrialization in the region, when manufacturers' reliance on water power led them to develop mill sites on minor watercourses, not just those on major rivers that could support large factories. For Heaton & Cowing, manufacturers of boot laces, this small factory provided an entrée into the larger economy; others like it accommodated niche services and often served as incubators of innovation. With the widespread adoption of steam power in the second half of the 19th century, these small-scale mills were often abandoned or replaced with large complexes relying on steam as well as water power, leaving the Heaton & Cowing Mill as a rare survivor of the type.

Narrative Statement of Significance

In the decades following Samuel Slater's 1790 introduction of water-powered cotton spinning in Pawtucket, a wide range of entrepreneurs secured water privileges along the waterways of southern New England seeking profit in the emergent textile economy. A survey of cotton mills in Rhode Island and nearby Connecticut and Massachusetts conducted in 1815 shows that the average number of spindles among the 167 factories reported was 805.^{iv} While the largest manufacturer, Almy, Brown and Slater, reported some 5170 spindles, a significant majority of respondents reported operations as small as 300-500 spindles. For example, among the ten factories reported in North Providence, the average spindle count was 780, but one operation (Stephen Randall's mill on the West River^v) reported only 172 spindles.

A sense of the optimism despite difficulties arising from the early years of cotton manufacture was offered by John Pease and John Niles in 1819:

When we consider that it is but about fifteen years since [cotton manufacture] first received its principal impulse, the inauspicious circumstances under which it was commenced, the difficulties which it had to encounter, from the want of practical knowledge, the prejudice which existed, the opposition from interest, arising from established commercial relations, the unequal competition which it has had to sustain with the British manufacturing interests; when we consider these and other circumstances, it must be a matter of surprise, that it has acquired the importance, and grown to the extent that it has. If the short and inauspicious period of a few years has produced such results, what may not be expected in half a century?^{vi}

In these early years of American industrialization, a typical New England cotton spinning mill was of frame construction, sited along a modest water privilege and producing cotton yarn for cloth manufacture on hand looms. By the 1830s, competition and economies of scale in the cotton economy—now commonly employing power looms-- encouraged specialization on the part of smaller entrepreneurs as well as investment in the related areas of machine fabrication, textile finishing, and woolen manufacture. Thus emerged a confident and diverse textile economy, encompassing a broad range of producers, suppliers, specialized manufacture, and auxiliary trades. This confidence was expressed in the erection of sturdy, masonry buildings more capable of

^{iv} Source: *Transactions of the Society for the Encouragement of Domestic Industry*, 1863. This survey was taken just before the introduction of the power loom, experimentally introduced at the Lyman Mill in North Providence in 1816.

^v This Randall privilege would, over the course of the 19th century, evolve into the Wanskuck Company (est. 1862), a major regional woolen producer that acquired the Geneva Worsted Mill's holdings (including the Heaton & Cowing Mill) in 1896.

^{vi} John Pease and John Niles, *Gazetteer of the States of Connecticut and Rhode Island* (1819), p. 323. The authors noted that there were already 52 cotton factories in Providence County at the time, including seven North Providence mills outside of Pawtucket Village.

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withstanding the vibration and weight of sophisticated textile machinery as well as the ravages of fire and periodic freshets along the rivers and streams that provided power.

Heaton & Cowing

It was in this context in August 1832 that David Heaton (1802-1864) and Martin K. Cowing (1807-1891) purchased a mill privilege in what was then part of North Providence for \$6000 from William N. Rhodes, who had operated a grist mill there.^{vii} This privilege was on the West River, a relatively modest stream which has its headwaters roughly three miles northward in Smithfield and flows southeasterly into the Moshassuck River in Providence.^{viii} Although its waterpower was limited, the river was sufficient for the smaller-scale ventures of the time and it was in close proximity to the commercial and transportation center of Providence. The laying out of the Douglas Turnpike in 1807, extending northwesterly out of Providence to Douglas, Massachusetts, and the Mineral Spring Turnpike in 1826, an east-west thoroughfare between the industrial village of Pawtucket and points west, helped open up viable areas for industrial investment along the West River. The two partners immediately erected a small mill and went into business manufacturing cotton cloth under the name of Heaton & Cowing. By 1835, Heaton & Cowing shared the flow and fall of the West River and its tributary streams with several similarly-scaled industrial enterprises. Kelly's Factory and an unnamed sawmill were upstream; Thomas Whipple's satinet factory and two cotton mills operated by Stephen Randall were downstream.^{ix}

The cotton mill appears to have met with early success. Heaton & Cowing were able to pay off their mortgage from William Rhodes by May 1835. Shortly after establishing themselves as textile producers, Heaton & Cowing leased space in the basement of their mill to John Whitaker and John Hollingsworth for a 1-to-3 year term for a "coloring, bleaching, and staining works."^x Whitaker and Hollingsworth also leased a dwelling house acquired from William Rhodes in the original purchase for use as a drying house.

Years later, in an 1879 deposition provided to the Rhode Island Supreme Court in a lawsuit over the deleterious effects of industrial pollution on downstream textile finishing on the West River, Martin Cowing discussed his early years in textile manufacture.^{xi} Although manufacture of cotton cloth was carried out by Heaton & Cowing between the years of 1832 and 1837, it appears that cotton dyeing—likely carried out by their basement lessees-- was also a substantial product of the mill. The following excerpt is from the deposition:

Q. You had at Geneva a dye-house, and did considerable [dyeing] at that time?

A. Yes, sir.

Q. Won't you locate that year, as exactly as you can?

A. I should think we commenced about the time we located out there, in '32.

^{vii} See North Providence Deed Books 5: 666 and 7: 146 (Pawtucket City Hall). While the deed (7:146) from Rhodes to Heaton & Cowing made no specific mention of a water privilege or grist mill, it does mention grist mill stones on the property. The contemporaneous mortgage deed (5: 666), however, specifically described the conveyance of a water privilege.

^{viii} Smithfield was then a large township that included much of northern Rhode Island. Greater Smithfield was subdivided in 1871, creating today's municipalities of Smithfield, North Smithfield, Woonsocket, Central Falls, and Lincoln. A tributary stream of the West River (described as Olney Brook by Martin Cowing in 1879), flowed easterly from the east slope of Fruit Hill, North Providence, to join the West River just upstream of the Cowing and Heaton privilege.

^{ix} Source: Map of the City of Providence and Town of North Providence, Lockwood and Cushing, 1835.

^x North Providence Deed Book 7: 209 (Pawtucket City Hall).

^{xi} *Silver Spring Bleaching and Dyeing vs. Wanskuck Company*, 1879-80. RI Supreme Court Equity Case 1492. Two bound volumes of the proceedings of this case are on file at the Rhode Island Historical Society Library. Cowing, aged 77 at the time, provided a deposition concerning his experiences as a manufacturer on the West River from 1832. The Cowing and Heaton privilege was three-quarters of a mile upstream from the Wanskuck Company, the defendant in the lawsuit. This suit served as an important legal precedent in later decisions regarding industrial water pollution.

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Q. You printed at Geneva?

A. No, sir: our goods were printed at the Wanskuck [Stephen Randall's factory]. The dyeing was done at Geneva.^{xii}

Later in the same deposition, Cowing described a sizeable dyeing operation between 1832 and 1835, employing approximately fifteen men—likely the Whitaker and Hollingsworth operation. Although some degree of dyeing continued at the Heaton & Cowing Mill after 1835, it appears to have been confined to the dyeing of lace and braid. After 1835 much of the dyeing was relocated upstream to an operation Cowing described as “the Barnes place.”^{xiii} In testimony provided in the same proceedings, John Barnes, a lifelong dye house worker, described the manufacture of cotton cloth by Heaton & Cowing: “They were manufacturing cloth when I first went there in 1837.” He added, “...then they commenced making braid and shoe strings, and they colored shoe strings for some time.”^{xiv}

Although Heaton & Cowing's factory was located in what was then North Providence, Providence City Directories as early as 1844 described the major product of the company as the manufacture of “corsets and shoe braid.” An investigation of Providence directory listings in the 1850s suggests that the mill was not in operation from 1850 to 1858. By 1859, Heaton & Cowing was once again listed as a braid and lace manufacturer. This reemergence may be attributable to physical improvements and another lease arrangement entered into at the close of the decade.

Lease Agreement with Ellsworth Manufacturing Company

In 1858, Heaton & Cowing entered into a lease agreement with woolen manufacturers and finishers Alexander Ellsworth and George W. Cushing. In this agreement Ellsworth and Cushing, doing business under the name Ellsworth Manufacturing Co., would occupy:

...the new addition^{xv} to the mill (55' x 27'), also the room now used for jacks and pickers by the Ellsworth Manufacturing Company in the old mill of said lessors, also the right and privilege of such portion of the land near said mill as may be required for the erection of a dry house and tent[er] bars.

Cushing and Ellsworth installed two sets of machinery for the production of woolen cloth.^{xvi} The lease agreement further specified the arrangements by which sufficient mechanical power would be conveyed to the woolen operation. The agreement guaranteed:

...a sufficiency of power to run all the machinery that the Ellsworth Manufacturing Company have heretofore run, or its equivalent, during the twelve working hours of the day, having a regular and uniform speed by the regulator driving pulley in the wheel house, making 44 ½ turns per minute, said driving pulley to be 12" in diameter with a receiving pulley of 9^{1/8}" in diameter, and the other connecting pulleys to remain as used by the Ellsworth Manufacturing Company.^{xvii}

^{xii} Ibid, Volume 2, p. 546.

^{xiii} Ibid, Volume 2, p. 547. A “Barnes Dye House” appears on an upstream tributary stream on the 1870 Beer's Atlas map. It appears that the dyeing operation removed to a different location after about three years at Heaton & Cowing Mill.

^{xiv} Ibid, Volume 2, p. 496. It is unclear whether Barnes ever worked directly for Heaton & Cowing. His memories of that period may reflect his related work in his family's upstream dye-works.

^{xv} Ibid, p. 519. According to the deposition of Marcus Cowing (son of Martin K. Cowing), this addition was built in the winter of 1857-8.

^{xvi} Ibid.

^{xvii} North Providence Old Records Book 2: 172 (North Providence Town Hall).

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The Federal Census of 1860 described the production of the two companies operating out of the stone mill and its rear addition.^{xviii} Heaton & Cowing, capitalized at \$40,000, employed eight males and twenty-one females, producing 150,000 [yards] gross of braid valued at \$25,000. Ellsworth Manufacturing Co., capitalized at \$36,000, employed seventeen males and eleven females, producing 288,000 yards of woolen cloth valued at \$96,000.

Ellsworth continued to lease parts of the Heaton & Cowing Mill until 1861.

Waterpower at Heaton & Cowing

Heaton & Cowing's water privilege on the West River was improved and adapted during the period from 1832 to the acquisition of the privilege by the Geneva Worsted Mill in 1879. In the fall of 1835, Heaton and Cowing, along with ten other owners of water privileges, formed a water company that impounded the West River at the North Providence/Smithfield line, creating a sizable pond, Wenscott Reservoir, at the head of the river where they could store water to supplement the run of the river during low-water months.^{xix}

In addition to this effort to provide a stronger and more consistent flow on the West River, Heaton and Cowing subsequently reworked the waterpower system at their millsite, presumably to increase the available power. As shown on the 1835 Lockwood and Cushing *Map of the City of Providence and Town of North Providence* the mill originally drew its water from the confluence of the West River and Olney Brook just west of the factory across the Douglas Pike. (See *Additional Information*, Figure 1) By 1853, the Lorigan and Christie *Map of the Town of North Providence* shows a new raceway coming from the north, where it tapped the West River upstream at a higher elevation. By bringing in water at a higher elevation, they could increase the amount of power they generated. Such an increase in power probably made the expansion of manufacturing with the Ellsworth Manufacturing Company possible.

Civil War-Era Rebuilding and Investment

A fire in the winter of 1861 heavily damaged the factory and likely destroyed the 55' x 27' rear addition used by Ellsworth Manufacturing Company. The partners rebuilt the mill immediately after the fire.^{xx}

In 1864, David Heaton died and the manufacturing operations at the mill were reorganized, with George Cowing Douglas, a nephew of Martin Cowing, assuming a major role. Douglas had come to work at Heaton & Cowing to learn the braiding and lacing trades in 1837, when he was fourteen years old. In 1865, he formed a company with George W. Daniels under the name Douglas and Daniels, and this company continued the manufacture of braid and lace in the stone mill. In 1867 Martin Cowing, George Douglas and George Daniels were incorporated as the Heaton & Cowing Mill Company "for the purpose of purchasing, holding, renting, improving and selling mill property and for the transaction of other business connected therewith."^{xxi} The assets of the former company, including the neighboring Geneva Mill, were transferred to the new corporation. While the 1870 Federal Census provided no report for Heaton & Cowing, it described the Douglas and Daniels operation as capitalized at \$1000, employing three males over the age of eighteen, six females over the age of

^{xviii} *Products of Industry* manuscript data for North Providence, Rhode Island.

^{xix} There are three separate agreements or indentures related to the establishment of this company. See North Providence Deed Book 7: 397, 399, 418 (Pawtucket City Hall). Ten other partners with Heaton & Cowing in this unnamed water company were: Stanford Newell, Henry Hopkins, Isaac Thurber, Philip W. Martin, Dexter Angell, Stephen Randall, Dexter Thurber (identified as agent for the United Mfg. Co.), John R. Leonard, Thomas Whipple, and Thomas Hollis. Dexter Thurber's water privilege was on the Moshassuck River below its confluence with West River. This water body is now also known as Twin River.

^{xx} *Silver Spring Bleaching and Dyeing vs. Wanskuck Company*, Vol. 2, p. 547.

^{xxi} *RI Acts and Resolves*, May Session 1867, pp. 26-7.

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fifteen, and sixteen children. Available waterpower furnished six horsepower for a complement of machinery that included 300 braiders and three twisters. Annual production was 80,000 yards gross braids valued at \$22,000. After the retirement of partner George Daniels in 1870, Douglas continued to operate the company in the Heaton & Cowing Mill under the same name until 1876, when he formed the Douglas Braid Works and relocated the company to downtown Providence.^{xxii}

The Geneva Worsted Mill

In 1862 Heaton and Cowing invested in the construction of the Geneva Mill, a substantial brick industrial plant (burned and rebuilt in 1891), comprising a main 100' by 50' building with an attached repair shop, dye house, and finishing rooms. The much larger Geneva Mill used the waterpower provided by the ca. 1853 headrace created for the Heaton & Cowing Mill, as well as steam power. Heaton & Cowing, in turn, reverted to drawing water from the original river channel just west of the factory, where they created a new pond which became known as Geneva Pond. At the same time they added a new single-story wheelhouse addition on the southwest corner off the stone mill. (See *Additional Information* Figure 4 and Figure 5) In his 1879 deposition, Martin Cowing was asked about this arrangement:

Q. Now about that pond on the west side of the river there at your place—Geneva. How is that fed?

A. Well, that receives the surplus water that is not received at the brick [Geneva] mill, and also a stream that enters from the south—what we call the Olney Brook. Where there is a surplus from the regular course that flows over and runs down into that pond.^{xxiii}

Heaton & Cowing did not operate the Geneva Mill, but leased it to a series of operators who produced cassimere (a type of woolen suiting) between 1863 and 1879.^{xxiv} In the latter year, the Heaton & Cowing Mill Company sold the Geneva Mill and the Heaton & Cowing Mill and to the manufacturing partnership of Ullman and Sack.

A. Albert Sack (b. 1842) emigrated in 1866 to the United States from his native Germany, where he had learned the woolen and worsted trades. In the mid-1870s he served as superintendent for Owen and Clark, then lessees of the Geneva Mill. In 1879 Sack, in partnership with S.B. and Morris Ullman, purchased the assets of the Geneva Mill from the corporation formed twelve years earlier. Sack and the Ullmans incorporated themselves as the Geneva Worsted Mills in 1880.^{xxv} Sack remained with the company until 1884 when he organized the Lymanville Company, overseeing the construction of a new steam- and waterpowered brick plant on the Woonasquatucket River in North Providence.

The 1881 Barlow's Insurance Survey described the Heaton & Cowing Mill as Geneva's Mill No. 2. Drawing and twisting operations were carried out on the first floor, spinning on the second. The rear frame addition was used for storage. Although the mill still employed its own waterpower system, the Geneva Worsted Mill, seeking to supplement available waterpower at Mill No. 2, built a frame Engine House attached to the south wall by 1881.^{xxvi} (See *Additional Information* Figure 5) In 1885, Geneva built a second frame engine house at

^{xxii} Douglas remained in downtown Providence until he relocated the company to the Wilkinson Mill in Pawtucket in 1882.

^{xxiii} *Silver Spring Bleaching and Dyeing vs. Wanskuck Company*, Vol. 2, p. 549.

^{xxiv} Lessees of the Geneva Mill included John Ross (with Hale and Burroughs) from 1863 to 1865; F.B. and A.E. Smith from 1866 to ca. 1868; and Owen and Clark from 1868 to 1879.

^{xxv} Providence Land Evidence Book 306: 443.

^{xxvi} There is some ambiguity in the historical record as to whether this engine house was frame or brick. Fire insurance standards relative to the possibility of boiler explosions generally required that these buildings be made of brick. Insurance drawings of the

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Mill No. 2 attached to the north wall. By 1889, only the north Engine House survived (see *Additional Information* Figure 6 and Figure 7). The southern Engine House likely succumbed to the flood of late winter 1886, which also washed away Mill No. 2's rear storage additions.

Morris Ullman continued to operate the Geneva Worsted Mill after Sack's departure. After a major fire in January, 1891, the Geneva Mill was rebuilt acquiring much of its present form.^{xxvii} (See *Additional Information*, Figure 8) By 1891 textile manufacturing had ceased in the old mill, which was reused for storage and a carpenter's shop. The engine house and the rebuilt rear addition were used for scouring and drying operations.

The Wanskuck Company

In 1896, the Wanskuck Company, a large worsted company with its factory ¾-mile down the West River where Stephen Randall's cotton factory once stood, acquired the entire Geneva complex and added it to their operations. The Wanskuck Company kept the Heaton & Cowing Mill and its rear addition, but demolished the 1880s engine house and the 1862 wheelhouse sometime prior to 1918. It is likely that the Wanskuck Company was responsible for rebuilding the mill's roof at this time with the current shallow-pitched mill construction roof.

Between 1926 and 1937 the Wanskuck Company demolished the frame rear addition to the Heaton & Cowing Mill and built a brick, two-story, 44' x 53' addition in its place. This flat-roofed addition, typical of factory construction of the period, effectively doubled the size of the building. By the early 1950s the building served as the Geneva complex's machine and carpenter shop. As was common in the Southern New England textile industry after World War II, labor conflict and southern competition forced the Wanskuck Company to close down the Geneva Mill in 1957.

Recent History

No longer associated with the neighboring Geneva complex, the Heaton & Cowing Mill served various industrial uses between 1957 and ca. 2000. These included several jewelry findings manufacturers, electroplaters and polishers. The mill, its brick addition and the rear cement block building have been vacant since that time. The waterpower system at the mill has largely disappeared as the raceways have been filled and in the March and April floods of 2010 the Geneva Dam was breached and the mill pond drained. The building is currently under consideration for residential adaptive reuse.

Developmental history/additional historic context information (if appropriate)

9. Major Bibliographical References

period show neither boilers nor a chimney in the Heaton & Cowing Mill's Engine House. It appears that piped steam was carried from the multiple boilers of the Geneva Mill into a frame engine house.

^{xxvii} A clipping from the *Boston Journal* (dated Jan. 5, 1891) pasted to the 1889 Barlow's Insurance Survey of the Geneva Mill describes a fire in which "the main buildings of the Geneva Worsted Mill were burned." It is unknown whether this fire damaged the Heaton & Cowing Mill. A supplemental survey completed by Barlow's in December 1891 shows the new brick mill complex but the stone building is unchanged from its depiction two years earlier.

Heaton & Cowing Mill
Name of Property

Providence County, RI
County and State

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Published material:

Bayles, Richard M. *History of Providence County*.
New York, W. W. Preston, 1891.

Grieve, Robert. *An Illustrated History of Pawtucket, Central Falls and Vicinity*.
Pawtucket, RI: Pawtucket Gazette & Chronicle, 1897.

Hall, Joseph D., editor. *Biographical History of the Manufacturers and Businessmen of Rhode Island*.
Providence: J.D. Hall, 1901.

Herndon, Richard et al. *Men of Progress: Biographical Sketches and Portraits of Leaders in Business and Professional Life in the State of Rhode Island and Providence Plantations*.
Boston: New England Magazine, 1896.

Kulik, Gary and Julia Bonham. *An Inventory of Rhode Island Industrial and Engineering Sites*.
Washington: Historic American Engineering Record, 1978.

Marquis, Albert N., ed. *Who's Who in New England*.
Chicago: A.N. Marquis Co., 1909.

Mc Lane, Louis. *Documents Relative to the Manufactures in the United States*.
Washington, DC: Duff Green, 1832.

Pease, John C. and John M. Niles. *Gazetteer of the States of Connecticut and Rhode Island*.
Hartford: William S. Marsh, 1819.

Providence City Directories (various publishers): 1832-2001.

Rhode Island Historical Preservation Commission. *Historical and Architectural Resources of North Providence, RI*. 1978.

Rhode Island Historical Preservation Commission. *Providence: A Citywide Survey of Historic Resources*. 1986.

Rhode Island Historical Preservation Commission. *Providence Industrial Sites*. 1981.

Rhode Island Society for the Encouragement of Domestic Industry. *Transactions* (1863).
Providence: Anthony Knowles and Co., 1863.

Rhode Island Supreme Court. *Silver Spring Bleaching and Dyeing vs. Wanskuck Co.*
Equity Case 1492. 2 Vols. Providence, RI: Supreme Court, 1880.

Government documents:

Heaton & Cowing Mill

Name of Property

Providence County, RI

County and State

City of Pawtucket Land Evidence, City Hall, Pawtucket RI.

City of Providence Land Evidence, City Hall, Providence, RI.

Federal Census, Rhode Island *Products of Industry* MS Schedules: 1850, 1860, 1870.

Rhode Island Acts and Resolves, May Session 1867.

Town of North Providence Land Evidence, Town Hall, North Providence, RI.

Town of North Providence Tax Books, 1853-1880.

Maps consulted (listed chronologically)

- 1835 Lockwood and Cushing. *Map of the City of Providence and the Town of North Providence.*
- 1853 Lorigan and Christy. *Map of the Town of North Providence.*
- 1862 Walling. *Map of the State of Rhode Island and Providence Plantations.*
- 1870 D. G. Beers Co., *Atlas of the State of Rhode Island and Providence Plantations.*
- 1875 G.M. Hopkins. *Atlas of Providence, Rhode Island.*
- 1881 Barlow's Insurance Surveys. *Geneva Worsted Mill, Heaton & Cowing Mill Company Survey No. 6712.*
- 1882 G.M. Hopkins. *Atlas of the City of Providence, R.I. and Environs.*
- 1885 Barlow's Insurance Surveys. *Geneva Worsted Mill, Heaton & Cowing Mill Company Supplement to Survey No. 6712.*
- 1889 Barlow's Insurance Surveys. *Geneva Worsted Mills, Survey No. 9758.*
- 1889 Sanborn Fire Insurance Maps. Providence and North Providence (also, 1921, 1951, 1956).
- 1891 Barlow's Insurance Surveys. *Geneva Worsted Mills, Survey No. 10,490.*
- 1895 Everts and Richards. *New Topographical Atlas of Surveys, Providence County, RI.*
- 1918 G.M. Hopkins. *Plat Book of the City of Providence, Rhode Island.*
- 1926 G.M. Hopkins. *Plat Book of the City of Providence, Rhode Island.*
- 1937 G.M. Hopkins. *City of Providence Plat Map.*

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67 has been requested)
- previously listed in the National Register

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency

Heaton & Cowing Mill
Name of Property

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previously determined eligible by the National Register
designated a National Historic Landmark
 recorded by Historic American Buildings Survey # _____
 recorded by Historic American Engineering Record # _____
 recorded by Historic American Landscape Survey # _____

Local government
 University
 Other

Name of repository: RI Historical Preservation and Heritage Commission

Historic Resources Survey Number (if assigned): _____

10. Geographical Data

Acreage of Property .58 acres
(Do not include previously listed resource acreage.)

UTM References

(Place additional UTM references on a continuation sheet.)

1 19 297260 4636740
Zone Easting Northing

3 _____
Zone Easting Northing

2 _____
Zone Easting Northing

4 _____
Zone Easting Northing

Verbal Boundary Description

The boundaries of the Heaton & Cowing Mill are contiguous with those of the City of Providence Tax Assessor's Plat 78, Lots 196 and 383.

Boundary Justification

The boundaries of this .58-acre parcel encompass the portion of the original 2-acre lot and water privilege acquired by Heaton and Cowing in 1832 that contains the surviving historic mill complex in its riverside setting. See *Additional Information* Figure 11 for a detail from Providence Assessor's Plat Map No. 78.

11. Form Prepared By

name/title Edward Connors

organization Edward Connors and Associates

date February 2012

street & number 39 Dyer Avenue

telephone 401 595-0699

city or town Riverside

state RI

zip code 02915

e-mail nconnors@cox.net

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A USGS map (7.5 or 15 minute series) indicating the property's location.

Heaton & Cowing Mill

Name of Property

Providence County, RI

County and State

A **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- **Continuation Sheets**
- **Additional items:** (Check with the SHPO or FPO for any additional items.)

Photographs:

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map.

Name of Property: Heaton & Cowing Mill

City or Vicinity: Providence

County: Providence

State: RI

Photographer: Richard Greenwood except for Edward Connors, Photo 2

Date Photographed: April 4, 2012 except for: Photo 1- April 11, 2012; Photo 2 - April 6, 2012; Photo 12 - Dec. 5, 2011

Description of Photograph(s) and number:

1 of 13. North and west elevations, view SE

2 of 13. West elevation, view E

3 of 13. East and north elevations view SW

4 of 13. South elevation, view NW

5 of 13. View west with Heaton & Cowing Mill on left and Geneva Mill on right

6 of 13. Stone mill first floor, view SE

7 of 13. Stone mill first floor, detail view of cased heavy timber framing

8 of 13. Rear addition first floor, view NW

9 of 13. Rear addition stairway, view S

10 of 13. Rear addition second floor, view NE

11 of 13. Stone Mill second floor, view NW

12 of 13. Stone mill basement, view NE

13 of 13. Rear addition basement, view SE

Property Owner:

(Complete this item at the request of the SHPO or FPO.)

Heaton & Cowing Mill
Name of Property

Providence County, RI
County and State

name Kenneth Correra
street & number 2110 North Florida Mango Road telephone _____
city or town West Palm Beach state FL zip code 34409

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.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18 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 Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.

Heaton & Cowing Mill
Name of Property

Providence County, RI
County and State

Additional Information

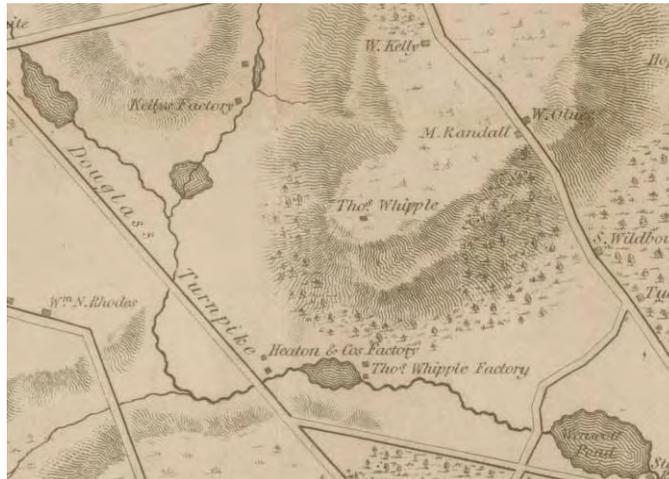


Figure 1

Detail from Lockwood and Cushing,
Map of the City of Providence and Town of North Providence (1835)
Showing "Heaton & Cos. Factory" and other factory sites on the West River.



Figure 2

Detail from Lorigan and Christy
Map of the Town of North Providence (1853)
Showing realignment of the West River and direct flow to the wheelhouse of "Heaton & Cowan" (sic).

Heaton & Cowing Mill
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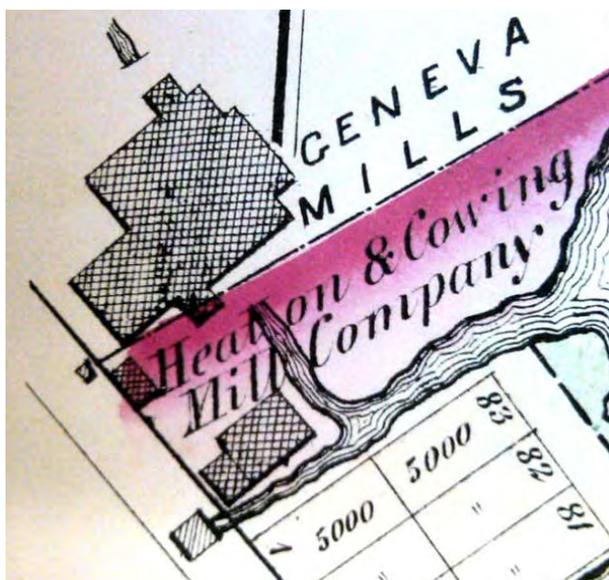


Figure 3

Detail from G.M. Hopkins, *Atlas of Providence RI* (1875) showing former headrace of the Heaton & Cowing Mill as adapted for the Geneva Mills.

By this time, overflow from the main flow of the river had been rerouted to enter the Heaton & Cowing Mill's wheelhouse from Geneva Pond (not shown) to the west.



Figure 4

Detail from Samuel B. Cushing, *Sketch, Showing the Upper Portion of West River* (1879) Exhibit 14, *Silver Spring Bleaching and Dyeing vs. Wanskuck Co.*

showing complex water system of Geneva plant and Heaton & Cowing Mill (circled). The "Q" and "R" labels refer to hydraulic analysis given by Cushing in his 1879 deposition.

Heaton & Cowing Mill

Name of Property

Providence County, RI

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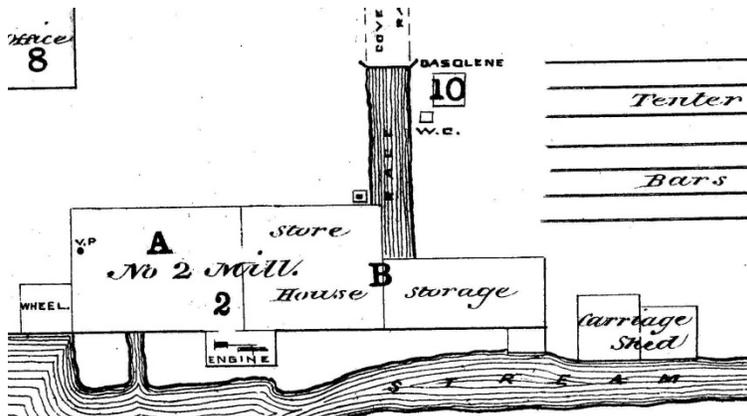


Figure 5

Detail from plan of *Geneva Worsted Mills*, Barlow's Insurance Survey No. 6712 (1881), showing the Heaton & Cowing Mill as Geneva's Mill No. 2 (A), the first Engine House as built on the south (water) side of the building, and two rear frame additions used for storage (B). The Store House, Storage Shed (both labeled B), Carriage Shed, and first Engine House were washed away in the flood of February 1886.

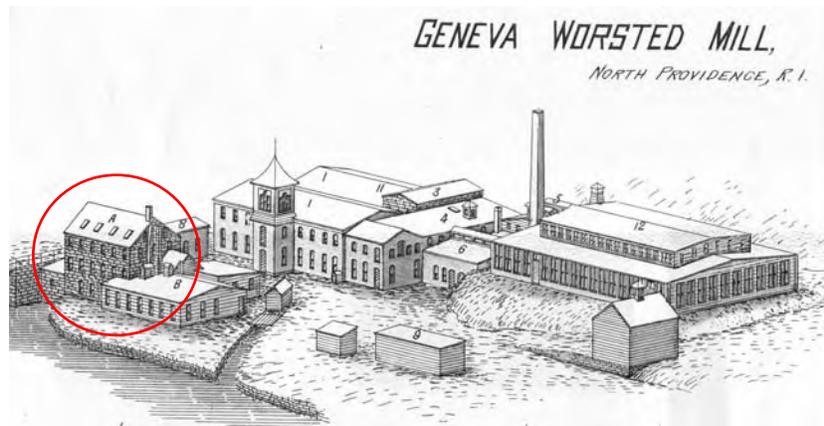


Figure 6

Detail from illustration of *Geneva Worsted Mills*, Barlow's Insurance Survey No. 9758 (1889), showing the Heaton & Cowing Mill (A, circled), the north Engine House (unlabeled, see plan Figure 7), and Dryer House (B).

The small gabled roof structure pictured just above the letter B in this drawing enclosed the belting and shafting carrying power from the second Engine House to the mill. Note the wheelhouse at far left depressed below the ground floor.

Heaton & Cowing Mill
Name of Property

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County and State

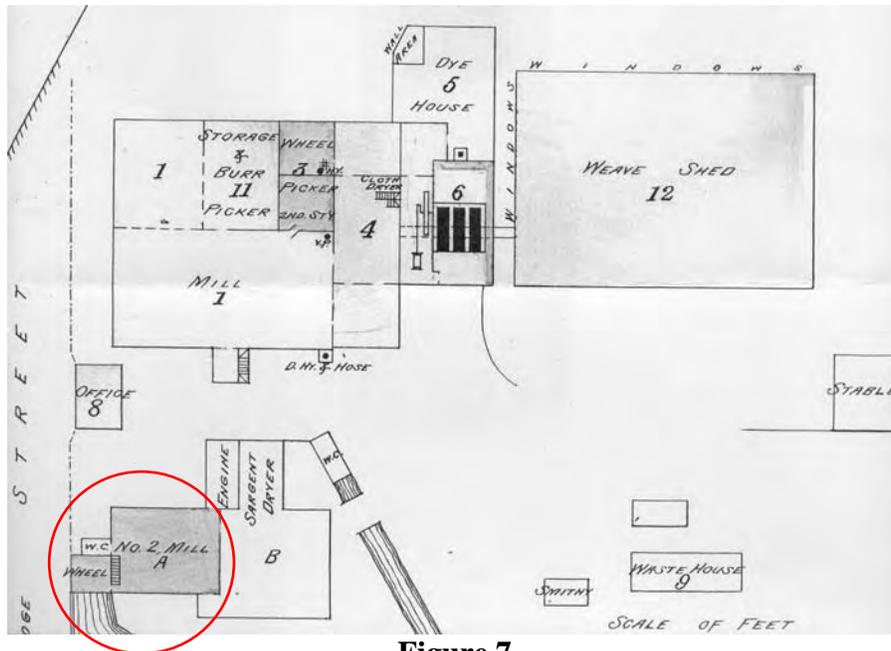


Figure 7

Detail from plan of *Geneva Worsted Mill, Heaton & Cowing Mill Co.*, Barlow's Insurance Survey No. 9758 (1889), showing continued use of the Heaton & Cowing Mill as Geneva's No. 2 Mill (A, circled) and its wheelhouse, as well as continued use of the Engine House, and the rear frame addition as a Dryer House (B).

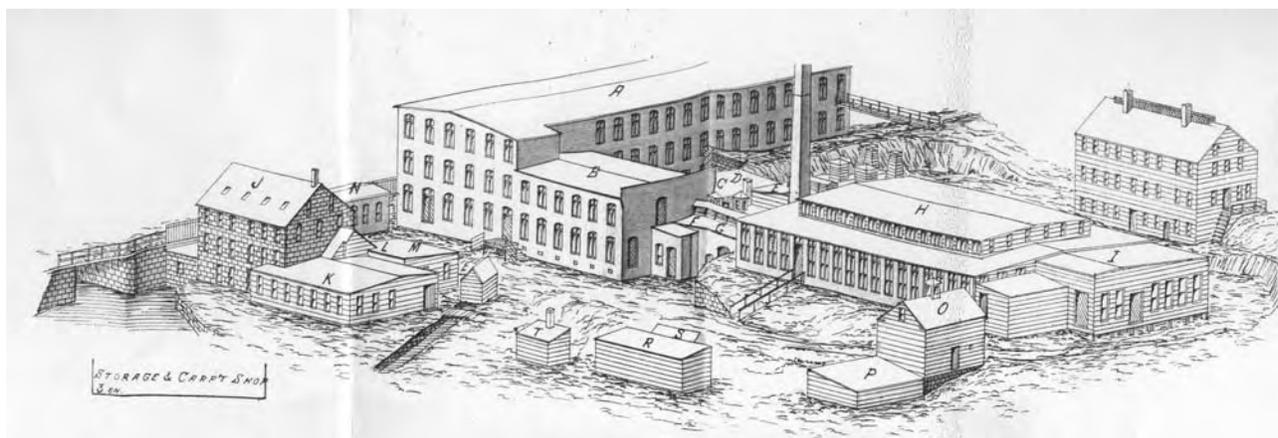


Figure 8

Detail from *Geneva Worsted Mill*, Barlow's Insurance Survey No. 10,490 (1891) Showing use of the Heaton & Cowing Mill (J) as Storehouse and Carpenter Shop, and use of the rear addition for Scouring and Storage (K, L and M). The engine house is no longer in use.

Heaton & Cowing Mill
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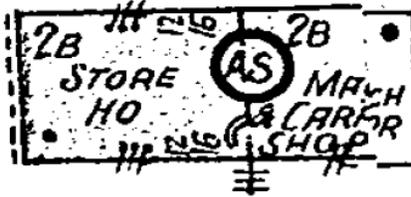


Figure 9

Detail from Sanborn Fire Insurance Map of North Providence (1956) showing continued use of the Heaton & Cowing Mill for storage under Wanskuck ownership and use of the rear brick addition, built between 1926 and 1937, as a Machine and Carpenter shop.

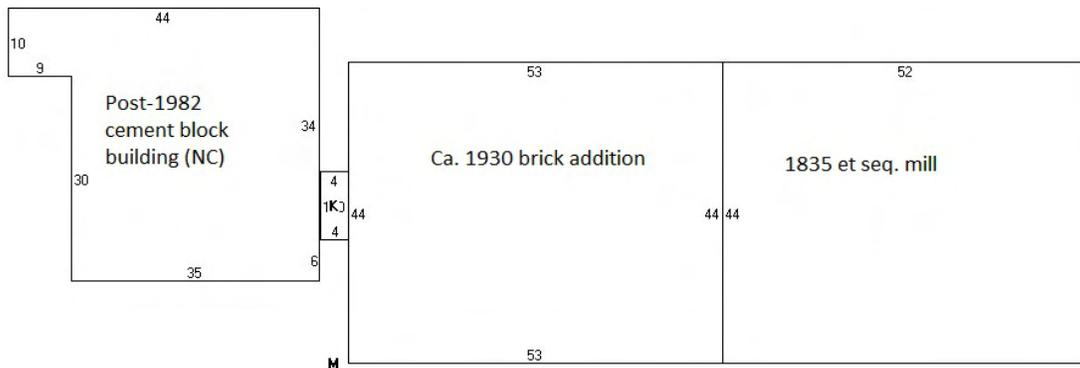
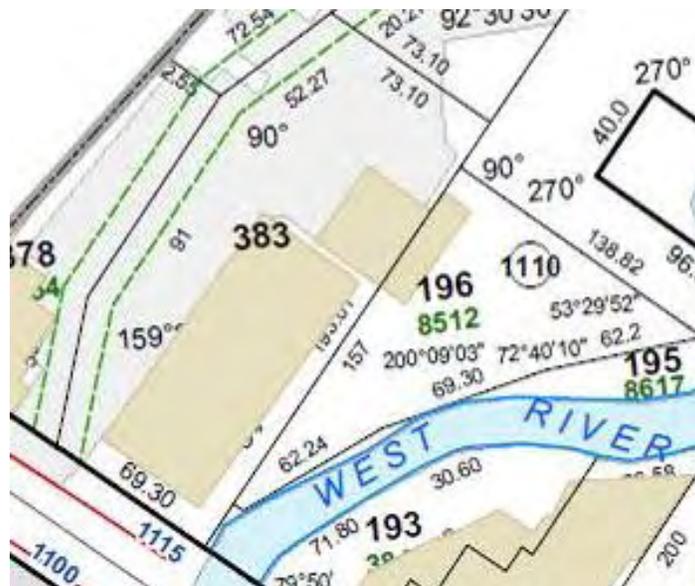


Figure 10

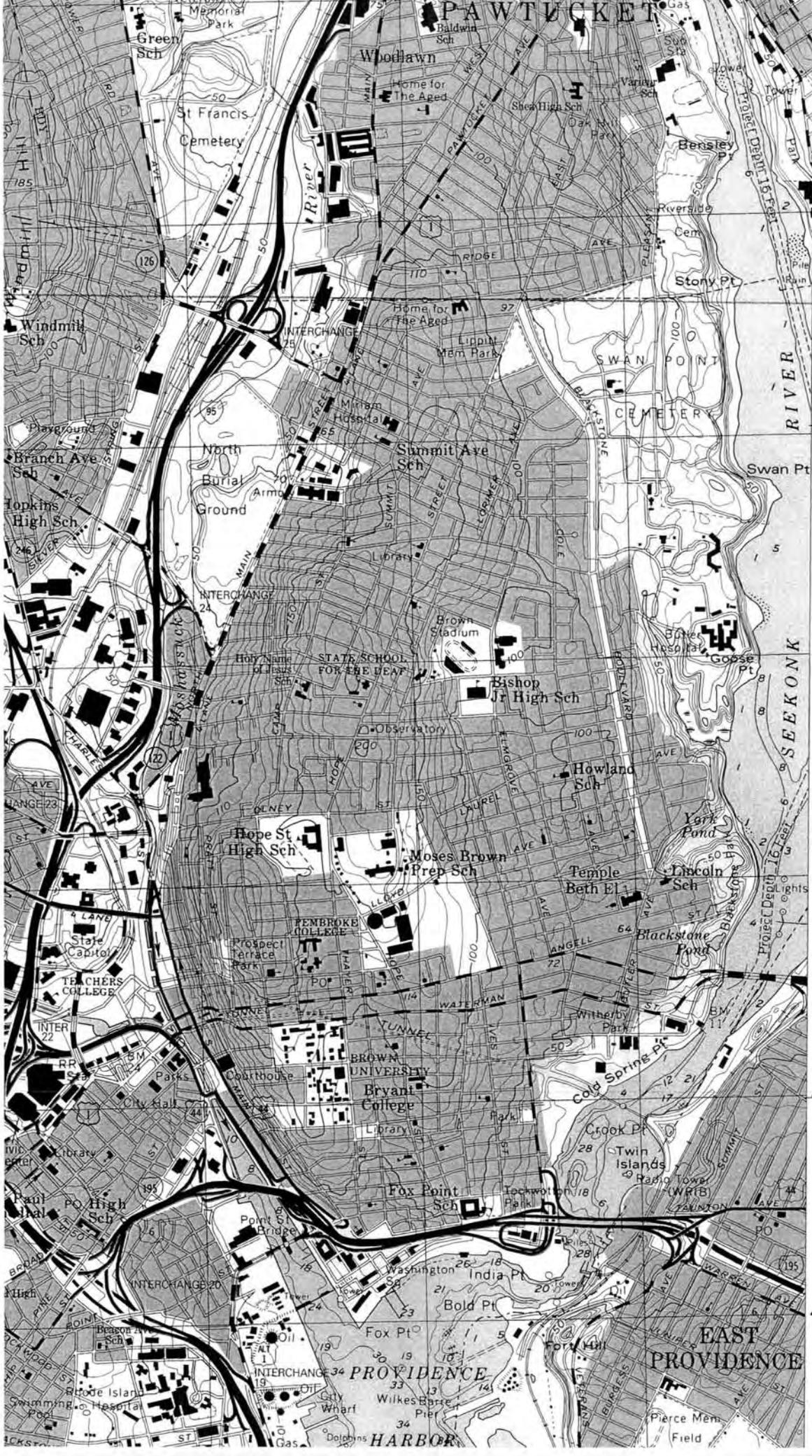
Drawing from City of Providence Assessor's Data showing current conditions. (l-r) post-1982 cement block rear building, the brick addition built between 1926 and 1937, and the Heaton & Cowing Mill



Heaton & Cowing Mill
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Figure 11
Detail from City of Providence Assessor's Plat Map 78, Lots 196 and 383



HEATON & COWING
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RI

UTM REFERENCE:
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Apex Specialties Co.







